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This book is also available as an e-book.


## advance Praise

Reading the first few pages of Dr Mani Shreshtha and Dr Anurag Dugar's book, I got hooked. The way they have started each chapter with a case study and then tried to simplify the nuances of the case through the eyes of a marketer is simply awesome. The flow of the book is interactive, which makes it a page turner. Best wishes to both of them, and I hope that they will continue to write more books which help students and practitioners alike.

Lakshman Nagar,<br>Business Director, More Retail Limited, Kolkata

This book is an honest and successful attempt to give practical insights to young budding marketing professionals. I would encourage all marketing students and professionals to read and absorb practical findings of the book.

Sameer Rinwa, Business Head-International Business, Alliance Insurance Brokers Limited, Mumbai

Marketing is the study of why people do what they do, with the final goal of getting them to do what we want them to do. This book is the right step in that direction. Starting with topics like 'How do I know my customers are satisfied?' to pricing strategy and planning for the best media for best results, this book is a must-read for students and practitioners of marketing.

This book is the Holy Grail of marketing-to tell you how to price your product, how to select the right media working for you and how to measure the sales performance of your team. It is a must-read for every marketing enthusiast.

Arvind, General Manager—QA, V-Mart Retail Limited, Gurugram

It is said that all big ideas are always very simple. Likewise, this thought of coming with a handbook of most common, most frequently needed and most commonly used calculations by marketers of today and aspiring marketers of tomorrow is a brilliant idea. I am very confident that it is going to be a 'must-have' in the armamentarium of every marketer. Kudos to the authors of this simple but brilliant idea.

> Ashok Saroha, Vice-President-Exports, Akums Drugs \& Pharmaceuticals Ltd, Delhi

Marketing has so much to do with numbers, but it is also a creative domain. If you know the models and right tools to play around with numbers, you can reach the pinnacle of marketing in any organization. This book explains the importance of knowing your tools and methods to play around with numbers to come to right marketing models for your business. Being a business/start-up owner myself, where money and resources are hard to come by, we have to be judicious in our planning, be it launching a product/service or deciding which region to launch and how many resources we need to put to pitch our product to the end customer. This book explains all of these well.

Kudos to the authors who have beautifully structured the entire cycle of marketing and beautifully clubbed it with various number models. It is a must-read for all, especially for start-ups which are looking to be the next unicorn.

## Prateek Rathi, Founder, Norfest, Hyderabad

Marketing calculations made simple, it is an excellent starter for sales and marketing professionals.

Sumit Mehta, Sr Director, GTM \& Ops AMS Europe, Capgemini, Bengaluru

## MARKETING <br> METRICS


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SAGE Response, our business books imprint, celebrates its silver jubilee this year. As we reflect on this transformational journey that began with a single title, we thank everyone who has helped us to produce content that is topical and relevant across a varied audience of aspiring managers, working professionals, practitioners and students. We feel privileged that eminent management and leadership experts, professionals and stalwarts from academia supported and trusted us with their work. Over the years, SAGE Response has built an enviable list of practicebased, reader-friendly books that provide creative strategies to keep pace with the rapidly changing global scenario. As we grow and evolve with the times, it is our endeavour to continue to publish books that offer innovative solutions, approaches and perspectives to the disciplines that we serve.

# marketing METRICS 

Beyond<br>Clickbaits

Anurag Dugar<br>Mani Shreshtha



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## preface

## A BITTER REALIZATION!

Most students of management and business opt for marketing as their specialization. While many choose it because they know that marketing offers the most jobs, they also find marketing extremely interesting. Another popular reason behind so many students choosing marketing is that 'they do not want to take finance', because they believe that finance is all about number crunching and marketing is all about creativity and making out-of-the-box strategies, beautiful advertisements, etc. For a combination of these reasons, marketing becomes a natural choice for students. For most of these students, the creative and fascinating impression of marketing falls flat on its face the moment they join a typical marketing role in the industry. The realization that marketing is so much about numbers and calculations comes as a rude shock to them. It is at this point that they start searching for resources to learn those calculations and measurements, and that is where this book comes in. It can be a great resource for cracking marketing interviews, solving marketing case studies and, most importantly, surviving in your marketing job.

This book will take you through the calculations that any marketing professional must know. Don't worry, we know your fear of numbers and reduced attention span, and that is why we have made it extremely short, simple and easy to understand. Just make sure that you read it carefully, solve
the practice problems and go through the additional readings for which the links are provided. Once done, you will be good to go!

Go ahead, learn the numbers and calculations used in marketing, and win marketing competitions at B-schools, outshine your peers at the office, and impress your boss and your professors by showing them that you know why marketing is also called a science!

## HOW IS THIS BOOK DIFFERENT?

Most of the books on marketing meet one of the two extreme ends of the spectrum. They are either purely theoretical with examples given as stories or are highly technical, filled with advanced level of mathematical models. This book is the perfect balance between these two extremes. It attempts to make the readers aware of the basic concepts and related calculations used in day-to-day life of a marketing professional. It gives the learner step-by-step confidence to understand the field of marketing through numbers. In all, this is a carry-along book, which adopts a crisp approach to deal with numbers in the field of marketing.

## THIS BOOK IS BEST FOR?

- MBA/BBA students: If you are a business school student and are planning to go for marketing specialization, then this book is for you. It provides exposure to the learners about key marketing concepts and related mathematical calculations used in day-to-day marketing activities. With this knowledge, you can win marketing competitions, solve marketing case studies, score well in marketing exams and, last but most importantly, crack placement interviews for marketing positions.
- New marketing and sales professionals: If you are a new marketing executive or management trainee in the marketing domain, you must have realized by now that you can't survive on your job without knowing numbers and calculations in marketing. You will not be able to make sound marketing decisions without these calculations and knowing these numbers well.
- Marketing managers/trainers: If you are a marketing manager, then this book will be very handy to learn and to train your juniors or fresh recruits in the form of a quick recapitulation of core marketing concepts and related calculations, before they hit the field and start making marketing decisions themselves.
- Business owners: The book also has its utility for all those business owners, retailers, etc., who without knowing these calculations cannot know how their business is doing, how to take a marketing-related decision, etc.
- Marketing professors: Finally, this book could also assist marketing professors looking for ready reference material for their classes. They can take their teaching to the next level if they can take mathematical calculations involved with various marketing concepts. They could also use practice problems to judge the analytical skills of students.
In general, the book is for every marketing enthusiast.


## WHAT IS COVERED?

The content of the book covers a range of topics from the field of marketing. It takes the learner on a journey which starts with the god for marketers, customer, moving towards sales, and then takes on components of marketing mix-product, pricing and distribution-and ends with promotion.

- Challenge: The book offers a challenge question, which is faced by a marketing professional on a routine basis.
- Feel: It introduces a marketing concept to answer the challenge question.
- Learn: It makes you understand and learn the methods to answer the question.
- Do: It eventually makes you apply the understanding and do the calculation on your own.
The book presents the content on the following broad themes.


## CUSTOMER-RELATED METRICS (CHAPTERS 1-4)

This section introduces the concepts revolving around the customer. It discusses the calculations related to customer lifetime value, customer satisfaction, customer churn rate and customer brand loyalty.

## SALES-RELLTED METRICS (CHAPTERS 5-11)

This section encompasses an important cog in the wheel: sales. It discusses sales-oriented calculations and methods such as minimum sales requirement, forecasting, deciding the size of a sales force, creating sales territories and measuring sales performance.

## PRODUCT-RELATED METRICS (CHAPTERS 12-14)

This section covers the first component of marketing mix: product. It discusses major product-related methods, including management through product mix, new product development cannibalization and forecasting for a new product.

## PRICING-RELATED METRICS (CHAPTERS 15-17)

This section highlights the concepts related to pricing. It discusses methods and calculations involved in making pricing decisions such as decisions through price elasticity, deciding menu cost, cost plus and value-based pricing, and price waterfall.

## DISTRIBUTION AND RETAIL-RELATED METRICS (CHAPTERS 18-22]

This section covers another important component of marketing mix: distribution. Chapters related to calculations for distribution decisions such as channel selection methods, omni-channel performance mapping, inventory management, calculating dealer's return on investment and trade area analysis are the highlight of this section.

## PROMOTION AND BRAND-RELATED METRICS

## [CHAPTERS 23-30]

This is the last section of the book, and it focuses on promotion. The methods and calculations considering traditional and modern promotion platforms are the highlight of this section. It discusses the topics under promotion decisions such as media planning basics and advertising agency pricing models. A specific focus is on the field of digital marketing through chapters focusing on click-through rate (CTR), cost per click (CPC) and paid, owned and earned media (POEM) frameworks. The book concludes with a chapter on calculating brand equity.

## 1

## нәрpy clients are repeat clients: measuing customer satisfaction

As it has always been, in the 1980s also, Pepsi and Coke were at war with each other. Pepsi launched a new weapon 'blind taste tests', wherein customers were asked to drink both Coke and Pepsi from two glasses and were not told which glass had Pepsi in it and which had Coke. After tasting both the drinks anonymously, the customers were asked which tasted better.

Pepsi hired an independent agency to conduct these tests, and the results were very encouraging. Pepsi was winning by a significant margin. It created an ad of this and broadcasted it on TV. Now, everyone was seeing and hearing about Pepsi's clear victory over Coke in these tests. ${ }^{1}$

Even today, most of us would believe that in this product category, taste determines satisfaction. So at that time, Coke's management also felt the same way and got worried! They immediately started researching on a new taste and when they came up with a new taste, they started blind taste tests. The results brought a eureka moment for Coke. The New Coke was winning over Pepsi.

[^0]So now we had three brands: Coke, New Coke and Pepsi. In taste tests, New Coke was number 1, Pepsi was number 2 and original Coke was number 3. Since the New Coke emerged as a clear winner, Coke's management decided that going forward, they would continue with the new taste and would dump the original Coke, and they did it.

No one was aware of what was about to happen! There was almost a revolt in the USA over this! People were on streets protesting against the dumping of the original Coke. Remember that there was no Internet then, so people were calling Coke's offices, writing letters to the management and protesting on streets. Even without the Internet, the scale of protests reached such a scale that Coke's management was forced to repeal its decision and relaunch the original Coke in less than 80 days. ${ }^{2}$

So after spending millions of dollars on researching and marketing the New Coke, it was taken back, and the original Coke was relaunched. In this process, Coke, Pepsi and the marketers of other brands learned a valuable lesson: Customer satisfaction is not as simple and shallow a phenomenon as it appears to be, and it is so critical and powerful that it can force marketers to roll back their decisions.

So how to measure customer satisfaction? This chapter attempts to answer this million-dollar question!

[^1][^2]
## CUSTOMER SATISFACTION

Marketing is often defined as identifying customer needs and satisfying them at a profit. The strong focus on satisfying the customer (needs) has established that customer satisfaction is the Holy Grail of marketing. Moreover, it is also believed that (a) a satisfied customer is the best advertisement, (b) satisfied customers are the ones who go on to become loyal customers and (c) satisfied customers are less price-sensitive and have higher customer lifetime value (CLV).

Not unexpectedly, marketers lose their sleep over this metrics, as they consider customer satisfaction the acid test of marketing. Hence, they continuously try to achieve customer satisfaction and also measure whether the customers are satisfied or not-and this makes a lot of sense as well!

## METHODS FOR MEASURING CUSTOMER SATISFACTION

Although expressing satisfaction in absolute terms is difficult for a customer, various methods are available to measure it in quantifiable form. These methods are CSAT and importance performance analysis (IPA). These methods are explained below.

## CSAT

The more difficult it is to express or define satisfaction, the easier it is to measure it with CSAT, an acronym made from 'C'ustomer + 'SAT'isfaction. Most of the time, customer satisfaction is measured through CSAT, which essentially has only one question, that is:

How do you rate your satisfaction with your experience with $\qquad$ Or
How would you rate your satisfaction with $\qquad$ ?

These blanks may be filled by the companies or marketers with different variations such as 'our products', 'our services', 'our sales staff' or 'our customer care'.

## APPLYING CSAT

Customers are shown the following table, and they respond with a tick or a circle on the answer of their choice. This is captured for as many customers of the company as time and money permit. If the customers are heterogeneous, the larger the number of respondents, the better the scores would tell how satisfied the customers are.

## MARKETING METRICS

| Question | How would you rate your satisfaction with |  |  |  | ? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Options | Very <br> unsatisfactory | Unsatisfactory | Neutral | Satisfactory | Very <br> satisfactory |
| Score | 1 | 2 | 3 | 4 | 5 |

## ANALYSIS OF RESPONSES

The analysis of the responses is simple. The higher the number of people rating 'satisfactory' and 'very satisfactory', the better it is. Usually, the responses are captured in five points but are categorized in three categories. All responses with scores of 1 and 2 are considered same and are seen as representation of 'unsatisfied customers', whereas responses of 4 and 5 are considered a representation of 'satisfied customers'.

The middle category is an interesting one. It consists of those customers who give a score of 3 . Here, companies generally do either of the following:

1. To have a conservative estimate of satisfaction, club them with unsatisfied customers.
2. Treat them as 'fence sitters' who can go to either side (satisfied or dissatisfied) with a gentle push, depending on how they are treated from now onwards. They can
either become dissatisfied or can join the category of satisfied customers.
So companies who treat them as fence sitters then make special strategies for these customers to pull them into the category of 'satisfied customers'. This makes more sense also because it would be difficult and require a lot of work to bring the 'dissatisfied customers' into the category of 'satisfied customers'. A lot of work often means a lot of resources also. So the company will have to see whether it wants to spend that much money and that many efforts on bringing dissatisfied customers into the category of satisfied customers. Table 1.1 shows how the captured scores look like.

Table 1.1
CSAT Score for Quarter 1: Jan-Mar 2015

| Options | Very <br> Unsatisfactory | Unsatisfactory | Average | Satisfactory | Very <br> Satisfactory |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Score | 1 | 2 | 3 | 4 | 5 |
| Cust_1 | 1 |  |  |  |  |
| Cust_2 |  |  | 3 |  |  |
| Cust_3 |  |  |  |  | 5 |
| Cust_4 |  |  |  | 4 |  |
| Cust_5 |  |  | 3 |  |  |
| Cust_6 |  |  |  | 4 |  |
| Cust_7 |  |  |  |  | 5 |
| Cust_8 |  |  |  |  |  |
| Cust_9 | 1 |  |  |  |  |

(continued)
(continued)

| Options | Very Unsatisfactory | Unsatisfactory | Average | Satisfactory | Very Satisfactory |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Score | 1 | 2 | 3 | 4 | 5 |
| Cust_10 | 1 |  |  |  |  |
| Cust_11 |  | 2 |  |  |  |
| Cust_12 |  |  | 3 |  |  |
| Cust_13 | 1 |  |  |  |  |
| Cust_14 |  |  | 3 |  |  |
| Cust_15 |  |  |  |  | 5 |
| Cust_16 |  |  |  |  | 5 |
| Cust_17 |  |  |  |  | 5 |
| Cust_18 |  |  |  | 4 |  |
| Cust_19 |  | 2 |  |  |  |
| Cust_20 |  | 2 |  |  |  |
| Sum | 4 | 10 | 12 | 16 | 30 |
|  | Considered as dissatisfied customers |  | Considered as 'fence sitters' | Considered as satisfied customers |  |

Calculating \% of unsatisfied customers:
$=[$ Sum of respondents who gave 1 and $2 /$ total respondents $] \times 100$
$=[(4+4) / 20] \times 100$
$=[8 / 20] \times 100=40 \%$
Calculating \% of neutral customers or fence sitters:
$=[$ Sum of respondents who gave 3/total respondents $] \times 100$
$=[4 / 20] \times 100=20 \%$

Calculating \% of satisfied customers:
$=[$ Sum of respondents who gave 4 and 5/total respondents $] \times 100$
$=[(3+5) / 20] \times 100$
$=[8 / 20] \times 100=40 \%$

## ADDITIONAL INSIGHTS ABOUT CSAT

If you use CSAT periodically, let us say after every six months, and compare the scores, you will have 'customer satisfaction trends', which is immensely useful for determining the direction in which your brand/product/service is moving. Accordingly, you can make strategies to accelerate further with same strategies or pull the brakes on existing ones and make new strategies for better results. Generally, the scores for multiple CSAT surveys look like as presented in Table 1.2.

Now it can be interpreted that while other scores are more or less same, the company has done something good in quarter 1 which has resulted in a sharp decline in dissatisfaction scores, and the same is true with strategies of quarter 3. The company can have a relook at what has worked for the company and if those strategies could be further improved. The CSAT survey can be done in each market of the company, and the results can be compared for all markets to see what is working where and what isn't. This can help the company in making or fine-tuning the strategies for future. Similarly, we can see the annual trends if we take the

Table 1.2
Scores of Multiple CSAT Surveys

|  | Qtr 1 <br> $(\%)$ | Qtr 2 <br> $(\%)$ | Qtr 3 <br> $(\%)$ | Qtr 4 <br> $(\%)$ | Annual Average <br> 2015(\%) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Satisfied | 40 | 45 | 48 | 49 | 45.5 |
| Neutral | 20 | 25 | 22 | 25 | 23.0 |
| Dissatisfied | 40 | 30 | 30 | 26 | 31.5 |

Table 1.3
Annual Trends through Annual CSAT Scores

|  | Annual Avg <br> 2015 (\%) | Annual Avg <br> $\mathbf{2 0 1 6 ( \% )}$ | Annual <br> $\mathbf{2 0 1 7 ( \% )}$ |
| :--- | :---: | :---: | :---: |
| Satisfied | 45.5 | 45 | 48 |
| Neutral | 23.0 | 25 | 22 |
| Dissatisfied | 31.5 | 30 | 30 |

annual scores and put them together like in Table 1.3 and draw interpretations.

## WHAT CSAT WON'T DO FOR YOU?

First, CSAT does not capture or measure whether the customer is going to do more business with you or whether they would recommend your business to others. It also does not measure what the customer thinks about your brand or your company. Second, often customers have strong views about some features of the product/service, and you as a marketer would like to know with which feature of your product is the customer satisfied and which one is not satisfying the customers. So, the aforementioned one question to measure customer satisfaction would not be of much help. This is not at all to say that 'overall satisfaction' as measured by CSAT is not/less important.

## IMPORTANCE PERFORMANCE ANALYSIS

Customers usually decide or determine their satisfaction on the basis of multiple parameters or product attributes. So we can identify those parameters which are important to customers in determining their satisfaction levels and then measure our performance on those parameters by asking the consumers: 'How good were we at that parameter?' Doing this, we can get an idea of how satisfied the customers are.

## APPLYING IPA

For applying IPA, we require the following information:

1. We need to know which parameters are important for the customers. This can be done in two ways:
a. By asking them which parameters/product attributes are important to them and then letting them give a list from most important to least important ones.
b. By giving them a list of options and asking them to rank those options from 1 onwards, where $1=$ most important and 2 is less important and so on.
2. Once we know the parameters, we can ask them to rate our brand/product/service on each of those and capture their answer on a Likert scale. The question would look like: 'How satisfied are you on the performance of this product attribute/feature?'
We can then plot those responses for each parameter on a $2 \times 2$ grid/matrix like the one shown in Figure 1.1. The responses of Q1 will determine the plotting on the vertical axis and the responses of Q 2 will determine the plotting on the horizontal axis.

Figure 1.1
Importance-Performance Matrix
$\left.\begin{array}{|c|c|}\hline & \\ \begin{array}{c}\text { QUADRANT I } \\ \text { Concentrate here } \\ \text { High importance } \\ \text { Low importance }\end{array} & \begin{array}{c}\text { QUADRANT II } \\ \text { Keep up the good work } \\ \text { High importance } \\ \text { Low importance }\end{array} \\ \hline \text { QUADRANT III } \\ \text { Low priority } \\ \text { Low importance } \\ \text { Low importance }\end{array} \quad \begin{array}{c}\text { QUADRANT IV } \\ \text { Possible overkill } \\ \text { Low importance } \\ \text { High importance }\end{array}\right]$

Reva Automotive, an electric car company, wants to know the satisfaction level of their customers. The results of market research show that customers prefer three elements, namely looks, mileage and power, the most in an electric car. Reva Automotive wants to know about customer satisfaction level of their car model with each of these features. How should the company proceed?

To determine customer satisfaction, the electric carmaker Reva Automotive requires completion of two tasks: first, to know the rank of importance of each of these features and, second, to measure the satisfaction level for each feature.

Task 1: To know the rank of importance of each of these features
It will be done in three steps.

Step 1: Ask the customers to rank the three features in terms of most important (1) to least important (3). The responses would look like as follows.

| Attribute | Cust_1 | Cust_2 | Cust_3 | Cust_4 | Cust_5 | Cust_6 | Cust_7 | Cust_8 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Looks | 1 | 3 | 2 | 1 | 1 | 1 | 2 | 3 |
| Mileage | 2 | 2 | 1 | 2 | 2 | 3 | 1 | 1 |
| Power | 3 | 1 | 3 | 3 | 3 | 2 | 3 | 2 |

Step 2: Since rank 1 is given to 'most important', we will assign the highest weight to it, followed by ranks 2 and 3. So we have assigned weights $0.6,0.4$ and 0.2 , respectively.

On an Excel sheet, you can exercise any of the two choices:

1. Replace the ranks with weights in the table.
2. Use the 'frequency' function of Excel to know which feature has got the most ' 1 ' and which one has got most ' 3 '. The one with most ' 1 ' will be considered the
most important and the feature with most ' 3 ' will be considered the least important.
Here, we have opted for choice number 1. Once it is done, the table would look like as follows.

| Attribute | Cust_1 | Cust_2 | Cust_3 | Cust_4 | Cust_5 | Cust_6 | Cust_7 | Cust_8 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Looks | 0.6 | 0.2 | 0.4 | 0.6 | 0.6 | 0.6 | 0.4 | 0.2 |
| Mileage | 0.4 | 0.4 | 0.6 | 0.4 | 0.4 | 0.2 | 0.6 | 0.6 |
| Power | 0.2 | 0.6 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.4 |

Step 3: Add a column at the end of the table and calculate the average of all the responses for each feature, like as given below.

| Attribute | Cust <br> $\mathbf{1}$ | Cust <br> $\mathbf{2}$ | Cust <br> $\mathbf{3}$ | Cust <br> $\mathbf{- 4}$ | Cust <br> $\mathbf{5}$ | Cust <br> $\mathbf{6}$ | Cust <br> $\mathbf{7}$ | Cust <br> $\mathbf{8}$ | Avg |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Looks | 0.6 | 0.2 | 0.4 | 0.6 | 0.6 | 0.6 | 0.4 | 0.2 | 3.4 |
| Mileage | 0.4 | 0.4 | 0.6 | 0.4 | 0.4 | 0.2 | 0.6 | 0.6 | 3.1 |
| Power | 0.2 | 0.6 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.4 | 2.0 |

The average scores for each feature tell the importance they hold for customers. So now we know that 'looks' are the most important feature, followed by 'mileage' and 'power'. This information will be plotted on the vertical side of the grid/ matrix, which is 'Importance'.

Task 2: To measure the satisfaction level with each feature For each feature, we will ask the consumers to rank their satisfaction level. This is just like CSAT. The only difference is that CSAT measures overall satisfaction, but here we are measuring satisfaction level of each feature of the car which is important to the consumer.

So the consumers will answer the following three questions.

| Question | How would you rate your satisfaction with the looks of the car? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Options | Very <br> unsatisfactory | Unsatisfactory | Neutral | Satisfactory | Very <br> satisfactory |
| Score | 1 | 2 | 3 | 4 | 5 |


| Question | How would you rate your satisfaction with the mileage of the car? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Options | Very <br> unsatisfactory | Unsatisfactory | Neutral | Satisfactory | Very <br> satisfactory |
| Score | 1 | 2 | 3 | 4 | 5 |


| Question | How would you rate your satisfaction with the power of the car? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Options | Very <br> unsatisfactory | Unsatisfactory | Neutral | Satisfactory | Very <br> satisfactory |
| Score | 1 | 2 | 3 | 4 | 5 |

MARKETING METRICS
The responses to these questions would look like as follows.

| Options | Looks | Mileage | Power |
| :--- | :---: | :---: | :---: |
| Cust_1 | 5 | 3 | 4 |
| Cust_2 | 4 | 4 | 5 |
| Cust_3 | 5 | 4 | 2 |
| Cust_4 | 4 | 3 | 1 |
| Cust_5 | 3 | 2 | 1 |
| Cust_6 | 4 | 1 | 3 |
| Cust_7 | 5 | 5 | 3 |
| Cust_8 | 5 | 2 | 2 |
| Sum | 35 | 24 | 21 |
| Avg | 4.4 | 3 | 2.6 |
| Shown in the grid/ <br> matrix as | $\bullet$ | $\wedge$ | $\square$ |

Now we can plot the scores of each task (Task 1 and Task 2) in the grid/matrix.

Figure 1.2
Importance-Performance Matrix of Reva Automotive


The vertical side of the matrix is 'Importance' (of features for the consumers). As you know, in Task 1, looks scored 3.4, mileage scored 3.1 and power scored 2. So these scores are plotted on the vertical axis with these scores.

Similarly, the horizontal side of the grid/matrix is 'Performance'; that is, is the consumer satisfied with the performance of each of these features? Here, 'looks' scored 4.4, 'mileage' scored 3 and 'power' got a rating of 2.6. These are plotted on the horizontal axis.

Essentially, we have plotted the scores where they meet on the grid. For example, the score of 'looks' is plotted at 3.4 vertical and 4.4 horizontal. Same is the case with the other two features (Figure 1.2).

## INTERPRETATION OF THE GRID/MATRIX FOR REVA AUTOMOTIVE

Consumers prefer looks, and the company is doing great on that. Even for mileage, which is important for consumers, company has done well, but there is still scope for improvement. Fortunately for the company, the consumers are least interested in power, and that is where the company has also not done well. The average score on performance is 2.5,
and the company has scored 2.6 on it. This shows that the company has to do better on this parameter. But overall, the consumers should be pretty satisfied with the company, as it is doing well on 2 out of 3 parameters.

We can also use this method to compare our customer satisfaction on important parameters with respect to competitors. We will follow the same method for competitors and then mark the scores on the matrix in different colours than ours and, hence, we would be able to see which competitor is keeping customers more/less satisfied than us on which parameters.

## CHECK YOUR UNDERSTANDING

1. Following are the scores of the CSAT survey done by a paint manufacturing company, Oceana Paints, for the third quarter of 2018.

| Options | Very <br> Unsatisfactory | Unsatisfactory | Average | Satisfactory | Very <br> Satisfactory |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Score | 1 | 2 | 3 | 4 | 5 |
| Cust_1 |  |  |  |  | $\checkmark$ |
| Cust_2 |  | $\checkmark$ | $\checkmark$ |  |  |
| Cust_3 |  | $\checkmark$ |  |  |  |
| Cust_4 |  |  | $\checkmark$ |  |  |
| Cust_5 |  |  |  | $\checkmark$ |  |
| Cust_6 |  |  |  |  |  |
| Cust_7 |  |  |  |  |  |
| Cust_8 | $\checkmark$ |  |  |  |  |
| Cust_9 | $\checkmark$ |  |  |  |  |
| Cust_10 | $\checkmark$ |  |  |  |  |
| Cust_11 |  |  |  |  |  |
| Cust_12 |  |  |  |  |  |

(continued)
(continued)

| Options | Very <br> Unsatisfactory | Unsatisfactory | Average | Satisfactory | Very <br> Satisfactory |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Score | 1 | 2 | 3 | 4 | 5 |
| Cust_13 |  |  |  |  | $\checkmark$ |
| Cust_14 |  |  |  |  | $\checkmark$ |
| Cust_15 |  |  |  |  | $\checkmark$ |
| Cust_16 |  |  |  |  | $\checkmark$ |
| Cust_17 |  |  |  | $\checkmark$ |  |
| Cust_18 |  |  | $\checkmark$ |  |  |
| Cust_19 |  |  | $\checkmark$ |  |  |
| Cust_20 |  | $\checkmark$ |  |  |  |

a. What procedure would you adopt for analysing this data?
b. Interpret the status of customer satisfaction for this company from this data.
2. M-Connect, a mobile manufacturing company, did a survey of its customers and the customers of its closest competitors named A and B. The purpose of the survey was to find out what was important to the customers of each company. Here is the data that they received.

The most important features for customers of each company (rated on 5)

| Attribute | Avg for <br> M-Connect | Avg for <br> Competitor A | Avg for <br> Competitor B |
| :--- | :---: | :---: | :---: |
| Camera | 3.4 | 3.6 | 4.2 |
| Battery life | 3.1 | 4.0 | 3.0 |
| Looks | 2.0 | 1.0 | 2.5 |

Next, M-Connect checked how the company and its competitor A were doing on these parameters. The scores given by the customers of each company are as follows.

| Options | M-Connect |  |  | Competitor A |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Camera | Battery Life | Looks | Camera | Battery Life | Looks |
| Cust_1 | 5 | 3 | 4 | 4 | 3 | 5 |
| Cust_2 | 4 | 4 | 5 | 4 | 3 | 4 |
| Cust_3 | 5 | 4 | 2 | 4 | 4 | 5 |
| Cust_4 | 4 | 3 | 1 | 3 | 5 | 1 |
| Cust_5 | 3 | 2 | 1 | 3 | 5 | 2 |
| Cust_6 | 4 | 1 | 3 | 3 | 5 | 2 |
| Cust_7 | 5 | 5 | 3 | 3 | 5 | 5 |
| Cust_8 | 5 | 2 | 2 | 3 | 2 | 5 |
| Cust_9 | 4 | 4 | 4 | 4 | 1 | 4 |
| Cust_10 | 5 | 5 | 5 | 4 | 1 | 4 |
| Cust_11 | 3 | 4 | 3 | 2 | 2 | 5 |
| Cust_12 | 2 | 4 | 5 | 3 | 2 | 4 |
| Cust_13 | 4 | 5 | 2 | 3 | 1 | 5 |
| Cust_14 | 5 | 3 | 4 | 3 | 2 | 4 |
| Cust_15 | 5 | 4 | 3 | 2 | 1 | 3 |
| Cust_16 | 5 | 5 | 4 | 2 | 3 | 4 |
| Cust_17 | 4 | 3 | 2 | 5 | 3 | 3 |
| Cust_18 | 1 | 1 | 1 | 5 | 3 | 2 |
| Cust_19 | 1 | 1 | 1 | 3 | 2 | 1 |
| Cust_20 | 2 | 2 | 1 | 4 | 2 | 1 |

a. Make the 'Importance-Performance Matrix' from the above data and analyse the status of customer satisfaction for M-Connect and its competitor A.
b. Is there anything else that the data is suggesting as far as customer satisfaction is concerned?

## Experience the Real Life

Choose a household product and using both the methods given in the chapter to measure 'customer satisfaction', measure the satisfaction level of your family members/ neighbours. Observe the difference between the two scores. Why is this happening? What does this difference mean?

## ADDITIONAL INSIGHTS AT A CLICK

1. Measuring Customer Satisfaction Is Easier than You Thought
This article from a renowned customer intelligence company explains most effective matrices used in measuring customer satisfaction for a starter. The article discusses in brief the matrices and its applicability for a marketer.
https://www.businesswire.com/news/home/20190 204005465/en/Measuring-Customer-Satisfaction-is-Easier-Than-You-Thought-Infiniti-Research-Reveals-the-Best-Metrics-to-Measure-CustomerSatisfaction
2. 6 Proven Methods for Measuring Customer Satisfaction The article provides a snapshot of customer satisfaction measurement methods, which furthers the understanding of a reader on the discussed concept. It also touches the area of customer satisfaction in digital world.
https://www.userlike.com/en/blog/6-proven-methods-for-measuring-your-customer-satisfaction

# 2 <br> calculating cusstomer's worth 


CrystalCart.com is a new but rapidly growing e-retailer. The cumulative number of total customers who shop at the website are continuously increasing, but Krish, the head of marketing, is looking puzzled. In front of him is the data about marketing budgets, marketing spending, customer acquisition costs (CAC) and customer retention. The data is telling a dangerous pattern.

Krish knows that CrystalCart is spending a lot of money on advertising and promotions to attract customers. Their creative, innovative and aggressive advertising and promotions are achieving the target of drawing customers to the website and the app. However, Krish is worried because CrystalCart is getting a large number of new customers, but they are not coming back; that is, 'repeat buying' is well below his expectations and industry averages. What does that mean?

This means that if CrystalCart is spending ₹100 to get the customers to their websitelapp, and the customers are spending ₹50 there, CrystalCart is losing ₹50 per customer. In fact, the more the number of such customers, the more the loss! So what is the solution?

The solution is simple: Customers usually need a lot of attraction to buy for the first time, but after that, that investment decreases. So in the case of

CrystalCart, if the customers can come again and buy from CrystalCart, then this time it would not require ₹ 100 to attract the customers. So that cost would decrease with every visit of the customer, and if the customer keeps buying like the way they did for the first time, the revenues would be the same. Reducing costs and stable revenues would eventually turn CrystalCart profitable.

So this game does not end just by attracting new customers, it is won when the same customers come and shop again and again because then the high costs of attracting those customers would be negated by the repeated buying that the customer does.

Repeated buying by a customer increases the value that the customer brings to the company, and it keeps on increasing with the time span when the customer is with the company. This is called CLV, which tells that in their lifespan, if the customer does not leave the brand and keeps buying it, how much value that would bring to the company.

For marketers, this is one of the most important customer metrics which tells the power of your business, brand and marketing strategies. If someone is to invest in your business, a bigher CLV will work as a major attraction for that investor because with that, the investor can get an idea that whether your business will do well or not.

So it makes a lot of sense as a marketer as well as an investor to know how to calculate CLV and that is precisely what this chapter is going to tell you!

[^3]CLV is an important concept to calculate the value that the customer will provide to the company in the long run. It also helps in identifying the most beneficial customers/segments and deciding how much investment on CAC would be justified for which customer/segment. CLV, which is also known as lifetime value (LTV), is one of the most critical metrics in marketing that the managers often ignore. The concept is quite simple to understand. It says that if a customer keeps transacting with your company for a specified duration of time, how much total value he will provide to the company.

## CALCULATING CLV

There are different ways to calculate CLV, and different parameters affect the calculation. The most basic method is as follows.

$$
\mathrm{CLV}=\mathrm{AOE} \times \mathrm{F} \times \mathrm{P}
$$

Where
AOE = Average order value: average amount a customer spends with you or the sum total of money paid by the customer in all transactions done in a duration/ total number of transactions in that duration $\mathrm{F}=$ Frequency of transactions: number of transactions done by the customer in a duration or total number of orders placed by the customer in a duration $\mathrm{P}=$ Period: the time duration for which the customer will do business with you

Example: Mr Ramkumar, owner of A-to-Z Fashion Retail, is going through his customer database. He found that his neighbour Mr Rakesh visits the
shop four times a year. The sales data suggests that Mr Rakesh spends, on average, ₹ 100 on each visit. The past experience tells Mr Ramkumar that the customers like Mr Rakesh continue to shop for four years. Mr Ramkumar wishes to know the value of Mr Rakesh for A-to-Z Fashion Retail.
Basically, Mr Ramkumar wishes to know the CLV of Mr Rakesh. It is calculated as follows:

$$
\begin{aligned}
\text { CLV of Mr Rakesh } & =₹ 100 \times 4 \times 4 \\
& =₹ 1,600
\end{aligned}
$$

## IMPORTANCE OF UNDERSTANDING CLV

CLV can help you in deciding how much should be your CAC. CAC is the amount of money that you spend to make someone your customer. It can be through advertising or offers given to potential customers to start buying from you. Let's try to understand the role of CAC in decision-making through an example.

Example: Carrying on with the previous example, assume that Mr Ramkumar of A-to-Z Fashion Retail is facing three scenarios in the context of CAC of Mr Rakesh.

| Scenario \#1 | Scenario \#2 | Scenario \#3 |
| :---: | :---: | :---: |
| CAC of Rakesh | CAC of Rakesh | CAC of Rakesh |
| is ₹200 | is ₹ 800 | is ₹ 1,300 |

The question before Mr Ramkumar is: Up to what extent will he proceed to spend to acquire A and when should he not? Help Mr Ramkumar.

Let's understand each of these scenarios before any conclusion.

Scenario \#1: To acquire Rakesh as his customer, it will cost Mr Ramkumar ₹200 now. Should he proceed?
Here, even if you do not know the concept of CLV, you can make a safe guess that spending ₹200 this year to get $₹ 1,600$ in 4 years would be a positive deal, although this is not a scientific way to take a decision and it will be addressed under scenario \#3.

Scenario \#2: To acquire Rakesh as his customer, it will cost Mr Ramkumar ₹800 now. Should he proceed?
If you do not know or apply the concept of CLV, ₹ 800 would appear more than what Mr Rakesh will spend in the first year, that is, ₹ 400 . So chances are that you will not even try. Again, this is not a scientific way to take a decision and it will be addressed under scenario \#3.

For now, if you know or apply the concept of CLV, you come to know Mr Rakesh's CLV of ₹ 1,600 and you might go ahead, but as you can see now, it is not that easy to take a call. You need more information.

Scenario \#3: To acquire Rakesh as his customer, it will cost Mr Ramkumar ₹1,300 now. Should he proceed?
Now the answer is not at all easy. Why? What is happening? It is because you know that the value of money decreases with time. So the CLV of ₹ 1,600 in 4 years might not be as valuable as ₹ 1,300 today. But how do you confirm that? For that, we will have to first understand the concept of time value of money.

## TIME VALUE OF MONEY

The time value of money simply means that a rupee today is of more value today than it will be tomorrow. It is the present value of money. So the net present value or NPV is the reason we say things like customers who pay cash are better than customers who buy on credit or the customers who are buying larger quantities in short run are better than customers who would buy in small quantities for longer periods.

To derive the present value of the cash flows, we need to 'discount' them at a particular rate. This rate is usually taken as the rate of interest I am paying for the loan taken for the investment in this business or the rate of return which I will get if I invest the money in some other business/investment with similar risk. Let us apply the concept of NPV.

Suppose Mr Ramkumar can invest those $₹ 1,300$ which he is thinking on spending on Mr Rakesh to acquire him as his customer and Mr Ramkumar can earn 10 per cent returns or suppose Mr Ramkumar takes a loan to start this business at 10 per cent interest to be paid on this loan. Hence, in both these cases, the rate of discount to calculate time value of money will be 10 per cent.

Now, continuing with scenario \#3 and using this 10 per cent as the rate of discount, let us calculate the present value of Mr Rakesh's CLV. The formula to calculate NPV is as follows:

$$
\mathrm{NPV}=(\text { Cash flows }) /(1+\mathrm{r})^{\mathrm{i}}
$$

Where

$$
\begin{aligned}
& \mathrm{r}=\text { rate of discount } \\
& \mathrm{i}=\text { year }
\end{aligned}
$$

After applying the formula of NPV, the CLV of Mr Rakesh is calculated as presented in Table 2.1.

So the present value of Mr Rakesh's CLV under scenario \#3 is ₹1,268.92, whereas Mr Ramkumar has to spend $₹ 1,300$ today as Mr Rakesh's CAC. So the clear decision is that Mr Ramkumar should not invest ₹ 1,300 today to acquire Mr Rakesh as his customer.

Overall, CLV helps in deciding how much you can spend on CAC.

## IS CLV BASED ON REVENUE OR PROFITS?

Another important point to understand is that, so far, we have considered 'revenues' generated through a customer for

Table 2.1
Calculation of CLV of Mr Rakesh under Scenario \#3

| Year | Cash Flow | Present Value | Remarks/Calculation |
| :---: | :---: | :---: | :---: |
| 0 | (-)1,300 | (-)1,300.00 | No positive cash flow |
| 1 | 400 | 363.63 | $\begin{aligned} 400 /(1+10 \%)^{1} & =400 /(1.1)^{1} \\ & =400 /(1.10) \end{aligned}$ |
| 2 | 400 | 330.57 | $\begin{aligned} 400 /(1+10 \%)^{2} & =400 /(1.1)^{2} \\ & =400 /(1.21) \end{aligned}$ |
| 3 | 400 | 300.75 | $\begin{aligned} 400 /(1+10 \%)^{3} & =400 /(1.1)^{3} \\ & =400 /(1.33) \end{aligned}$ |
| 4 | 400 | 273.97 | $\begin{aligned} 400 /(1+10 \%)^{4} & =400 /(1.1)^{4} \\ & =400 /(1.46) \end{aligned}$ |
| Today's CLV of Mr Rakesh |  | 1,268.92 |  |

calculating CLV. However, revenue is different from profit. It is a pertinent question that which one should be preferred for calculating CLV? We can understand the point in discussion through an example.

Ben and Abbey are the two customers of Tea Hut retail shop. The owner of the shop is interested in knowing about who is a better customer from business point of view for Tea Hut under two different scenarios presented in Table 2.2.

After looking at the particulars mentioned in Table 2.2, following inferences can be made.

For scenario \#1, Ben is the better customer for the business of Tea Hut.

Interestingly, there might be customers who spend less but the profit that they give to the company is higher. Consider scenario \#2. In this case, customer Abbey is generating half of the revenue of that of customer Ben, but as it is observable from Table 2.2, both are equally profitable for the company.

Table 2.2
Particulars of Ben and Abbey at Tea Hut

| Particulars | Scenario \#1 |  | Scenario \#2 |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Ben | Abbey | Ben | Abbey |
| Years that customers <br> will be with Tea Hut | 3 | 2 | 3 | 3 |
| First year revenue | 1,000 | 500 | 1,000 | 500 |
| Second year revenue | 1,000 | 500 | 1,000 | 500 |
| Third year revenue | 1,000 | - | 1,000 | 500 |
| Lifetime revenue | 3,000 | 1,000 | 3,000 | 1,500 |
| Profit margin (\%) | 10 | 10 | 5 | 10 |
| Lifetime gross profit | 300 | 100 | 150 | 150 |
| CAC | 50 | 50 | 50 | 50 |
| Lifetime net profit | 250 | 50 | 100 | 100 |

If you are wondering how can there be difference in profit margin from two customers, well, the answer is simple: If you take your car to a company's own service centre, the amount that you would pay is much higher in comparison to if you take your car to any authorized service centre. Hence, the company earns different revenues from different channels and, therefore, the profitability of customers going to different channels is different.

Similarly, there is a group of customers who buy from you at all times of the year, and if you compare them with the customers who buy from you only when you put a sale, obviously, the customers who are paying you the regular price would generate more revenue and profits in comparison to those who buy only during the sale.

## CALCULATING AVERAGE CLV

A company might also calculate its average CLV, that is, the average CLV of all its customers by using the following formula.

$$
\mathrm{CLV}=\mathrm{AOV} \times \mathrm{F} \times \mathrm{GM} \times \mathrm{P}
$$

Where
Company's AOV $=$ Total sales revenues in a duration/ total number of orders in that duration
Company's purchase frequency $(\mathrm{F})=$ Total number of orders in a duration/total number of unique customers Gross margin (GM) = Total sales revenue - Cost of goods sold/total sales revenue Customer lifetime period ( P ) $=1$ /Churn rate Churn Rate $=$ Number of customers at the end of the period - Number of customers at the beginning of the period/Number of customers at the beginning of the period
Cost of goods sold $=$ Value of beginning inventory + Value of additional purchases during period - Value of ending inventory

Concepts such as churn rate and cost of goods sold will be discussed at length in later chapters.

## CHECK YOUR UNDERSTANDING

1. Amit is an interior decorator by education and is working in an MNC. Now he wants to start his own interior decoration business. For that, Amit will have to take a loan of ₹ 500,000 for 3 years. The prevailing rate of interest is 7 per cent.

Amit has already identified a potential customer-Rohit-who is a real estate developer and can give Amit a business of ₹200,000 every year, for 3 consecutive years. However, to acquire Rohit as his customer, Amit will have to invest ₹75,000 now. Should Amit invest $₹ 75,000$ on acquiring Rohit as a customer?

Amit will need only a laptop and an Internet connection to work, which he already has. So there are no other costs for him except to pay the EMI on the loan and ₹ 15,000 per month which he needs to meet his daily expenses.

Make logical assumptions and answer the question.
2. Assume that Ram and Shyam are the customers of Dash Crockery House. Both of them will be transacting with the Dash Crockery House for four years. However, Ram will buy 150 units @ ₹50 for the first year and for next 3 years, he would be buying 150 units @ ₹ 55 . On the other hand, Shyam would be buying 500 units equally divided in 4 years @ ₹45. Since Ram will buy on credit, the profit that he would generate for the business would be 5 per cent, and Shyam would buy in cash, so the profit margin from Shyam would be 6.5 per cent. The CAC for both Ram and Shyam is ₹ 3,500 . Because of the production and supply constraints, the business can cater to either Ram or Shyam. Which customer should the business go for?

## ADDITIONAL INSIGHT <br> Value of 'Referrals' in Calculation of CLV

Suppose there are two customers, A and B. B is 5 per cent less profitable in comparison to A . However, he has a strong network and recommends our company to many people, out of which three become our customers. Now, if we add this 'referral' advantage to CLV of both A and B, we might find B as more profitable than A. So it's a good idea to see and include the referral power of customers while calculating CLV.

## Experience the Real Life

On the next visit to your favourite grocery store, try to meet the store owner. Do they make an effort to enquire about more profitable customers? What process do they follow? Is it logical? Offer your help to calculate CLV in case they agree to share the customer data.

## ADDITIONAL INSIGHTS AT A CLICK

1. What's Customer Lifetime Value-All You Need to Know
The article provides an in-depth understanding of the CLV concept. It emphasizes that CLV metrics is often underutilized and ignored. The article also covers the applicability of the concept in the digital arena. https://exponea.com/blog/customer-lifetime-valueguide
2. Why the Time Value of Money (TVM) Matters to Investors
The article in a very crisp way displays the importance of understanding time value of money. It helps in relating the concept of time value with the CLV. https://www.investopedia.com/ask/answers/033015/ why-time-value-money-tvm-important-conceptinvestors.asp

## 3

## who is Leaving and who is staying?

童
Simply Cosmetics is a subscription-based cosmetics provider. The customers who sign up with Simply Cosmetics would get their chosen cosmetic products at regular time intervals without taking the trouble of going and buying them again and again.

For example, if you consume a bottle of shampoo in three months, you can purchase the annual subscription from Simply Cosmetics, wherein you will tell your preferred brand of shampoo and set the delivery to 'every three months'. Once done, you will receive your shampoo in every three months delivered at your doorstep. You can do the same for a lot of other cosmetics, toiletries and personal care products.

Priti, the marketing head of Simply Cosmetics, had a rough day at the office. She was told by the marketing intelligence department of her company that the number of customers who were not renewing their subscriptions was increasing rapidly. At the same time, because of aggressive marketing, new customers were getting added rapidly as well.

Priti was confused because she had to take a decision: Should she spend her marketing budget on acquiring new customers or should she use the budget to retain the customers who might leave when their subscription ends?

Priti thought how good it would be if she could know beforehand how many customers are likely to leave, how many are likely to stay and which ones they are. That would make her job so easy! She smiled at the thought
and took a deep breath as she sat down to study how the marketing intelligence department is calculating that number! It was important to understand this because without knowing how many customers are likely to leave, how many customers are likely to stay and how many new customers are likely to be added, she could not forecast the demand for her products.

As she was looking at the numbers, her mobile buzzed. Priti looked at the screen and her face turned pale. It was the second mail from the head of production, who wanted to know the demand forecasts so that he can plan for production accordingly.

As you can guess, as a marketer you would be required to know the customer churn rate and customer retention rate (CRR) because that is an important metric which will not only reflect customers' satisfaction with your company and its product but will also help you in forecasting demand.


## CUSTOMER CHURN RATE

Customer churn is the number of customers who leave your business over a given period of time. Needless to say, it is not a good thing for a business, unless those customers are lossmaking ones. Marketers keep a track of this metric because it is an indicator of business's health and strategies. The formula for calculating customer churn rate is as follows.

Customer churn rate $=$ (Number of customers who leave the business in a period/Remaining number of customers at the end of the period) $\times 100$

To understand the calculation in a better way, let's consider an example.

If at the beginning of the year, Connect Bank had 1,000 customers and 500 left during the year while 250 were added as new customers, what would be the churn rate of Connect Bank?
By applying the formula of churn rate, we can calculate it for Connect Bank as follows:

$$
\begin{aligned}
& =(500 / 750) \times 100 \\
& =66.66 \%
\end{aligned}
$$

Take a note that in most of the cases, the lower the churn rate, the better it is.

## IDENTIFYING CHURN

The measurement of churn rate would be effective only if the churn is properly defined. Take an example of a mobile app marketing company. People install the app, and some use it too. Now, what will you consider as churn?

1. Those who download the app but do not even open it
2. Those who uninstall the app
3. Those who subscribe but never use

The above situations clearly prove the point that it is very difficult to define churn in some cases and before defining churn, you cannot measure it properly. So special attention needs to be given to the question: What is churn for you? And only then you would be able to measure it properly.

Churn rate can differ if you take the number of customers at the end of the year vs the number of customers at the beginning of the year. To prove this point, consider the following example.

Suppose at the beginning of the year, Cutting Edge Salon had 100 customers, and at the end of the year, it had 120 customers. During the year, the salon lost

10 customers while added 30 new. Calculate the churn rate of Cutting Edge Salon.
First of all, we calculate churn rate by considering number of customers at the end of the period:
Churn rate (end) $=($ Number of customers lost/Number of customers at the end of the period) $\times 100$

$$
\begin{aligned}
& =(10 / 120) \times 100 \\
& =8.3 \%
\end{aligned}
$$

Then we calculate the churn rate by considering the number of customers at the beginning of the period to check any variation in answer:
Churn rate (beginning) $=$ (Number of customers lost/Number of customers at the beginning of the period) $\times 100$

$$
=(10 / 100) \times 100
$$

$$
=10 \%
$$

So it is noticeable that the way we define our churn will have an impact on the final outcome of measurement.

## CUSTOMER RETENTION RATE

While churn rate measures how many customers are leaving your business in a given period, the CRR tells you how many customers you are able to retain with you.

It is an established fact that retaining customers is far less costly than acquiring new customers (some scholars have estimated that it costs six times more to acquire new customers). The logic is simple: If the customers stay with you for a longer period of time, the CLV will increase.

So businesses spend a lot of money on activities and actions to retain customers and to maximize revenues from them. CRR measures whether your efforts and resources spent on customer retention are bearing any fruit or not.

Simply speaking, if you know the customer churn number, you can simply subtract that number from the total customers at the beginning or end of a period and you will get the number of customers retained. However, this is the 'number' of customers retained, 'not' the CRR, which is as follows.

$$
C R R=(E-N / S) \times 100
$$

Where
$\mathrm{E}=$ Number of customers at the end of the period
$\mathrm{N}=$ Number of new customers acquired during the period $S=$ Number of customers at the start of the period

To understand the calculation in a better way, let's consider an example.

Baygon Ltd, a pesticide company, had 2,300 customers at the beginning of the year. It went on to add 200 new customers in that year. However, during this period, 500 customers stopped doing business with the company. What is the CRR of Baygon Ltd?
The CRR of Baygon Ltd is calculated as:

$$
\begin{aligned}
\mathrm{CRR} & =(\mathrm{E}-\mathrm{N} / \mathrm{S}) \times 100 \\
& =[(2,000-200) / 2,300] \times 100 \\
& =(1,800 / 2,300) \times 100 \\
& =78.26 \%
\end{aligned}
$$

Ideally, you would like to only add new customers, but that usually doesn't happen. Some customers would surely leave during the period. Therefore, as a thumb rule, a CRR of around 90 per cent is fairly good.

1. If at the beginning of the year, the business had 150,000 customers and 2,500 left during the year while 750 were added as new customers.
a. What would be the customer churn rate, taking the number of customers at the beginning of the period?
b. What would be the customer churn rate, taking the number of customers at the end of the period?
c. Note down the customer churn rate calculated for the two questions (a and b) above. Now assume that you are an entrepreneur and are making a presentation to a venture capitalist. Which customer churn rate would you show in your presentation, 'a' or 'b'?
d. What is the CRR for this business?
2. Rhythm Ltd is a music streaming company. It sells monthly subscriptions of their service. Below is the data of its subscription for the fourth quarter (January to March).

| Month | Customers at <br> the Beginning <br> of the Month | Customers at <br> the End of the <br> Month | Daily <br> Active <br> Customers | Customers <br> Opted Out of <br> Subscription |
| :--- | :---: | :---: | :---: | :---: |
| Jan | 120 | 135 | 75 | 20 |
| Feb | 135 | 140 | 80 | 25 |
| Mar | 140 | 150 | 75 | 20 |

On the basis of the data, calculate the following:
a. Customer churn rate for each month and for the quarter, taking the number of customers at the beginning of the period as base
b. Customer churn rate for each month and for the quarter, taking the number of customers at the end of the period as base
c. Monthly and quarterly CRR for this business
d. Assuming that the company only considers 'active customers' as their customers and considering those as the 'number of customers', the customer churn number and customer retention number for each month

## Experience the Real Life

Talk to the retailers around your house and college to understand whether they even know how many new customers they add or lose every month/year. Explain them the concept and see what queries they have. Do you have the answers to those queries?

## ADDITIONAL INSIGHTS AT A CLICK

1. How to Easily Slow Down Customer Churn

This popular article speaks about the strategies and methods through which customer churn rate could be focused efforts, and it starts with understanding the basic calculations. The article covers the application of the concept in the digital world. https://www.forbes.com/sites/theyec/2020/06/26/ how-to-easily-slow-down-customer-churn/?sh= 3bcbd48e459a
2. A 9-minute Guide to Winning at Customer Retention The article highlights an important issue that the customer isn't truly 'acquired' unless they're in it for the long run. If not, they aren't really our customers; they're just strangers passing through. In all the
article is a snapshot of few smart strategies to retain customers.
https://medium.com/swlh/a-9-minute-guide-to-winning-at-customer-retention-2d30b3258d92
3. Subscription Models: A Successful Way of Customer Retention
The article discusses subscription model as a successful way of long-term customer retention for a business. It also states that the model can guarantee a steady stream of revenue while also allowing companies to showcase new or exclusive products. https://www.thedrum.com/profile/superb-media/ news/subscription-models-a-successful-way-of-customer-retention

## 4 <br> are we in the mind or the Heart of customel?


When you spend millions on marketing your brand, what do you expect in return?

Well, the minimum that most marketers would expect is that the customers remember their brand in buying situations and the maximum they would expect is that the customers fall into love with their brand, look for it to buy and recommend it to others! The first one here is 'share of mind' and latter one is 'share of heart'. As one can guess, both lead to sales, and that is what marketers love. Isn't it?

Let's test this! Try and remember the last three things that you have purchased. Which brands are they? Aren't these the brands which you were aware of and remembered at the time of making the purchase decision? This is the power of 'share of mind', that is, more often than not we tend to buy brands that we remember first at the time of making the purchase decision. That's the power of customers' share of mind, and that is why marketers want their brand to stay at the top of customers' minds.

Now consider this hypothetical case: A customer has been buying your soap brand for two years. Does that make you happy? It should because you think that the customer is loyal and that is why they are buying your brand repeatedly. But one fine day, the customer shifts to a new brand which has recently launched. What has happened? Where is the loyalty
gone? You go and talk to the customer and ask them these questions. You get the shock of your life from the answer that they just give: 'I was buying the soap just because I could not get what I want. Now, this new soap is the thing I have been looking for!'

Naïve marketers often confuse repeat buying with loyalty; in other words, they tend to confuse customers' 'share of wallet' with 'share of heart'. So while repeat buying (share of wallet) can happen because of any reason, for loyalty (share of heart), you need to build emotional connection. That emotional connection does not allow the customers to move to competing brands and, hence, ensures repeated sales and efficient marketing and preserves the brand, and that emotional connection is captured through 'share of heart'.

That is why customers' share of heart is critical for marketers because it is the real meaningful indicator of brand's and business's health, and knowing how to measure it is critical for you!


Every firm in any industry is striving for market success. Market success is generally an ability to produce and sell the largest volume of a product in comparison to rivals. For that purpose, market share is popularly used as an indicator to gauge the performance of a company in relation to its competitors. The value of market share guides the managers to check the direction of the growth of the firm in relation to the growth in the industry over a period of time. It also helps in making demand-forecasting decisions. Also, any positive or negative change in the market share provides an indication towards taking corrective measures.

Many firms view higher market share equivalent to higher profitability. With a narrow view, firms also consider it as

Table 4.1
National Sales Data of Popular High-end Bicycles Brands

| Company <br> Name | Brand <br> Name | Average Unit <br> Price (in ₹) | Units Sold/ <br> Year (No.) | Sales <br> (in ’000 ₹) |
| :--- | :--- | :---: | :---: | :---: |
| Algo Ltd | Mach 1 | 16,000 | 20,000 | 320,000 |
| Basics Ltd | ABS | 17,000 | 36,000 | 612,000 |
| Carl Ltd | Falcon | 15,000 | 28,000 | 420,000 |
| Deck Ltd | Hawk | 16,000 | 44,000 | 704,000 |
| Eagle Ltd | Swift | 14,000 | 16,000 | 224,000 |
|  | Total |  | 144,000 | $2,280,000$ |

the dominant indicator for business performance. Although market share is the quantitative way of identifying the performance of a company or a brand in relation to the competition, overreliance on this quantitative measure is not truly supported by expert across the world. Experts advocate two major measures, that is, share of mind and share of heart of the market, to consider for getting the true position of a brand in relation to its competitors. It is suggested that firms calculating market shares should also adopt the approach of measuring share of mind and share of heart as an indicator to present and future operational success.

To get an insight about the concepts of market share, share of mind and share of heart, let's consider the data (Table 4.1) of popular high-end bicycles brands in the country.

## MARKET SHARE

Market share analysis is the percentage of a market's unit or revenue sales accounted for by a specific firm in an industry. Assuming that all the bicycle companies are offering a single brand to the market, the market share of a company can be calculated in two ways: absolute market share and relative market share.

## ABSOLUTE MARKET SHARE

It is the percentage of a company's sales to the industry sales. The sales may be in the form of units sold or revenue generated in a given period of time.

> Market share of company A (unit wise) $=$ (Units sold by company A/ Total units sold by all the companies) $\times 100$

Also,

Market share of company A (revenue wise) = (Sales revenue of company A/
Total sales revenue of all the companies) $\times 100$

Mr Raghavan is the marketing manager of Algo Ltd, a high-end bicycle manufacturing company. Last year, the company had a unit-wise market share of 9.8 per cent. Since then, under the supervision of Mr Raghavan, the company launched an aggressive marketing campaign. Mr Raghavan wishes to know if there is any impact of the market strategy on the market share of Algo Ltd. This time, he is also interested in knowing the revenuewise market share. Calculate.

With reference to the data given in Table 4.1, for the required market share of Algo Ltd, the formula to calculate unit-wise and revenue-wise market share needs to be applied.

Market share of Algo Ltd (unit wise) $=(20,000 / 144,000) \times 100$

$$
=13.89 \%
$$

Market share of Algo Ltd (revenue wise)

$$
\begin{aligned}
& =(320,000 / 2,280,000) \times 100 \\
& =14.03 \%
\end{aligned}
$$

From the above calculations, it is clearly visible that this year, the unit-wise market share of Algo Ltd has increased to 13.89 per cent from last year's 9.8 per cent. So Mr Raghavan may attribute this growth to the aggressive marketing strategy.

## RELATIUE MARKET SHARE

It is the percentage of a company's or brand's market share in comparison to the largest competitor. The relative market share may be in the form of units sold or revenue generated in a given period of time.

Mr Raghavan, the marketing manager of Algo Ltd, wishes to know how their brand Mach 1 is performing in comparison to the market leader.

From the data given in Table 4.1, it can be concluded that the brand Hawk of Deck Ltd is the market leader, with the unit-wise market share of $(44,000 / 1,440,000) \times 100=30.55$ per cent. So to calculate the relative market share, we have to compare the market share of brand Mach 1 with the market leader, that is, brand Hawk.

Relative market share of brand Mach 1 (unit wise) = (Market share of Mach 1/Market share of Hawk) $\times 100$

$$
\begin{aligned}
& =(13.89 / 30.55) \times 100 \\
& =45.46 \%
\end{aligned}
$$

Also,
Market share of brand Mach 1 (revenue wise) = (Market share of Mach 1/Market share of Hawk) $\times 100$

$$
\begin{aligned}
& =(14.03 / 30.87) \times 100 \\
& =45.45 \%
\end{aligned}
$$

Broadly, it can be stated that market share is an indication of share of mind and share of heart, or in simple format:

$$
\text { Market share }=\text { Share of mind }+ \text { Share of heart }
$$

It highlights the importance of understanding the determinant of market share, rather than just sticking to its mathematical measure. The two determinants indicate the position of a firm in terms of brand loyalty and long-term outlook.

## SHARE OF MIND

Share of mind is also denoted with the term 'share of voice'. Share of mind is related to awareness of customers about the brand. It could also be attached to brand recognition and brand recall by a customer. To be precise, share of mind is the ability of customers to understand the brand-related features vis-à-vis competitor brands. Share of mind is achieved by increasing the awareness level of a brand through promotional activities such as public relations and advertising. To check the awareness of a brand, few simple questions are sometimes asked as a brand recall test. For example, customers are asked: 'Name any three companies you are aware of in bicycle industry'. A brand name appearing first in their mind is having a higher share as compared to subsequent brands. Higher the percentage of customers who are able to recall a specific brand, higher is the share of mind of that brand. So share of mind is related to awareness of a brand, and it is the focus area of advertisers. To calculate share of mind, the following approach could be adopted.

Step 1: Customers are asked to recall and recognize the features of each brand, and the responses are recorded through a 5 -point rating scale. Then a mean score of each brand is
calculated. Closer the mean value to 5 , higher the recognition of brand-related features.

Step 2: Apply the formula for share of mind.

$$
\begin{aligned}
\text { Share of mind } & =\frac{\text { Mean value of P }}{\text { Max Likert value } \mathrm{Q}} \\
& \times \frac{\text { Mean value of P }}{\text { TIM }- \text { Mean value of P }} \times 100
\end{aligned}
$$

Where
$\mathrm{P}=$ Brand under consideration
$\mathrm{Q}=$ Maximum Likert value (varies from scale; for a 5 -point scale, it is 5)
TIM = Total industry mean

Example: MR Ltd, a popular marketing research company, was hired by Algo Ltd to conduct a survey on the share of mind of their Mach 1 brand. The representatives of MR Ltd asked the potential customers of bicycle to recall the top five brands of bigh-end bicycles. The values of customers' recall were recorded on the basis of 5-point Likert scale, and the mean scores of their responses are presented in Table 4.2. Calculate the share of mind of brand Mach 1.

Share of mind of brand Mach $1=$

$$
\binom{\frac{\text { Mean value of Mach } 1}{\text { Max Likert value }} \times}{\frac{\text { Mean value of Mach } 1}{\text { Total mean value }- \text { Mean value of Mach } 1}} \times 100
$$

Note: Similarly, share of mind can be calculated for rest of the brands.

Table 4.2
Mean Scores of Customers' Recall

| Company Name | Brand Name | Mean Score |
| :--- | :--- | :---: |
| Algo Ltd | Mach 1 | 3.4 |
| Basics Ltd | ABS | 3.9 |
| Carl Ltd | Falcon | 2.7 |
| Deck Ltd | Hawk | 4.2 |
| Eagle Ltd | Swift | 3.1 |
|  | Total Mean Value | 17.3 |

## SHARE OF HEART

Market share and share of mind are connected to the rational aspect of consumer behaviour, but there also exists an emotional aspect of consumer that needs proper recognition. Many a time, consumers respond in an emotional manner to a brand or related message. Share of heart denotes the influence relationship between a consumer and a specific brand, product or service provider. It is the first thing a consumer prefers over a number of given options. It is like creating an emotional bond with your consumers. Share of heart is similar to share of mind, but the preference for a brand or firm is based on emotions in place of rationality. Share of heart indicates the level of satisfaction and emotional attachment with a brand. To check the share of heart, consumers are asked questions such as: 'Name any three firms you prefer to buy a product from' and 'Would you recommend brand A to your friend or relatives?' Major components of share of heart are share of requirement, brand belief, loyalty and purchase intention, indicating share of brand purchase, commitment of purchase, willingness to shop with the same brand in future and willingness to purchase, respectively. In other words, share of heart is associated with being loyal to a brand and spreading positive comments about it by word of mouth. Understanding of share of heart avoids brand switching and brand rejection to a great extent.

To calculate share of heart, the following approach could be adopted.

Step 1: Customers are asked about their frequency of purchase/ visits for a specific brand and their willingness to recommend that brand to friends and relatives. Just like share of mind, the responses are recorded through a 5 -point rating scale. Then a mean score of each brand is calculated. Closer the mean value to 5 , higher the loyalty towards that brand.

Step 2: For calculating the share of heart (frequency of purchase/visits) and share of heart (willingness to recommend), apply the following formula.

$$
\frac{\text { Mean value of } \mathrm{P}}{\text { Max Likert value } \mathrm{Q}} \times \frac{\text { Mean value of } \mathrm{P}}{\text { TMV }- \text { Mean value of } \mathrm{P}} \times 100
$$

Where
$\mathrm{P}=\mathrm{Brand}$ under consideration
$\mathrm{Q}=$ Maximum Likert value (varies from scale; for a 5 -point scale, it is 5)
TMV = Total mean value

Step 3: Calculate the average to find the overall share of heart value.
Overall share of heart $=[$ Share of heart $($ frequency $)$ + Share of heart (recommend)]/2

Example: The mean values of customers' frequency of usage or purchase and willingness to recommend the brand to their friends of the top five brands of popular taxi service on a 5-point Likert scale are mentioned in Table 4.3. Calculate the share of heart of brand BlahBlah.

First of all, the total mean value for frequency of purchase is calculated by adding all the mean scores mentioned under frequency of purchase, and it comes out as 17.6. Then the

Table 4.3
Mean Scores of customers' Frequency of Purchase and Recommendation

| Brand Name | Frequency of Purchase <br> Mean Score | Willingness to Recommend <br> Mean Score |
| :--- | :---: | :---: |
| Ola | 3.8 | 3.6 |
| Uber | 3.4 | 3.6 |
| Meru | 2.9 | 2.1 |
| BlahBlah | 4.3 | 3.9 |
| Fast | 3.2 | 3.2 |

share of heart of brand BlahBlah (frequency of purchase) is calculated by applying the following formula.

$$
\begin{aligned}
= & \frac{\text { Mean value of BlahBlah }}{\text { Max Likert value }} \times \\
& \frac{\text { Mean value of BlahBlah }}{\text { TMV }- \text { Mean value of BlahBlah }} \times 100 \\
= & \frac{4.3}{5} \times \frac{4.3}{17.6-4.3} \times 100=27.80 \%
\end{aligned}
$$

Next step is to calculate the total mean value for willingness to recommend, which is calculated by adding all the mean scores mentioned under willingness to recommend, and it comes out as 16.4. Then share of heart of brand BlahBlah (willingness to recommend) is calculated by applying the following formula.

$$
\begin{aligned}
= & \frac{\text { Mean value of BlahBlah }}{\text { Max Likert value }} \times \\
& \frac{\text { Mean value of BlahBlah }}{\text { TMV }- \text { Mean value of BlahBlah }} \times 100 \\
= & \frac{3.9}{5} \times \frac{3.9}{16.4-3.9} \times 100=24.34 \%
\end{aligned}
$$

Finally, the overall share of heart for brand BlahBlah is calculated by averaging the share of hearts percentage for frequency of purchase and willingness to recommend, and it comes out to be $(27.80+24.34) / 2=26.07 \%$

Note: Similarly, share of heart can be calculated for rest of the brands.

## 4 CHECK YOUR UNDERSTANDING

1. In a highly competitive and growing market of air purifiers, the sales performance of top four companies selling air purifiers in India for the year 2020-2021 is shown in Table 4.4.

Calculate the unit-wise and revenue-wise relative market share of Dreamair Ltd.
2. The mean values of customers' recall about the top five brands of gyms and fitness centres on the basis of 7-point Likert scale are given in Table 4.5. Calculate the share of mind of brand TenX.

Table 4.4
Sales Performance of Popular Air Purifier Brands

| Name of <br> Company | Average Unit <br> Price (in ₹) | Number of <br> Units Sold <br> (in a Year) | Sales <br> (in ’000 ₹) |
| :--- | :---: | :---: | :---: |
| Airflow Ltd | 11,000 | 800 | 8,800 |
| Bestair Ltd | 11,500 | 700 | 8,050 |
| Clearair Ltd | 14,000 | 900 | 12,600 |
| Dreamair Ltd | 18,000 | 500 | 9,000 |

Table 4.5
Mean Scores of Customers' Recall

| Name of Gym and Fitness Centre | Mean Score |
| :--- | :---: |
| Fit | 5.9 |
| Hammer Strength | 6.2 |
| TenX | 4.8 |
| F-Mantra | 5.5 |
| Healthify | 4.2 |

## Experience the Real Life

Identify five popular brands of toothpaste. Talk to 20 people in your social circle and gather the data by asking them whether they always remember and recall the features of each brand. On the basis of data collected, try to calculate share of mind of each brand.

## ADDITIONAL INSIGHTS AT A CLICK

1. The High-impact 10X Advantage: Share of Voice vs Share of Mind
This wonderful article explores the applicability of the concepts of share of heart and share of mind in the field of advertising. It provides an additional dimension to the readers about usage of the concept to counter the challenges of clutter in the field of advertising.
https://wizardofads.org/the-high-impact-10x-advan-tage-share-of-voice-vs-share-of-mind/
2. A Comprehensive Guide to Mindshare and Market Share
This guide provides you a detailed insight about the concepts of market share and mind share. It helps the reader in getting a competitive advantage through increase in mind share and market share. Overall, it enhances the conceptual knowledge on the topic. https://www.meetcortex.com/blog/a-comprehensive-guide-to-mindshare-and-market-share

## 5

## deciphering break-even point


Arjun, an arts student who specialized in fabric art and painting, started his umbrella manufacturing and selling business in 2018. He came up with very unique designs on umbrellas and experimented with different fabrics. He saw the prevailing prices in the market and priced his umbrellas very close to those price points. Unique designs and fabrics, coupled with almost same prices as other bland and dull umbrellas, led to good response, and the business got off to a very good start.

After a year, Arjun realized that he was running out of capital and called his chartered accountant (CA). Arjun's main concern was that in spite of selling so well, why was he not getting any money and, in fact, where was his own capital going?

The CA told Arjun that, yes, the sales were good but not good enough to make a profit! Arjun was surprised as he always thought that the more the sales, the more the profit! He was puzzled!

His CA explained to him that since he was doing exquisite designs on umbrellas, the cost of labour was high, and because he was using various types of fabrics, the cost of inventory of fabrics and low usage of each type of fabric were also leading to very high costs. With higher costs, and the prices set equal to the big players in the market, Arjun was losing money on each umbrella that he was selling.
'But increasing the price of umbrellas would decrease the demand, so the sales would go further
down!' said Arjun! The CA replied, - 'I am not asking you to increase the price, Arjun! I am saying that the sales are low and that is why we are not making a profit.'

Arjun was shocked because he felt that the sales were great! 'How many more umbrellas do I need to sell to get out of this loss?' was his cry! He also told his CA that he was under the impression that he would make 10 per cent profit, because he had taken money from his father's fixed deposit where his father was earning 9 per cent. He wanted to earn at least more than that!

The CA said that the solution lied in first reaching the break-even point (BEP) and then deciding the profit he wanted to make and accordingly price the umbrellas and then try to achieve the minimum sales requirement (MSR) point to make that desired profit.

Arjun had never heard these terms before! He said, 'What on earth are BEP and MSR?' His CA told him that these terms can help him in answering the two most critical questions that he was facing: How many umbrellas he should sell to make a profit and what should his sales revenue be to achieve his desired level of profit.

This chapter introduces the concept and methodology to calculate BEP and MSR, so that you can answer questions which Arjun is facing and are critical to any business.


## WHY BEP?

When you set out to sell a product, it is important to know how many units you need to sell to cover the costs. That point is critical because only after selling that number of units, the additional sales would start giving you any profit, whatsoever. That point, which is the minimum number of units to be sold,
is called BEP. In other words, the BEP tells you the minimum number of units that must be sold so that your business can at least cover its costs. In other words, any sales below the BEP would results in losses.

## CALCULATING BEP

For the calculation of BEP, you need to know the following.

- Sales price: It is the price which the buyer is ready to pay or, in other words, the price offered by the seller to sell a product. It is the seller's final price.
- Variable costs: It is the cost that varies with the production. So it increases or decreases with the amount of output. More the output, lesser would be the variable cost. For example, if the cost of producing a pen is $₹ 2$ and the company produces 25,000 pens in a month, then the variable cost would be ₹ 50,000 . On the other hand, if there is no production during a month, then the variable cost would be nil. Labour cost or cost of raw material generally falls under variable cost.
- Fixed costs: Contrary to the variable cost, the fixed cost does not vary with the amount of production. It remains the same, irrespective of production. Even if there is no production, you have to pay the fixed cost. Carrying on with the previous example, if the pen manufacturing company has to pay a monthly rent of ₹ 80,000 for using the manufacturing machine, assuming that there is no production during the month, the company still has to pay the fixed cost, although the variable cost in this case is still nil.
Also, you need to know the 'contribution margin' that can be calculated through the formula given below. But before going for the formula, let us understand what contribution margin is and what its significance is. Suppose you make three products
and have to take a decision to drop one of them, then which one would you drop? Obviously, you would like to drop the one which is least profitable, but how would you know which one is contributing the least profit to your company? Contribution margin answers that for you. It tells you how much money you are making for each product or unit sold after deducting the variable costs from its sales price.

Since you can the profit contribution of each product or unit sold through contribution margin, this knowledge can help you in tweaking the sales price and structuring sales commissions or the margins that intermediaries earn (dealer, distributor, retailer, etc.). Hence, knowing the contribution margin is extremely important for a marketer. The two-step calculation of BEP is as follows.

## MARKETING METRICS

 Contribution margin $=$ Sales price - Variable costs$$
\text { BEP }=\text { Fixed costs/Contribution margin }
$$

Zippo Ltd fixes the sales price of its gas lighter at ₹40 per unit. The company has to pay a monthly rent of ₹ 38,500 for using the production facility, and variable costs are ₹15 per unit. Rajesh, the marketing manager, wishes to know how much sales they have to do to start earning profits.
To get an answer to his query, Mr Rajesh has to follow a two-step procedure. He has to first calculate the contribution margin and then BEP.

$$
\begin{aligned}
\text { Contribution margin } & =40-15 \\
& =₹ 25
\end{aligned}
$$

$$
\begin{aligned}
\mathrm{BEP} & =38,500 / 25(\text { Monthly rent is a fixed cost }) \\
& =1,540 \text { units }
\end{aligned}
$$

This means that Zippo Ltd must have their sales go past 1,540 units to start earning profits.

So now you know how much minimum quantity (units) is to be sold to make sure that the business does not face any loss.

## MINIMUM SALES REQUIREMENT

Sometimes the situation is different: The marketer or the entrepreneur has a clear idea of the profit margin that they want to make. In that case, they are interested in knowing what amount of sales (revenue) would be required to achieve that specific profit margin. In such a scenario, the matrix used is MSR. It tells you the minimum sales revenue to be generated to achieve a particular profit margin.

MSR is an important metric because every business aspires to earn a specific return on investment (ROI) and achieve a specific profit goal. To do that, the business needs to get a minimum amount of sales revenue. That quantity of sales is called MSR.

To calculate the MSR, you need to know the following:

- Fixed costs (in ₹)
- Profit goal (in ₹)
- Gross profit margin (in \%)

MSR $=($ Fixed costs + Profit goal $) /$ Gross profit margin

Nitro Chemicals Ltd has to pay ₹50,000 as the fixed costs for its chemical manufacturing business. For the next quarter, the company wants to earn a profit of ₹50,000 from the sale of chemicals, with a gross profit margin of 50 per cent. How much will be the MSR of Nitro Chemicals Ltd?

MSR of Nitro Chemicals Ltd $=(50,000+50,000) / 50 \%$

$$
=₹ 200,000
$$

So in order to achieve the profit goal of ₹ 50,000 at the gross profit margin of 50 per cent, Nitro Chemicals Ltd must make the sales of ₹200,000 in the next quarter.

## ADDITIONAL INSIGHTS ON GROSS PROFIT AND GROSS PROFIT MARGIN

Gross profit margin is one of the key indicators of the health of business. It tells whether your average profit on your product is sufficient to cover your direct expenses and make a profit. To calculate gross profit margin, you need to calculate gross profit first.

Gross profit $=$ Sales revenue - Cost of goods sold Where

Cost of goods sold $=$ Cost of raw material and labour

In the year 2020, Rapid Batteries Ltd earned ₹1,000,000 from sales. During the year, the raw material used costed $₹ 450,000$ and wages paid to the labour amounted ₹400,000. What will be the gross profit for Rapid Batteries Ltd?

Gross profit for Rapid Batteries Ltd

$$
\begin{aligned}
& =1,000,000-(450,000+400,000) \\
& =₹ 150,000
\end{aligned}
$$

With gross profit figures in your hand, you can calculate the gross profit margin with the following formula.

Gross profit margin $=($ Gross profit/Sales $) \times 100$

So in the above example,
Gross profit margin for Rapid Batteries Ltd

$$
\begin{aligned}
& =(150,000 / 1,000,000) \times 100 \\
& =15 \%
\end{aligned}
$$

## CHECK YOUR UNDERSTANDING

1. Comfy Footwear Ltd has to pay ₹500,000 as the fixed costs for its business, and the company wants to earn a profit of $₹ 70,000$ on it, with a gross profit margin of 35 per cent. How much minimum sales must be done at Comfy Footwear Ltd to achieve this gross profit margin?
2. Pizza Plaza earned $₹ 1,000,000$ from the sale of pizzas in last one year. The raw material used costed ₹ 450,000 and wages paid to the labour amounted $₹ 400,000$. What will be the gross profit and gross profit margin for Pizza Plaza?

## Experience the Real Life

Go to a retailer in your area and talk to them about the method they use to calculate gross profit and gross profit margin. Also ask them about their awareness about achieving the sales at which they have no profit-no loss (do not use the term BEP with them), and if they are aware, how they calculate it.

## ADDITIONAL INSIGHTS AT A CLICK

1. What's a Good Profit Margin for a New Business? This is a conceptual article on measuring the profitability of a business by using gross profit margin and net profit margin. It provides a comparison of both net profit and gross profit margins and their usefulness in under different scenarios. https://www.investopedia.com/articles/personal-finance/093015/whats-good-profit-margin-newbusiness.asp
2. How to Determine a Good Profit Margin for Your Small Business
It is a wonderful article on calculating gross profit margin in an easy manner. The article also covers the issues such as why profit margin matters, determining good profit margin and further steps to plan the future course of action after calculating profit margins.
https://medium.com/@BBBNWP/how-to-determine-a-good-profit-margin-for-your-small-business-ca 98f65b22a7
3. How to Do a Break-even Analysis?

This article provides information about the basic components required for conducting break-even analysis. A to-the-point approach is being followed in the article to appraise the reader about the concept. https://www.forbes.com/2007/01/15/smallbusiness-break-even-businessplan-ent-fin-cx_bl_0116nolo_ slide.html?sh=d294c85398da

## 8

# Whinh M 


When UK exited the European Union (EU), it ceased to offer the same benefits to the businesses as it did when it was a part of EU. In fact, many businesses set up their units in UK to get the advantages of an EU partner country. Now, as these businesses are planning to leave UK, they are looking for some other lucrative markets to enter. ${ }^{1}$ According to a survey, most businesses are considering the USA, China and Canada as their options. But the question is: How do you choose?2

If your answer is to check the market potential and enter the market with the highest potential, then you are probably missing the point! I wish it was that simple! There are many more parameters other than just the potential demand which are to be considered when entering a market. If you are just keeping the market potential in mind, you are in for trouble! Consider the following cases.

The USA-based automobile companies in India make a curious case for studying market selection strategies. General Motors, Ford and Harley Davidson are the giants in their own right. All of them entered India and, obviously, they would have done their calculations and analyses about the market and the

[^4]potential it had. However, all of them were forced to repeal their decision and decided to leave the Indian market after spending billions of dollars in India because they could not do well. ${ }^{3}$

You must have read/heard/seen this in news and would have wondered: Where did these companies go wrong? What is it about choosing a market that is so tricky that these giants could not assess?

On the contrary, when Airtel chose to enter Africa in 2010, it looked like a strange move but after a few years of teething problems, Airtel has emerged as one of the largest players in the African wireless telecommunication market. Airtel proved that its decision to enter Africa was correct, and it analysed the market accurately enough to back their decision. ${ }^{4}$

Very similar to Airtel is the case of Mahindra and Mabindra which chose to enter both the USA (in 1994) and China (in 2005) with its tractors. It might look like as if entering China would be easier because it is closer and similar to India in many ways but what about the USA? The USA seems to be a very different market for what Mahindra tractors have to offer and, obviously, there were questions about whether it is a right move. Guess what? Mahindra went all alone in the US market, whereas it entered China with a local partner. Why? What do you think where is Mahindra doing well-in the USA or in China? Check that out from the Internet!

If you are thinking that 'entering new markets' is only about international markets, then that's incorrect. As a marketer, you will be deciding which territory to

[^5]enter and which one to leave, and this territory could as well be a city, state or a country. This decision of choosing the right market is a part of the marketers' job profile. With limited resources available, you cannot go everywhere and, hence, this decision.

This chapter will introduce you to the nuances of market selection through category and brand development indices, which will help you in taking this decision.

Category development index (CDI) and brand development index (BDI) are important tools to measure market and sales potentials and make forecasts. To use these tools, the total market is divided into segments and, through these tools, the strength of brand and the product category is tested in each segment.

CDI talks about how the sales performance of a particular product category is in a specific subset (of customers, cities, etc.) in comparison to its average sales among all consumers in the (whole) market. BDI talks about how the sales of a brand are in a specific subset (of customers, cities, etc.) in comparison to its average sales among all consumers in the (whole) market.

In the FMCG industry, a region is broken into city markets, and then CDI and BDI are calculated for each city. In Table 6.1, it can be seen that the 'region' consists of multiple cities and, out of those, there is a city A for which CDI and BDI are being calculated.

Example: Let's consider the data given in Table 6.1 to understand the calculations of CDI and BDI.
In the first column, 'market size' is given. It is the total population which can buy the product. Here, the population of the region and cities named ' $A$ ' and ' $B$ ' are given.

The second column titled 'Industry Information' has information about the industry which includes all players who

Table 6.1
Information Related to City A and City B

| Market Size |  | Industry <br> Information |  | Company <br> Information |  |
| :--- | :---: | :--- | :---: | :--- | ---: |
| Region's <br> Population | $1,000,000$ | Sales (₹) <br> region | $2,000,000$ | Sales (₹) <br> region | 500,000 |
| Population <br> city A | 300,000 | Sales (₹) <br> city A | 500,000 | Sales (₹) <br> city A | 100,000 |
| \% Population <br> in city A | $30 \%$ | \% of sales <br> city A | $25 \%$ | $\%$ of sales <br> city A | $20 \%$ |
| Population <br> city B | 500,000 | Sales (₹) <br> city B | $1,000,000$ | Sales (₹) <br> city B | 350,000 |
| \% Population <br> in city B | $50 \%$ | \% of sales <br> city B | $50 \%$ | $\%$ of sales <br> city B | $70 \%$ |

sell a particular product. So industry sales in the region are the combined sales of the product category by all players. Similarly, the industry sales of the product category are given for cities ' A ' and ' B ' as well.

Last column titled 'Company Information' talks about the sale of the product by a single company in the region as well as in cities ' A ' and ' B '.

To calculate CDI and BDI of city A , the following formula is used.
CDI in city $\mathrm{A}=\frac{\% \text { of industry sales in city } \mathrm{A}}{\% \text { population in city } \mathrm{A}} \times 100$

$$
=25 / 30 \times 100=83.3 \%
$$

$$
=\frac{\% \text { of company sales in city } \mathrm{A}}{\% \text { population in city } \mathrm{A}} \times 100
$$

$$
=20 / 30 \times 100=66.7 \%
$$

## INTERPRETATION OF CDI AND BDI

Note: In indices, 100 per cent is average. So anything below it is below average and anything above it is above average.

## FOR CITY A

In the above calculation, the CDI of 83.3 per cent tells that although there is enough penetration of the product category in the city A , there is still potential in the market.

Similarly, the BDI of 66.7 per cent is even lower than CDI, which means that the brand sold by the company has a lot of scope to improve.

$$
\begin{aligned}
& \text { FOR CITY B } \\
& \mathrm{CDI}=50 / 50 \times 100 \\
& =100 \% \\
& \mathrm{BDI}=70 / 50 \times 100 \\
& =140 \%
\end{aligned}
$$

In the above calculation, the CDI of 100 per cent tells that the category has fully penetrated the market in city B , and the BDI of 140 per cent shows that the brand is doing much better in city B in comparison to city A .

The company should make a 'hold' (the market share) strategy in city B, whereas it should use a 'build' (the market share) strategy in city A .

If one uses CDI and BDI techniques periodically, one can use them for forecasting as well because then one will have trends on how the product category and brand are doing over a period of time. Similarly, if one uses CDI and BDI with competitor data, one will understand how the brand is doing with respect to competing brands.

## MAKING CDI AND BII CHARTS FOR BETTER AND QUCC DECISIONS

Enter the data on an Excel sheet in the following format (Table 6.2).

Table 6.2
Input Data of City A and City B

| City | Population | \% of <br> Population | Category <br> Sales <br> (in ₹) | \% <br> Category <br> Sales | CDI <br> (\%) | Brand <br> Sales <br> (in ₹) | \% <br> Brand <br> Sales | BDI <br> $(\%)$ |
| :--- | :--- | :--- | :---: | :--- | :--- | :--- | :--- | :--- |
| A | 300,000 | $30 \%$ | $2,000,000$ | $25 \%$ | 83.3 | 100,000 | $20 \%$ | 66.7 |
| B | 500,000 | $50 \%$ | $1,000,000$ | $50 \%$ | 100 | 350,000 | $70 \%$ | 140 |

Select the information in CDI and the BDI columns and add the scatter chart button. The chart would look something like this:


Once done, you can easily add different cities/segments in the chart to understand how they are doing relatively. For example, here it can be seen that city A is not doing well in comparison to city B.

You can also plot CDI and BDI for each market separately because that would show a better picture in case a market/ segment is doing well on BDI and where the CDI is lower or vice versa. Here, in this example, it is not required because city $B$ is higher on both counts (CDI and BDI).

## INTERPRETING THE CHART AND MAKING STRATEGIES

The four quadrants of the chart could be understood in the following manner.

1. The upper right quadrant: As can be seen in the graph, both CDI and BDI are above 100 here ( 100 is the average in indices). This is the portion of 'above average' performance, and city $B$ is performing well to be there. If there are multiple markets (like city A and $B$ here), the graph would be very handy to understand the whole picture in an efficient way.
2. The lower left quadrant: This zone is an indicator of weakest performance and may be weakest potential also. Both CDI and BDI are below average for city A. The company must look into this and come up with a plan. It might be that the market is not ready/accepting the product and so the brand is not performing.
3. The lower right quadrant: This zone is an indicator of overpenetrated market or oversaturated market; building a brand here is a very challenging thing. The company must break competitor's customers or customers who are not loyal to any brand and bring them into their stable.
4. The upper left quadrant: This zone is an indicator of a market where the category has not penetrated enough but the brand is doing well. The company may think of increasing distribution to capture the market as much as possible. However, it might also be an indicator of a market with less potential where the brand is doing well. So if the potential of market is weak, then the company must decide the way forward because it might be that the brand's sales have been already saturated.

## CHECK YOUR UNDERSTANDING

1. Calculate the BDI and CDI for the data given below and interpret the scores.

- State: Rajasthan-divided into three zones, namely A, B and C
- Total population of target market in Rajasthan: 2 crore
- Population in zones $\mathrm{A}, \mathrm{B}$ and C , respectively: 1.15 crore, 0.5 crore and 0.35 crore
- Company's sales: in A, B and C zones: 5 crore, 2 crore and 1.5 crore
- Industry sales in A, B and C zones: 6 crore, 1.5 crore and 3 crore

2. Draw a scatter chart in Excel for the data in Q1 and recommend strategies for all the three zones.

> Assume that your area is a marketing region. Identify five big retailers which sell soap and talk to them about the 'total sales of soap' in their stores. Similarly, collect the sales figures for a soap brand of your choice and collect its sales figures from the same retailers. Logically assume the target population of the chosen soap brand and calculate the CDI and BDI for the soap brand.

## ADDITIONAL INSIGHTS AT A CLICK

1. Understanding and Calculating an Index, BDI and CDI
In this blog, the concepts of index, CDI and BDI are introduced by the expert. The written content in this blog is also supported by a video to reinforce the understanding of the reader.
https://www.grizelledelosreyes.com/understanding-and-calculating-an-index-bdi-and-cdi/
2. How to Use BDI and CDI for Planning

It is a wonderful article to develop a conceptual understanding about BDI and CDI. The article mentions the step-by-step procedure to calculate the BDI and CDI. It also explains how a particular output can be interpreted and used for further planning. https://braindispenser.wordpress.com/2011/02/20/ how-to-use-bdi-and-cdi-for-planning-updated/

## 7

## perfect your soles onboarding

Having the right number of salespeople on the field can be a boon, and not getting this number right can be a bane too! Having the right number of salespeople will lead to the best sales numbers, whereas if this number is incorrect, it will either increase the costs or decrease the ROI and not let the company achieve the maximum possible sales revenue.

The reason is that sales force is a very expensive resource, and if they are less or more than required, it will cost you a lot! That is the reason that marketers estimate this number with great care.

However, every sales force calculation went for a toss because of COVID-19. Sales force which is the most mobile unit of any company were stuck in their homes! Customers' business was on decline too, and so they were not buying from you. Now, on the one hand, you have reducing sales revenues and, on the other hand, your most expensive resource is sitting idle at home.

The companies waited for some time, but it seemed as if this would never end. How long can you go on like that? What do you do as a company?

There were two options:

1. Switch customers to online platforms, which some of the customers were eager to do in any case.
2. Restructure the sales force because there was less requirement. With online medium and no travel involved, one salesperson could handle many more customers and that led to excess of idle sales force.

As you can guess, knowing how to calculate the sales force is a handy technique for the marketers. This is one decision that they have to take every year because they have to submit the sales force requirement plan to the HR at the beginning of the year.


For a company engaged in commercial activity, the sales force registers a special place in the business. Salespeople are assets to the company as they are instrumental in generating the business. As the resources for any company are limited, it becomes imperative to determine the right size of sales force. Hiring too many salespeople may drain limited resources, while too less sales force may restrict the reach of the company. Sales force size affects customer coverage, sales efforts, costs and profitability. The decision related to the size of sales force also affects the territory design. An important thing to keep in mind regarding the size of sales force is that it is dynamic in nature and changes with the market conditions. In addition, it is virtually impossible to determine the right size of the sales force for a company. A poor calculation regarding the size of sales force results into errors like eventual retrenchment of additional sales force or lost opportunities due to insufficient sales force. Therefore, it is a challenging task to determine the right size of the sales force. For calculating the size of sales force, managers adopt a range of methods including following their instincts about the right number of salespeople for the year. In general, companies adopt requirement-based methods to calculate sales force size.

## METHODS TO DETERMINE THE SIZE OF SALES FORCE

A sales manager can adopt any of the following three basic methods to determine the size of sales force.

## WORKLOAD METHOD

This method is one of the simplest methods for determining sales force size. It is based on the basic assumption that every salesperson should share equal workload. The method considers that three major factors, namely customer size, sales volume potential and travel load, are instrumental in deciding workload for the entire market coverage.

The calculation by this approach requires two inputs: total workload for covering the entire market and capacity of an individual salesperson to handle the workload. Calculation under workload method could be understood with the help of the following example.

> Example: David is the sales manager at Pure RO Systems Pvt. Ltd, a company committed to provide clean drinking water to the households. Recently, David is given a task to decide the number of salespersons required to handle their current customer base of 1,000 customers. Help David.

The task assigned to David requires choosing a method to calculate the number of salespersons. Suppose David chooses workload method to calculate the number of salespersons. Now he has to follow certain steps to calculate the number of salespersons required to handle 1,000 customers of Pure RO Systems Pvt. Ltd. The steps are as follows.

Step 1-Grouping of customers according to sales volume potential: The first step requires grouping of 1,000 customers as per their potential value to the company. The customers may be divided into three groups such as high potential (HP): 100, moderate potential (MP): 250 and low potential (LP): 650.

Step 2—Decide time spent per call and call frequency: Keeping in mind the importance of the customer group, the total time per call and the number of calls to a customer in a year are

Table 7.1
Customer Group-wise Call Frequency at Pure RO Systems Pvt. Ltd

| Customer <br> Groups | No. of <br> Customers | Expected Time <br> Spent/Call <br> (Min) | Expected No. of <br> Calls/Year |
| :--- | :---: | :---: | :---: |
| HP | 100 | 40 | 60 |
| MP | 250 | 30 | 40 |
| LP | 650 | 12 | 20 |

decided. Total time per call and number of calls per customer in a year can be decided on the basis of past practices and collective experience of the sales team. Let's assume that for the HP group, a salesperson is expected to spend 40 minutes for a single call and expected to make 60 such calls in a year (refer to Table 7.1). So the total time spent by a salesperson on a single HP customer is $60 \times 40=2,400$ minutes or 40 hours. Similarly, for MP and LP groups, total time spent is 20 hours and 4 hours, respectively.

Step 3-Calculate Total Workload per Year for Covering the Entire Market: In this step, total workload for covering the entire market for all customer groups is calculated by using the following formula.

## Workload per year of a group

$=$ Number of customers in a group
$\times$ Time spent per customer in group per year

So
Workload for HP group per year: $100 \times 40=4,000$ hours Workload for MP group per year: $250 \times 20=5,000$ hours Workload for LP group per year: $650 \times 4=2,600$ hours

Total workload (for all the groups or the entire market)

$$
\begin{aligned}
& =4,000+5,000+2,600 \\
& =11,600 \text { hours }
\end{aligned}
$$

Step 4-Estimate the total work time available per salesperson: Suppose it is estimated by the management that each salesperson should work for 42 hours in a week and for 45 weeks in a year (permitting vacations, leaves, emergencies, etc). So the total work time available per salesperson is calculated by using the following formula.

> Total work time available per salesperson $$
\begin{array}{l}=\text { Number of working hours per week } \\ \\ \times \text { Number work weeks in a year }\end{array}
$$

Total work time available per salesperson
$=42$ hours/week $\times 45$ weeks $=1,890$ hours/year
Step 5-Calculate the total work time available per salesperson by task: Sometimes salespersons are assigned tasks other than selling. So all the selling, non-selling and travelling-related time should be apportioned accordingly.

Assuming that a salesperson is devoting 50 per cent of the time in selling tasks and rest 50 per cent on other tasks,

Total work time available per salesperson on task $=50 \%$ of $1,890=945$ hours $/$ year

Step 6-Calculate the number of salespersons required: It is the final step and based on the information gathered in previous steps. We calculate the size of sales force required using the following formula.

Size of sales force required $=$ Total workload (for all the groups)/Total work time available per salesperson on task

Number of salespersons required
$=11,600$ hours $/ 945$ hours $=12.27$ or 13 salespersons
Although workload method is one of the most popular approaches among companies to calculate sales force size, still it suffers from a few drawbacks. The workload method does not specifically consider profit for calculating workforce size and also assumes that all the salespeople should share equal workload.

## SALES POTENTIAL METHOD

This method conveys the concept of sales personnel unit. A sales personnel unit is the performance of a set of activities contained in job description. This method assumes that if an individual salesperson's performance is excellent, then their contribution is more than one sales personnel unit and vice versa. If all the salespeople are performing as per their job description, then the number of salespersons required will be equal to the number of units of salepersons required.

$$
\mathrm{N}=\frac{\mathrm{S}}{\mathrm{P}}(1+\mathrm{T})
$$

Where
$\mathrm{N}=$ Number of sales personnel units
$\mathrm{S}=$ Forecasted sales volume
$\mathrm{P}=$ Estimated sales productivity of one sales personnel unit
$\mathrm{T}=$ allowance for rate of sales force turnover

Although this method looks much more simplified, accurately estimating the factors such as sales productivity is sometimes difficult, as it is further dependent on other factors like completeness of job description. Also, identifying sales force turnover is often challenging.

Zenith Ltd, a computer manufacturer, has forecasted sales figure of $₹ 7,000,000$ for the year 2022. The estimated sales productivity of its one sale personnel unit is ₹ 140,000 . On the basis of previous experiences and the future business environmental conditions, the company assumes an annual rate of sales force turnover of 8 per cent. How many sales personnel units will be required by Zenith Ltd to meet the forecasted sales target?

As per the given information, Zenith Ltd could adopt sales potential method to calculate the number of sales personnel. To calculate the required number of sales personnel units, insert the given values in the formula.

$$
\mathrm{N}=\frac{\mathrm{S}}{\mathrm{P}}(1+\mathrm{T})
$$

Number of sales personnel units

$$
\begin{aligned}
& =(7,000,000 / 140,000) \times(1+8 / 100) \\
& =(50) \times(1.08) \\
& =54 \text { sales personnel units }
\end{aligned}
$$

## INCREMENTAL METHOD

Incremental method of calculating the size of sales force is the preferred approach. This approach suggests that net profits will increase when additional sale personnel are added subject to the condition that the incremental sale revenues exceed the incremental cost incurred as a result of adding that salesperson. Two important inputs for calculation of size of sales force under incremental method are incremental revenue and incremental costs. The following example will clarify the approach of incremental method.

Pinnup Ltd, a stationary item manufacturer, assumes that its total sale volume varies directly with the number of salespeople in the field. Their cost of goods sold remains steady at 70 per cent of the sales. The
company salespersons receive fixed salary and travelling allowance of ₹ 25,000 and $₹ 14,000$, respectively. Each salesperson is getting 5 per cent commission on sales volume they generate. Currently, Jagan, the sales manager at Pinnup Ltd, is working with a team of 19 salespersons in the field. Jagan is facing a dilemma that whether he should hire more salespersons to increase the profit of the company? If yes, how many more salespersons need to be added?
For answering the question whether to hire more salespersons and if yes then how many, it is important to see the impact of every additional salesperson on the net profit contribution (refer to Table 7.2). Calculation on the basis of given information using incremental method is as follows.

Pinnup Ltd is already operating with 19 salespersons. The moment one more salesperson is added, that is,

Table 7.2
Impact on Net Profit Contribution with Additional Salespersons at Pinnup Ltd

|  | There Will Be Additional (in ₹) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| With the <br> Addition of <br> Salespersons <br> No. | Sales <br> Volume <br> (a) | Cost of <br> Goods <br> Sold (b) | Gross <br> Margin <br> (c) $=$ <br> (a) (b) | Salary + <br> Commission <br> + Travel <br> \& Expense <br> Allowance (d) | Net Profit <br> Contribution <br> (c) - (d) |  |
| $\mathbf{2 0}$ | 300,000 | 210,000 | 90,000 | $25,000+$ <br> $15,000+14,000$ <br> $=54,000$ | 36,000 |  |
| $\mathbf{2 1}$ | 250,000 | 175,000 | 75,000 | $25,000+$ <br> $12,500+14,000$ <br> $=51,500$ | 23,500 |  |
| $\mathbf{2 2}$ | 200,000 | 140,000 | 60,000 | $25,000+$ <br> $10,000+14,000$ <br> $=49,000$ | 11,000 |  |
| $\mathbf{2 3}$ | 150,000 | 105,000 | 45,000 | $25,000+$ <br> $7,500+14,000$ <br> $=46,500$ | $(1,500)$ |  |

20th salesperson, the net profit contribution increases by ₹ 36,500 . Similarly, net profit contribution further increases by ₹ 23,500 when the 21 st salesperson is added. It is observed from Table 7.2 that till 22 nd salesperson, the net profit contribution is positive. The moment the 23 rd salesperson is added, net profit contribution enters into negative zone. So the ideal sales force size for Pinnup Ltd is 22. Jagan can hire three more salespersons for his sales force.

## CHECK YOUR UNDERSTANDING

1. WeCom Pvt. Ltd has entered into the electronic communication field since 2018. Slowly and steadily, WeCom Pvt. Ltd is establishing its position in the market through a total base of 1,550 customers. These customers are further classified into three groups, namely Diamond, Gold and Silver, on the basis of their value to the company. WeCom recently hired Mr Sarthak as sales manager for sales planning with an immediate focus on determining the size of sales force to cater the requirements of 1,550 customers. Relevant information related to customer groups and time spend is shared with Mr Sarthak (refer to Table 7.3).

Help Mr Sarthak in calculating the time spent (in hours) by a salesperson on a customer in a year and the size of sales force to handle 1,550 customers.

Table 7.3
Customer Group-wise Call Frequency at WeCom Pvt. Ltd

| Customer <br> Group | No. of <br> Customers | Time Spent/Call <br> (Min) | No. of Calls/ <br> Year |
| :--- | :---: | :---: | :---: |
| Diamond | 350 | 60 | 60 |
| Gold | 450 | 30 | 40 |
| Silver | 750 | 10 | 20 |

For calculation, few assumptions can be made such as salespersons work for 40 hours per week and for 48 weeks in a year and spend 65 per cent of the time on tasks related to selling.
2. Delta Ltd, a tyre manufacturer, has forecasted sales of ₹5,500,000 for the next year. The estimated sales productivity of its one sale personnel unit is ₹105,000. The company assumes an annual rate of sales force turnover of 11 per cent. Calculate the number of sales personnel units required by Delta Ltd to meet the forecasted sales target.

## Experience the Real Life

Connect to your bank branch manager and enquire about how many salespersons are working in the account opening division. Also ask how they decide on the number of sales representatives to sell their products and services. Check whether they are following any specific method for calculating the size of sales force.

## ADDITIONAL INSIGHTS AT A CLICK

1. All the Latest Insights on Sales and Sales Hiring The article provides key insights which are relevant to sales force sizing. It specifically focuses on the methods for calculating the number of salespersons required to deploy into a new market or sales territory. It also addresses the issue of sales force optimization with a view to long-term profit. https://www.peaksalesrecruiting.com/blog/sales-force-sizing-guide/
2. Pharma Sales Force Sizing Strategy: Classic Approaches
The article, specific to pharma industry, discusses the most popular classic approaches used for sales force sizing. It also compares the approaches by mentioning pros and cons of each such approach. It reveals the appropriateness of a specific method under a given market condition. All in all, it reinforces the basic idea discussed in the current chapter. https://insights.axtria.com/blog/pharma-sales-force-sizing-strategy-part-1-classic-approaches

## 8 Eyes on the future: predicting soles forecast


There are two nightmares that marketers often have: first, not having enough products in stock when the customers are asking for them and, second, having more products in stock than the consumers demand. A solution to both these problems is accurate sales forecasting!

Well, accurate is difficult to achieve, but marketers would do anything to get the forecasts as close to actual sales, as possible. But since forecasting is about future, no one knows what it would bring!

You might ask: If we cannot get accurate forecasts, what is the point in making them? Why waste all the time and other resources and work hard to do sales forecasting? The answer is simple and can be expressed through the following question. Assume that there is technology available, and you are about to be transmitted to the African country Namibia in a few seconds and you have two options: (a) just go without any information about Namibia or (b) get some information about the country but it won't be accurate. What will you choose? Most people would understand that 'something is better than nothing' is a better option. The same holds true for marketers and forecasting. Marketers understand that having an idea about what can the sales be like in a future period is a good enough information!

Two friends, who happened to be sales heads of two companies, were sitting with each other as they
were working on next year's sales forecasts. One was in a company that sold soaps, while the other was in readymade garments company. The one in soap company was relaxed and quickly forecasted the sales for the next year. The sales head of the readymade garments was anxious and perplexed. He was trying different data points and scenarios but still could not close the thing. Why is it so?

The answer is hidden in their industry types. There are certain industries where sales forecasting is more difficult than others! For example, technology and fashion are more difficult than soap. In such industries, the rate of change is very high, but any innovation has the power to bring a paradigm shift, whereas in industries that are mature and stable, chances of such a thing happening are very less and even if an innovation comes, it would be incremental and affect the market gradually, like in soaps.

All in all, you must have understood by now that (a) sales forecasting is an important decision for marketers, (b) in general, it is difficult to predict the future and (c) for some industries, forecasting sales is even more difficult and tricky!

Whatever the case may be, you as a marketer will be asked to forecast sales and here is your chance to learn the fundamentals! So go on and read the chapter carefully!

Sales forecasting is the process of estimating the number of sales for your business over a future period of time. This forecast period can be monthly, quarterly, half-yearly or yearly. A forecast could be made for a product line, a specific product or a market segment. Sales forecasting is different from sales potential. Sales potential indicates sales which would be
achieved in ideal conditions. Understanding and calculating market potential and sales potential of a product or service are two important prerequisites for a sales forecast. Calculation of sales forecast is always tricky, as the business environmental factors such as economic conditions, policy changes, industry changes and product changes keep on varying.

## METHODS OF SALES FORECASTING

A sales forecasting method describes the procedure of estimating how much of a product can be sold under a given period of future time. There exist many sales forecasting methods, and no method is perfect. It is important to check the suitability of a method on the basis of the requirement and availability of information. It is highly advisable to use more than one method to forecast your sales to reduce the uncertainty. If more than one method gives you similar forecasted figures, then you can rely on the results; otherwise, it is suggested to check the suitability of the chosen method.

Some of the popular sales forecasting methods are as follows.

## JURY OF EXECUTIVE OPINION

This method is used when the company is relatively new and possesses little information about sales and marketing figures. This method obtains the views of top executives of the company. These executives are provided best possible information about the industry outlook, company's market position, resources, etc. On the basis of information provided, these experts give their best estimate of the forecasted sales and then the average of all the estimates is considered to come to final forecasted sales. In case an expert opinion varies too much, it is discussed among the jury of experts before coming to a final conclusion.

The planning team of Thunderbolt Ltd is assigned a task to decide the number of units which can be sold in the coming third quarter for its beverages product line. The team wishes to have a quick idea about the forecasted sales figure. Suggest a suitable method of sales forecasting and calculate the estimated forecasted sales.

For estimating a forecasted sales figure, the head of planning team can constitute a jury of four or five of his most experienced executives for estimating the forecasted sales. Every executive has to present their opinion about how much they will be able to sell in the third quarter for its beverages product line. The opinion of the executives will be based upon their market knowledge, experience and some intuition. The forecasted sales estimates of each executive are noted down and discussed. At the end, an average of all the individual forecasted estimates is taken to come out for a final forecasted sales estimate for the given period as mentioned in Table 8.1.

## POLL OF SALES FORCE OPINION

Under this method, sales estimates are collected from each salesperson involved in selling the given product or service. This method assumes that as the salespersons are in direct touch of the market, they can judge the situation in a better manner.

Table 8.1
Forecasted Sales of Thunderbolt Ltd

|  | Opinion on Forecasted Sales <br> of Product Line 'Beverages' <br> for Third Quarter <br> (in '000 Units) | Final Forecasted Sales <br> (in '000 Units) |
| :--- | :---: | ---: |
| Executive A | 28 | $(28+33+24+27$ )/4 |
| Executive B | 33 | $(212 / 4$ <br> $=28$ |
| Executive C | 24 |  |
| Executive D | 27 |  |

Poll of sales force opinion is based on the bottom-up approach, wherein estimates from all the salespersons are taken and aggregated to calculate the forecasted sales. An advantage of this method is that once the salespersons are involved in forecasting the sales, they show more confidence at the time of allocation of sales quota based on forecasted sales figures.

> Jarvis is the sales manager of Bradford Publications Ltd. The company is in the business of publishing and marketing encyclopaedias. Jarvis is handling five sales territories in all, with Delhi as the biggest one. In all, four salespersons are working under Jarvis on Delhi market. Jarvis is interested in knowing how much sales in units he can get from the territory Delhi in coming six months. Suggest a suitable method to Jarvis and calculate the estimated sales forecast.

For estimating a forecasted sales figure, Jarvis can call all the four salespersons working in the Delhi territory. Then he can ask each of them to present their opinion about how many encyclopaedias they will be able to sell in the next six months. Similarly, rest of the salespersons can be asked to mention their estimated sales figures. The forecasted sales estimates of each salesperson are noted down and discussed. At the end, an aggregate of all the individual forecasted estimates is taken to come out for a final forecasted sales estimate for the given period as mentioned in Table 8.2.

This method of poll of sales force opinion has a weakness that the salespersons are not trained for forecasting and their opinion might be highly biased (overly optimistic or overly pessimistic) based on current market conditions.

## MOVING AVERAGE MODEL

The method of moving average uses historical data of company's sales performance to forecast sales for the next period.

Table 8.2
Forecasted Sales of Territory Delhi of Bradford Publications Ltd
$\left.\begin{array}{|l|c|c|}\hline \text { Salesperson of } & \begin{array}{c}\text { Opinion on Individual } \\ \text { Forecasted Sales of } \\ \text { Encyclopaedia by Each } \\ \text { Territory 'Delhi' }\end{array} & \begin{array}{c}\text { Final Forecasted Sales } \\ \text { 'esperson in Territory } \\ \text { 'Delhi' for Next } \\ \text { 6 Months Territory 'T' } \\ \text { (in Units) }\end{array} \\ \text { (in Units) }\end{array}\right\}$

This method takes an average of sales from past periods to predict the sales in a future period.

Sales $_{\mathrm{t}+1}=1 / \mathrm{n}\left(\right.$ sales $_{\mathrm{t}}+$ sales $_{\mathrm{t}-1}+\ldots+$ sales $\left._{\mathrm{t}-\mathrm{n}}\right)$
Where
Sales $_{\mathrm{t}+1}=$ Forecasted sales
Sales $_{t}=$ Current period sales
Sales $_{\text {t }-1}=$ Immediate past period sales $^{\text {p }}$

The sales of assigned period are added, and the sum is divided by the number of periods to get the average. When the forecast is calculated for the next period, the sales total in the oldest period are dropped and replaced by actual sales in the newest period. In this way, moving average works. Moving average can be calculated for two periods or more, depending upon the requirement of the forecaster.

Rapid Ltd is a battery manufacturer, operating in the northern part of the country. The performance of the company's tubular battery sales for last six quarters in ('000 ₹) is shown in Table 8.3. The marketing manager of
the company is interested in knowing the sales estimates for the third quarter of 2019. Assume that there is no impact of seasonality on the sales of the product.

The estimated sale of tubular battery for the quarter 03/19 can be calculated by using moving average method (using two periods as well as three period moving averages) as mentioned in Table 8.4.

|  | Quarter/Year |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $01 / 18$ | $02 / 18$ | $03 / 18$ | $04 / 18$ | $01 / 19$ | $02 / 19$ | $03 / 19$ |  |
| Actual sales <br> (in ’000 ₹) | 26 | 26 | 48 | 34 | 40 | 52 | - |  |
| Two period <br> moving <br> average | - | - | 26 | 37 | 41 | 37 | $46 a$ |  |
| Three period <br> moving <br> average | - | - | - | 33 | 36 | 41 | $42 b$ |  |

Notes: ${ }^{\text {a }}$ Forecasted sale for quarter $03 / 19$ (in ' 000 ₹) using two period moving average
$=($ Sales of quarter 01/19 + Sales of quarter 02/19)/2
$=(40+52) / 2$
$=46$
${ }^{\mathrm{b}}$ Forecasted sale for quarter $03 / 19$ (in ' 000 ₹) using three period moving average
$=($ Sales of quarter 04/18 + Sales of quarter 01/19 + Sales of quarter 02/19)/3
$=(34+40+52) / 3$
$=42$

## EXPONENTIAL SMOOTHNG MODEL

The method of exponential smoothing is a type of moving average in which the forecaster can allow sales in certain periods to influence the forecast more than sales in another period. Here, the heaviest weight is placed on the most recent data.

$$
\text { Sales }_{t+1}=(\mathrm{L}) \text { Actual sales }_{t}+(1-\mathrm{L}) \text { Forecasted sales }_{t}
$$

Where
Sales $_{\mathrm{t}}=$ Sales in current period
$\mathrm{L}=$ Smoothing constant

The identification of smoothing constant $(\mathrm{L})$ is the tricky part, and its value is determined by the forecaster on the basis of review of data, intuition and past experience with the similar scenarios. The value of $L$ ranges from 0 to 1 . A high value of L implies more recent periods to influence the sales forecast in comparison to earlier period and vice versa.

Triber Pvt. Ltd is a gym equipment manufacturer with pan India presence. The performance of the company's gym equipment sales for last six quarters in ('000 ₹) is given in Table 8.5. Mr Ravi, VP-Sales, is assigned a task to forecast the sales for the third quarter of year 2019.
The sale of gym equipment for the quarter 03/19 is calculated by using exponential smoothing method (using two scenarios) as mentioned in Table 8.6.

Scenario 1: When smoothing constant is low (0.2).
Scenario 2: When smoothing constant is high (0.8).

## OPPORTUNITY STAGE FORECASTING

This method requires historical data which provides an understanding about the sales pipeline. Once you establish a robust

Table 8.5
Quarterly Sales of Gym Equipment at Triber Pvt. Ltd

|  | Quarter/Year |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $01 / 18$ | $02 / 18$ | $03 / 18$ | $04 / 18$ | $01 / 19$ | $02 / 19$ | $03 / 19$ |  |
| Actual <br> sales <br> (in '000 ₹) | 26 | 26 | 48 | 34 | 40 | 52 | - |  |

Table 8.6
Estimation of Gym Equipment Sales for Third Quarter of 2019 at Rapid Ltd

|  | Quarter/Year |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $01 / 18$ | $02 / 18$ | $03 / 18$ | $04 / 18$ | $01 / 19$ | $02 / 19$ | $03 / 19$ |  |
| Actual sales | 26 | 26 | 48 | 34 | 40 | 52 | - |  |
| Forecasted sales <br> $(\mathrm{L}=0.2)$ | - | 26 | 26 | 30 | 45 | 35 | ${42^{a}}^{\text {a }}$ |  |
| Actual sales | 26 | 26 | 48 | 34 | 40 | 52 | - |  |
| Forecasted sales <br> $(\mathrm{L}=0.8)$ | - | 26 | 26 | 44 | 37 | 39 | $50^{b}$ |  |

## Scenario 1:

${ }^{\text {a }}$ Forecasted sale for quarter $03 / 19$ (in ’000 ₹) using ( $\mathrm{L}=0.2$ )

```
= (0.2) Actual Sales of quarter 02/19 + (0.8) Forecasted Sales of quarter 02/19)
=(0.2 \times 52) + (0.8 × 35)
= 10.4+32
= 42.4 or 42
```


## Scenario 2:

${ }^{\mathrm{b}}$ Forecasted sale for quarter 03/19 (in '000 ₹) using ( $\mathrm{L}=0.8$ )
$=(0.8)$ Actual Sales of quarter $02 / 19+(0.2)$ Forecasted Sales of quarter 02/19)
$=(0.8 \times 52)+(0.2 \times 39)$
$=41.6+8$
$=49.6$ or 50
sales pipeline, implementing this method becomes feasible. To establish a sales pipeline, stages of sales process are divided into different stages, starting from new lead generation to contract stage.

Also, you have to work out what percentages of customers go on to make a purchase at each stage of the pipeline.

Table 8.7
Sales Pipeline of Cummins Generators Pvt. Ltd

| Stage in Sales Pipeline | Chances of Closing the <br> Deal (\%) |
| :--- | :---: |
| New lead | 15 |
| Qualified lead | 25 |
| Request proposal | 40 |
| Negotiation | 75 |
| Contract stage | 95 |

Generally, the further the potential customer is down the pipeline, the better are the chances of closing the deal.

Two sales representatives, Sam and Jack, are working with Cummins Generators Pvt. Ltd. Presently, Sam is putting his effort on a client to fetch a ₹20,000 deal, while Jack is dealing with another client to grab ₹50,000 business. Sam's deal is at negotiation stage, while Jack's deal is at qualified lead level. The company adopts a sales pipeline as mentioned in Table 8.7. Forecast the amount generated by both the sales representatives.
Considering the stages of sales pipeline at which both Sam (at negotiation stage) and Jack (at qualifying stage) are, the forecasted amount of business generated by both the sales representatives will be as follows.

$$
\begin{aligned}
& =(20,000 \times 75 \%)+(50,000 \times 25 \%) \\
& =15,000+12,500 \\
& =₹ 27,500
\end{aligned}
$$

## CHECK YOUR UNDERSTANDING

1. Forecast the sales of a contact lens manufacturing company Drishti Ltd for the first quarter of 2014. The performance of the company's contact lens sales for last five quarters in (' $000 ₹$ ) is as follows.

|  | Quarter/Year |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $04 / 12$ | $01 / 13$ | $02 / 13$ | $03 / 13$ | $04 / 13$ | $01 / 14$ |  |
| Actual <br> sales (in <br> ’000 ₹) | 37 | 43 | 39 | 37 | 45 | $?$ |  |

Assume smoothing constant ( $\mathrm{L}=0.3$ ).
2. Three sales representatives, Dan, Eon and Finch, are working with Bajaj Investments Pvt. Ltd. Presently, Dan is putting his effort on a client to fetch a ₹ 80,000 deal, Eon on a ₹ 65,000 deal and Finch is dealing with a client to grab ₹ 35,000 business. Dan's deal is at contract stage, Eon's deal is at proposal request stage and Finch's deal is at qualified lead level. The company adopts the following sales pipeline.

| Stage in Sales Pipeline | Chances of Closing the Deal <br> (in \%) |
| :--- | :---: |
| New lead | 12 |
| Qualified lead | 22 |
| Request proposal | 43 |
| Negotiation | 70 |
| Contract stage | 90 |

Forecast the amount generated by all the sales representatives for Bajaj Investments Pvt. Ltd.

## Experience the Real Life

Try to connect with the branch manager of a health insurance company in your city. Discuss with the manager the sales forecasting method adopted at their company. Do they discuss with salespersons before forecasting the sales?

## ADDITIONAL INSIGHTS AT A CLICK

1. 7 Best Sales Forecasting Methods to Predict Your Revenue Accurately
The article discusses the relevance of forecasting of sales. Sales forecast is instrumental in deciding the size of sales team, bifurcation of sales targets and revenue flow in future. It also discusses various factors which can influence sales forecasts. In the end, the article presents various methods of sales forecasting to reinforce the present understanding about the concept.
https://blog.klenty.com/sales-forecasting-methods/
2. 15 Strategic Approaches to Accurately Forecast Sales This wonderful insight provided by experts states that business owners can't rely solely on current sales or what's worked in the past in order to succeed. They must also look to the future to predict which actions will maximize profit. The article presents 15 proven strategic approaches that entrepreneurs can utilize to increase sales forecast accuracy.
https://www.forbes.com/sites/forbesbusinessco uncil/2020/10/06/15-strategic-approaches-to-accurately-forecast-sales/?sh=14220ef929d1

## 9

## set coals to meet gools

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This is the case of Raj who has worked in sales roles in many companies. This case is about how he learned that 'sales target' is a very broad thing than what most people believe it to be.

Like most students, Raj was taught at his college from where he did his BBA that the meaning of 'sales targets' is the number of units a salesperson is asked to sell by the company or an amount that they have to generate from selling the company's products.

These thoughts were reinforced when after doing BBA, Raj got placed in a company which sold shoes. The sales target of Raj at that company was to generate a sale of ₹ $1,000,000$ per month. Then after some time, Raj left that company and joined a company that sold TV sets. Here, Raj's sales target was to sell 100 units of TVs in the sales territory assigned to him.

Till this point, Raj was convinced that what he was taught in his B-school about the sales target was practised in real life.

After some time, Raj got a chance to work with an established MNC. This USA-based company had just entered India. Here, for the first time, Raj got a target which was less to do with sales. The company asked Raj that he would be appraised on how many dealers he could make in a quarter and not on sales. His target also included organizing an event for dealers in every three months, where Raj would host them in a botel for a dinner.

Finally, Raj joined a small company as a sales manager. Here, the sales targets were a combination
of the previous jobs that Raj had done. He was responsible of unit sales as well as for making dealers in his territory. However, the company ran into financial troubles and Raj was surprised to see that his sales target changed accordingly.

Now, the company gave Raj a target of achieving a profit of 3 per cent from his territory in each quarter. Later, even this was changed to an expense-based target, where Raj could not spend more than 5 per cent of the sales revenue that he generated from his territory. So Raj had to operate in a way that he achieves his target of 'controlling the expenses'.

This journey of Raj made him learn that 'sales targets' are of different types and can be used as a strategic tool to achieve the objectives that the company wants.
MARKETING METRICS
When the company was new to the market, its objectives were to make dealers and keep them in good faith, so the target was set accordingly. When the company was facing financial problems, the focus naturally shifted to generating profits and/or to control sales expenses, and the targets were set accordingly.

Hope you have realized that sales target is not limited to the stereotypical meaning that most people have. Instead, sales targets are very broad, strategic tools in the hands of marketers to achieve different company objectives. Read on to learn how sales targets can be used to measure the performance of your sales team.


## SALES TARGET

It is the sales milestone which a salesperson is supposed to achieve. These targets are/can be set for any prespecified duration but generally are set for a month, quarter and year.

Sales targets are expressed in units sold or revenue generated or both. Companies also give product-specific sales target to salespeople.

## IF SALES TARGETS CAUSE PRESSURE IN SALES TEAM, WHY DO WE HAVE THEM?

1. Targets motivate people to achieve them because beyond that are incentives.
2. Targets measure the performance of a salesperson with their previous performance as well as with other salespersons.
3. Targets keep you on track and do not allow you to be complacent.

## ARE SALES TARGET ONLY ABOUT SELLING MORE OR GETTING MORE REVENUES?

No, there are different types of sales targets, which are discussed further.

1. Volume-based sales targets: When a salesperson is asked to sell a particular number of units of a product, it is called volume-based sales target. Such targets are useful if a company is selling multiple products and out of those some are established and some are new. So if the salespersons are not given specific units to be sold of each type of a product, they might sell those products which are established and take less effort to sell and ignore the ones which are new and are difficult to sell. Hence, as mentioned in Table 9.1, companies set a sales target to sell specific number of units of each type of products, and such targets make sure that salespersons are focusing on every product and try to sell them.

Table 9.1
Volume-based Sales Targets for a Salesperson at Kevin Care Ltd

| S No. | Product | Units To Be Sold Every Month |
| :---: | :--- | :---: |
| $\mathbf{1}$ | Hair Silky Shampoo | 25,000 |
| $\mathbf{2}$ | Shine Toothpaste | 23,000 |
| $\mathbf{3}$ | Cleano Soap | 35,000 |

Table 9.2
Revenue-based Sales Targets for Each Salesperson at Morepen Ltd

| S No. | Salesperson | Territory | Monthly Sales <br> Revenue Target |
| :---: | :--- | :--- | :---: |
| $\mathbf{1}$ | Ramesh | Rajasthan | $2,500,000$ |
| $\mathbf{2}$ | Amit | Gujarat | $2,300,000$ |
| $\mathbf{3}$ | Kapil | Andhra Pradesh | $3,500,000$ |

2. Revenue-based sales targets: When a salesperson is asked to achieve particular sales revenue, then such targets are called revenue-based sales targets. Such targets are useful if a company is selling products which are similar in costs, margins and almost similar in terms of brand power. In that case, as mentioned in Table 9.2, it matters less which product is being sold and, hence, to keep things simple, companies just ask the sales force to generate a particular amount from sales in their territory and do not specify separate targets for different types of products.
3. Activity-based sales targets: In certain situations, a sale is not the primary role of the salesperson. This might sound counterintuitive, but it is true!

Consider this: A company is a market leader in a saturated market. Now, since the company is already a market leader and since the market is already saturated, there is little chance to get new sales or sales growth. So the company asks its salespeople to perform certain activities and set their targets for those activities. For

Table 9.3
Activity-based Sales Targets for a Salesperson at Glen Ltd

| S <br> No. | Product | Target | Achieved | \% <br> Achievement |
| :---: | :--- | :---: | :---: | :---: |
| $\mathbf{1}$ | Product demonstrations | 50 | 40 | 80 |
| $\mathbf{2}$ | Organize dealer meets | 05 | 05 | 100 |
| 3 | Visiting large customers | 25 | 20 | 80 |
| Total achievement |  |  | 260 |  |
| Overall achievement of targets |  |  |  | $260 / 3=86.6 \%$ |

example, the company might ask the salespeople to follow up with customers and solve their problems, maintain and strengthen relationship with dealers, etc. The company assigns targets for each activity and then calculates the salesperson's achievement in the following way (Table 9.3).
4. Other types of sales targets: The above-mentioned methods are some of the prevalent ways of setting sales targets. However, targets are not limited to these. There can be many more ways of setting sales target, which are as follows:
a. Expense-based sales target: Salespeople are asked to maintain the sales expenditure to a certain percentage of sales revenue.
b. Profit-based sales target: Salespeople are asked to achieve a certain percentage or amount of profit from their sales territory.
c. Customer satisfaction-based sales target: Customer satisfaction is measured at the beginning of the year, and salespeople are asked to maintain or increase it during the year. At the end of the year, the satisfaction scores are measured once again, and based on that the performance of salespeople is measured.

## CALCULATING SALES TARGETS

Sales targets are set for a specific time period. The time period varies from situation to situation. Generally, sales targets are divided and reviewed on monthly basis. Two approaches are adopted to calculate monthly sales targets, that is, top-down and bottom-up.

## TOP-DOWN APPROACH

The top management decides the growth it wants in the sales revenue and converts it into annual sales target. That annual sales target is divided into sales territory or salespeople, in the ratio of their past sales.

Khurana Sales Corporation, a leading name in distribution of pesticides, generated sales revenue of ₹10 lakh in 2020 as mentioned in Table 9.4. The company is eyeing on a 20 per cent growth. The company set the annual sales target (by revenue) for the next year at ₹ 12 lakh (10 lakh $+20 \%$ of 10 lakh). Presently, the company is operating in four sales territories, namely $A, B, C$ and $D$. Calculate the total and territory-wise monthly target for Khurana Sales Corporation.
From Table 9.4, it is clear that the total monthly sales target is now ₹ 1 lakh, by adding territory-wise revised monthly sales target.

Instead of territories, this method can also be used by dividing the sales target into salesperson. To understand this in a better way, let's reconsider the previous example with an added information, that

Table 9.4
Calculation of Monthly Sales Targets for Khurana Sales Corporation

| Territory | Last Year's <br> Annual sales | $20 \%$ Plus for <br> Next Year | Monthly Target per <br> Territory |
| :---: | :---: | :---: | :---: |
| A | 100,000 | 120,000 | $120,000 / 12=10,000$ |
| B | 500,000 | 600,000 | $600,000 / 12=50,000$ |
| C | 300,000 | 360,000 | $360,000 / 12=30,000$ |
| D | 100,000 | 120,000 | $120,000 / 12=10,000$ |

is, four salespersons, namely Aman, Vinit, Chetan and Deepak, are handling their respective sales territories A, B, C, and D (Table 9.5).
Another calculation related to sales target is to check by what percentage the sales target has increased. To calculate that, the following method is used.
$\%$ increase in sales target $=$
$[($ Sales target - Last year's sales $) /$ Last year's sales $] \times 100$

Carrying on with the previous example, the percentage increase in sales target is calculated as provided in Table 9.6.

Table 9.5
Calculation of Salesperson-wise Monthly Sales Targets for Khurana Sales Corporation

| Salesperson | Last Year's <br> Annual Sales | 20\% Plus for <br> Next Year | Monthly Target <br> per Territory |
| :--- | :---: | :---: | :---: |
| Aman | 100,000 | 120,000 | $120,000 / 12=10,000$ |
| Vinit | 500,000 | 600,000 | $600,000 / 12=50,000$ |
| Chetan | 300,000 | 360,000 | $360,000 / 12=30,000$ |
| Deepak | 100,000 | 120,000 | $120,000 / 12=10,000$ |

Table 9.6
Calculation of Territory-wise Percentage Increase in Monthly Sales
Targets for Khurana Sales Corporation

| Territory | Last Year's <br> Annual Sales | Annual Target for Next Year | \% Increase |
| :---: | :---: | :---: | :---: |
| A | 100,000 | 120,000 | $\begin{array}{r} 120,000-100,000 / 100,000 \times \\ 100=20 \% \end{array}$ |
| B | 500,000 | 600,000 | $\begin{array}{r} 600,000-500,000 / 500,000 \times \\ 100=20 \% \end{array}$ |
| C | 300,000 | 360,000 | $\begin{array}{r} 360,000-300,000 / 300,000 \times \\ 100=20 \% \end{array}$ |
| D | 100,000 | 120,000 | $\begin{array}{r} 120,000-100,000 / 100,000 \times \\ 100=20 \% \end{array}$ |

## BOTTOM-UP APPROACH

Each salesperson from each territory is asked how much they can sell during the coming year. That figure becomes the sales target for the salesperson, and when all these figures given by each salesperson are added, it becomes the total target for the company.

One might think that by going this way, why will any salesperson set a high/higher target for themselves. Well, the figure given by the salespersons is not taken as it is. Managers discuss this figure with them one on one and make sure that the salespeople set an ambitious target for themselves. So this figure has to be higher than the previous year's sales done by the salesperson and not only that, the figure must be in line with the company's broad objectives and should also be at least enough to cover for inflation and opportunity costs for the company.

## IMPORTANT INSIGHTS ABOUT SALES TARGETS

1. There is hardly any sense in reaching the sales target but losing out on margins. Some companies use discounts, etc., to increase sales, which backfires because then the sales are being bought and the profit is eroded.
2. Keep the sales target practical and meaningful. If the sales targets are easy to achieve, salespeople will make less efforts and you will lose money on the table. However, if you set the target too high or unachievable, then also salespeople will not make any effort, as they would know that there is no point in trying.
3. If you have three products-A, B and C-out of which $A$ has the highest profit margin while $B$ and $C$ have less profit margins, then try to keep the sales target of A as high as possible.

## CHECK YOUR UNDERSTANDING

1. A gifting company Love Wrap Ltd operates in five territories, named $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$ and E . Its sales revenue from all these territories was ₹50 lakh for the year 2019. The company is trying to grow @ 15 per cent in the next year. Individual sales of each territory are given below.

| Territory | Last Year's Annual Sales |
| :---: | :---: |
| A | $1,000,000$ |
| B | $2,000,000$ |
| C | $1,000,000$ |
| D | 500,000 |
| E | 500,000 |

What should be the new sales target for each territory?
2. The current and the new sales targets for each salesperson of the tyre manufacturing company Religare Ltd are given below.

| Salesperson's Name | Old Target (₹) | New Target (₹) |
| :---: | :---: | :---: |
| A | $1,000,000$ | $1,350,000$ |
| B | $2,700,000$ | $2,750,000$ |
| C | $4,350,000$ | $5,000,000$ |

Calculate the hike in the sales target of each person in terms of percentage.

## Experience the Real Life

Meet the salespeople of at least two FMCG companies (they usually come to the retail stores near your house) and ask them about the hike in their sales targets in the recent years. Use those numbers and the formula given above to calculate the change.

## ADDITIONAL INSIGHTS AT A CLICK

## 1. How to Sell? Set Better Sales Targets

The article puts an emphasis on the relevance of information before setting up sales targets. It conveys that well-informed target setting is more realistic and achievable. The article also provides an overview about what to do when targets are achieved. https://www.forbes.com/sites/iese/2016/05/ 05/how-to-sell-set-better-sales-targets/?sh=2274 a0cf7026
2. The Ultimate Guide to Setting Sales Targets

In a very simple way, the article addresses issues such as what sales targets are and why they matter, how to figure out what your sales targets should be, and how to deal with increased sales targets without burning out your team. In all, it is a good read about sales targets.
https://www.copper.com/resources/sales-targets

## 10 soles Teriliory Planning


Companies often make sales territories arbitrarily. The most commonly used basis is geography. For example, companies would just assign one city or a group of cities to one sales representative and another city/cities to another sales representative. This leads to a lot of issues, for example:

1. A pharma company ${ }^{1}$ which paid the sales representative a commission on sales got a complaint from one sales representative that the sales representative from adjoining territory was selling in her territory and that too at a lower price. The sales representative complained that this was hurting her in two ways: (a) since they were earning commission on sales, the other representative was eating out the money out of her pocket and (b) selling the same product at a lower price was spoiling her reputation in the territory, as retailers were not trusting her anymore.
2. A packaged food company ${ }^{1}$ was continuously receiving complaints from its dealers that the sales representative was not visiting them and was not working in their area. When the sales head talked to the representative, and asked him about these complaints, he said that he was handling the largest state of the country, which was earlier managed by two representatives. The

[^6]second representative had left last quarter and now he was managing the whole state all alone. Hence, he could not pay visit to each city in every month. The sales head remembered that earlier when there were two representatives working in the state, they were fighting for sales, claiming that the state was too small for both of them to achieve the targets. The sales head wondered: What is the right number of sales representatives for this state?

In spite of the issues discussed in the opening case, using the geographical basis for the formation of sales territory has its own advantages and utilities. It is still the most popular, easiest and fastest way of making sales territories. So in this chapter, we will focus on that.

## SALES TERRITORY: THE BASIC IDEA

A sales territory comprises a number of present and potential customers, located within a given geographical area and assigned to a salesperson. It is important to understand that a sales territory is customer oriented and not the geographical area. It is based on the premise that market is made up of people, rather than places. In addition, for measurement purposes, market is measured in number of potential and existing customers' times, their purchasing power, and not calculated in square kilometres. A good territory design is helpful in increasing customer coverage, reducing travelling time and selling cost, helping sales force evaluation, and increasing morale of salespeople.

Ideally, a territory design aims to provide equal opportunities to salespeople in terms of sales potential and workload. In a real scenario, sales territories need adjustments as per changing market conditions.

## PROCESS TO DESIGN SALES TERRITORRES

To start with, a sales manager can follow a three-step process to determine basic territories. These steps are as follows.

Step 1—Select a geographical control unit as a territorial base: A geographical control unit can be a state (Haryana), district (Gurugram), city (Chandigarh) or PIN code (132119). A territory can have several units in it. It is suggested to keep the control unit small to facilitate easy adjustments.

Step 2-Determine Location and Potential of Customers: The next step is to determine the location and potential of both present and potential customers within each selected control unit. Current customer record can be gathered from sales data. On the other hand, potential customer data list can be identified through secondary databases such as directories, reference lists and competitors' buyer list. After identifying customers, the next step is to consider the business potential of each account. Such accounts could further be classified into different categories such as high net worth (most profitable), medium net worth and low net worth (least profitable).

Step 3-Determine Basic Territories: Once the location and potential of customers are determined, the final step is to create a basic territory based on statistical measures. Two widely accepted methods used for creating basic territories are buildup method and breakdown method. The applicability of these methods is discussed next.

## METHODS FOR DETERMINING BASIC TERRITORIES

The two most popular methods for determining basic territories are discussed below.

## BUILD-UP METHOD

As per the build-up method, territories are created by clubbing small geographical areas based on the number of calls a salesperson is expected to make. The basic premise of this method is that it equalizes the workload of salespeople. It is like building up from basic control unit.

The following steps could be followed to create a territory based on the build-up method.

1. Determine optimal call frequencies: In this step, how many times in a year an account should be visited by a salesperson is identified. The call frequency depends on various factors such as sales potential, customer behaviour, cost of calling and nature of product. The classification of customers in terms of their profitability to the company also decides how many times they are going to be contacted. For example, an HP account might be contacted thrice a month as compared to an LP account which might be contacted once a month.
2. Determine the total number of calls needed in each control unit: To determine the total number of calls needed in each control unit, use the following formula.

> Total calls needed $=$
> Number of each type of account in the control unit $\times$ Call frequency for that account

Suppose, for market A, there are 15 HP and 4 LP accounts which required being contacted 5 times and 1 time per month, respectively. In such a case, the total numbers of calls needed for market A per year are calculated as $(15 \times 5 \times 12)+(5 \times 1 \times 12)=(900)$ $+(60)=960$ calls per year.
3. Determine workload capacity: To determine the total workload capacity of a salesperson, the following formula is applied.

> Workload capacity $=$
> Average number of calls a salesperson can make in a day $\times$ Number of calling days in a year

In the above formula, the average number of calls in a day depends on several factors such as daily working hours, time spent per call and travelling time.
Mr Jatin is an enthusiastic sales executive working with one of the leading brands of home appliances, Hawkins Ltd. His job profile includes meeting with the clients and convincing them to buy their latest range of energy-efficient home appliances. He works for 8 hours in a day for Hawkins Ltd and spends approximately 40 minutes on a given call. As per the given itinerary, it takes him around 8 minutes to reach the next potential buyer. How many calls can Jatin make in a year if he goes for calls on 225 days per year?

The above situation demands calculation of workload capacity of Mr Jatin. To calculate that, first there is a need to check the total working time of Jatin in a day, that is, $8 \times 60=480$ minutes. Total time spent by Jatin per customer is 40 (time at call) +8 (travel time per call) $=48$ minutes. It means that the total number of calls Jatin can make in a day is $480 / 48=10$ calls. At the rate of 10 calls per day, he can make 225 (visiting days) $\times 10=2,250$ calls in a year. Therefore, Jatin is capable of handling workload of 2,250 calls in a year.
4. Determine tentative territorial boundary lines: In this step, the company keeps on combining the adjacent
control units till the total requirement matches with the workload capacity of a salesperson. The starting point of grouping of control units and choice of salesperson to consider depends upon the will and wisdom of the company personnel. This causes possibility of many combinations of sale territory designs. Suppose 3 connected control units are having calling requirement of 720,880 and 600 per year, respectively. A salesperson having a workload capacity of 2,250 per year can handle all the three control units, as in total, it amounts to 2,200 calls per year. Therefore, a single territory by combining above three control units can be made and assigned to this salesperson.
Glen Put. Ltd deals in the sales of air purifiers. Mr Manish is their star sales performer for last three years and is, presently, having annual workload capacity of 2,500 calls. Recently, the company is in the process of redesigning its territories based on customer groups residing in three identified markets, namely Allepy, Baltec and Cochi. The details of call frequency for three customer groups, namely HP, MP and LP, are mentioned in Table 10.1.

Table 10.1
Customer Group-wise Call Frequency at Glen Pvt. Ltd

|  |  | Market <br> Allepy | Market <br> Baltec | Market <br> Cochi |
| :--- | :---: | :---: | :---: | :---: |
| Customer <br> Group | Call <br> Frequency/ <br> Month | No. of <br> Accounts | No. of <br> Accounts | No. of <br> Accounts |
| HP | 3 | 15 | 10 | 10 |
| MP | 2 | 20 | 20 | 15 |
| LP | 1 | 25 | 30 | 10 |

Table 10.2
Calculation about Combined Call Requirement at Glen Pvt. Ltd

|  |  | Market <br> Allepy |  | Market <br> Baltec |  | Market <br> Cochi |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Customer <br> Group | Call <br> Frequency/ <br> Month | No. of <br> Accounts | No. of <br> Calls <br> per <br> Year | No. of <br> Accounts | No. of <br> Calls <br> per <br> Year | No. of <br> Accounts | No. of <br> Calls <br> per <br> Year |
| HP | 3 | 15 | 540 | 10 | 360 | 10 | 360 |
| MP | 2 | 20 | 480 | 20 | 480 | 15 | 360 |
| LP | 1 | 25 | 300 | 30 | 360 | 10 | 120 |
|  |  | Total | 1,320 |  | 1,200 |  | 840 |

Mr Sushant Rana, the sales manager of the air purifier division, is thinking of assigning all the three markets to Manish. Advise Sushant about taking such a decision.

Before offering an advice to Mr Sushant, it is important to identify the combined call requirements of all the three given markets. Based upon the information shared about the Glen Pvt. Ltd, Table 10.2 shows the calculations required to identify the combined call requirements.

The call requirement for all the three given markets is $1,320+1,200+840=3,360$ calls per year, and Mr Manish can handle only 2,200 calls per year. Therefore, optimally, Mr Manish can only handle market Allepy and market Cochi, together with 2160 calls per year, and it is not advisable for Mr Sushant to assign all the three markets to Manish.

## BREAKDOWN METHOD

This method is popular among sellers of industrial products or those who are looking for exclusive distribution. The following steps could be followed to create a territory on the basis of breakdown method.

1. Determine sales potential: It is calculated as the sales volume the company can expect in the entire market.

For example, the entire market potential for electric scooters for the year 2021 is predicted at 5 lakh units, and the company Pulse Ltd has sold 12 per cent of the total electric scooters sold last year at the rate of ₹ 40,000 per unit. The company is expecting the same performance this year also. Therefore, the sales potential for 2021 for company Pulse Ltd will be $(500,000 / 100) \times 12=60,000$ units.
2. Allocate total sales potential among control units or territories: Sales potential for each control unit is calculated by multiplying market index with the total sales potential for allocating it among various control units. A market index is a single or combination of market factors expressed as a percentage. The percentage of previous year's total retail sales of a territory can be considered as a marketing index. The territorial sales potential can be calculated using the following formula.

> Territorial sales potential $=$ Total sales potential $\times$ Market index

Suppose the percentage of last year's total retail sales of Chandigarh, Mohali and Panchkula cities was 20, 50 and 30 , respectively. The territorial sales potential (for total 60,000 units) of Pulse Ltd for Chandigarh will be $60,000 \times 0.2=12,000$ units. Similarly, for Mohali and Panchkula, it will be 30,000 units and 18,000 units, respectively.
3. Determine the sales volume expected from each salesperson: In this step, the company assesses how much each salesperson must sell to have a profitable business. The starting point for such calculation is to do cost analysis and then apply judgement based on past experience. For example, assume that for the electric
scooters of Pulse Ltd, cost of goods sold is amounting to 65 per cent of sales, the cost of direct selling activities is $₹ 250,000$ and the expected margin by the company is 15 per cent of sales. Then each salesperson must generate a sale volume of ₹ $1,250,000$ to meet the margin expectation of the company. With this figure at hand, the management may feel that during past years, their salespersons were able to make an average sale of ₹ $1,500,000$ and can be pushed to sell ₹2,000,000. So the expected sales volume is set for ₹ $2,000,000$.
4. Draw tentative territorial boundaries: Now the entire market is divided in such a way that each salesperson will get the equal sale potential. In this step, the management has to assign enough adjacent control units to each salesperson so that they have at least $₹ 2,000,000$ of sales potential.

## CHECK YOUR UNDERSTANDING

1. Kyocera is a popular brand in providing industrial cooling solutions with a focus on the northern part of the country. Rahul works as marketing executive-B2B at Kyocera Ltd. He spends around seven hours every day in the field and meets potential buyers for generating sales. Rahul spends approximately 300 minutes on a given call to convince the potential buyers. It takes him around 15 minutes to reach at the next potential buyer. The sales manager of Rahul wishes to know how many calls Rahul can make in a year if he goes for calls on 240 days per year. Help the sales manager.
2. Glambus Pvt. Ltd deals in sales of high-end customized beauty products targeting celebrities. Among a team of 45 dedicated salespersons, Ash is their star sales performer for the last 5 years. He is the person

Table 10.3
Call Frequency for the Three Customer Groups

|  |  | Market <br> Alpha | Market <br> Beta | Market <br> Gamma |
| :--- | :---: | :---: | :---: | :---: |
| Customer <br> Group | Call Frequency/ <br> Month | No. of <br> Accounts | No. of <br> Accounts | No. of <br> Accounts |
| Platinum | 4 | 10 | 20 | 30 |
| Diamond | 2 | 20 | 30 | 20 |
| Gold | 1 | 30 | 10 | 10 |

Mr Vasu, the sales manager, can always rely upon. Recently, the company is focusing on three customer groups, namely Gold, Diamond and Platinum, residing in three identified markets, that is, Alpha, Beta and Gamma. The details of call frequency for the three customer groups are as follows (Table 10.3).

Vasu is interested in encashing the talent of Ash and wishes to assign him all the three markets to get maximum conversions. Presently, Ash is having a workload capacity of 1,800 calls per year. Is it wise for Vasu to assign all the three markets to Ash?

## Experience the Real Life

On your next visit to your family doctor, try to meet a medical sales representative. Enquire about the sales territory they are handling and how many calls they are making in a day. Do they have more than one salesperson in a single territory? Also, find out how the sales territories are designed in their company?

## ADDITIONAL INSIGHTS AT A CLICK

1. 5 Steps for Designing Territories for Your Top Talent
In this wonderful article, a step-wise approach is described for designing sales territories. The content reinforces the basic concepts related to sales territory designing which are looked into in the present chapter.
https://salesbenchmarkindex.com/insights/5-steps-for-designing-territories-for-your-top-talent/
2. How to Plan for, Map Out and Optimize Your Sales Territories
The content in this article takes the reader along on a journey of sales territory. It is a comprehensive guide which discusses almost all the aspects of sales territories, starting from planning a sales territory to optimizing it.
https://www.xactlycorp.com/complete-guide-sales-territories

## 11 whol sooing better?


Arpit is a sales manager and is handling the state of Gujarat for an FMCG company. The company has been present in Gujarat for last five years, but earlier it was covering only the southern part of the state. In last one year, the company entered the northern part of the state as well.

Arpit was given a fresh team of four sales executives. Out of these four, two started operating in South Gujarat, where the company had been present, and the remaining two were given the new region of North Gujarat and were given the task to make the company successful in the new territory.

Now, after a year of operating in whole of Gujarat, Arpit is evaluating these sales executives, which is as follows.

| Sales <br> Executive | Territory | Target <br> (Units) | Achievement <br> (Units) | Achievement <br> $\%$ |
| :--- | :--- | :---: | :---: | :---: |
| Ashish | North Gujarat- <br> NG 1 | 300 | 200 | 66.6 |
| Raghu | North Gujarat- <br> NG 2 | 200 | 100 | 50 |
| Vijay | South Gujarat- <br> SG 1 | 500 | 250 | 50 |
| Rohit | South Gujarat- <br> SG 2 | 600 | 500 | 83 |

Arpit is in a fix because of the company's performance appraisal policy. The policy clearly stated that sales
executives are to be assessed on the quantum of sales that they have made. Although there is a provision in the policy that if the new sales executives have achieved around $80 \%$ of the sales target in their first year, they will be kept on probation for one more year, but anything less than that means the monthly salary of the executive would be reduced by $15 \%$.

Northern Gujarat was divided into two territoriesNG 1 and NG 2-out of which NG 2 was dominated by some very strong competition, while NG 1 was relatively open. The two new sales executives who were handling each of these territories worked very hard to establish the presence of the company in these territories.

Raghu, who was managing NG 2, was successful in establishing the dealer network for the company but obviously could achieve only 50\% of his sales target, while Ashish who was handling NG 1, which was a slightly easier territory, established the dealer network and also achieved 66.6 per cent of the sales target. Arpit knew that these guys had left no stone unturned to create the base of the company in these territories. In fact, since Arpit himself worked with them, he knew how difficult the task was. He wanted that the company must reward these executives with a permanent position. However, based on the company's policy, both the employees must be fired.

Arpit went to his boss, the regional sales manager, who looked after western India, but he said that this was a policy issue and he could not do much, but he suggested Arpit to talk to the head of sales and convince him to allow an exception for these sales executives.

Arpit went to the head of sales, Mr Gupta, and explained the case to him. Mr Gupta listened carefully but said that there were two issues in doing this:
(a) The company's policy could be tweaked at the end of the financial year and there were six months remaining for that and, hence, the policy could not be changed midway into the year; and (b) Creating exceptions and rewarding these sales executives would send a wrong message to the other sales executives, even though they were working in easier territories. It would appear as if Vijay was fired even though be also achieved 50 per cent of the target, whereas Raghu was promoted for achieving equal target as Vijay.

What should Arpit do? What is wrong here and how can it be corrected? Is it right to assess all these executives in the same way, and on the same parameters?

This chapter would dive deeper into such issues and suggest some solutions to these practical problems faced by marketers.


Sales target is a popular term among the firms involved in marketing and sales activity. It is sales only which can generate revenue for the firm. Targets are used in the firm for several purposes, such as providing quantitative performance standards, executing sales and expense control, motivating sales force for desired performance, and connecting sales performance with rewards.

Another popular term used for sales target is the 'sales quota'. A sales target or quota is a quantities objective assigned to sales department, sales team or individual sales personnel. These performance standards are used to evaluate actual sale efforts against the desired sales performance. So sales targets or quotas are used as the benchmark of sales performance for comparing the sales efforts of the firm.

## TYPES OF SALES TARGETS

For appraising the sales performance on the basis of targets or quotas, it is pertinent to understand the types of these targets. There exist four broad categories of targets.

## SALES VOLUME TARGETS

Sales volume targets basically explain how much sales will be done under a given time frame. The sales volume targets are set for geographical areas, product lines, marketing channels or a combination thereof, corresponding to any unit of the sales organization. The smaller the selling unit, the better the target-based sales operations control.

1. Rupee sales volume targets: These targets are generally established by the firms selling broad product lines, as fixing unit-based targets may push the salespersons to cut the process too deep in order to increase unit sales. Such situations could end up in losses for the firm despite meeting unit sales targets.
2. Unit sales volume target: When prices of a product are not stable, it is better to use unit-based sales volume target. For example, a product is priced at ₹500 per unit, and selling 800 units would generate ₹ 400,000 in sales. On the other hand, with price ₹ 800 per unit, only 500 units need to be sold to generate the sales of $₹ 400,000$. Also, for high-priced products, a target of selling 5,000 units at $₹ 1,000$ per unit sounds a better target as compared to a target of ₹ $5,000,000$.

## BUDGET TARGETS

These are set for the sales personnel to control expenses, gross margin or net profit. In budget targets, the emphasis is on earning more profits by controlling expenses. So by aligning
expenses with sales volume, the company can contribute to more profits.

## ACTIVITYY TARGETS

Activity targets emphasize on time and efforts spent by sales personnel among different activities. The total activities of sales personnel could be divided into total sales calls, product demonstrations, calls to prospects, etc. Such kind of targets are more popular for selling insurance products, where sales personnel are striving for developing newer contacts.

## COMBINATION TARGETS

Combination targets include performance of both selling and non-selling activities. Performances are computed as percentages and presented as point systems. The points scored under the systems consider both sales volume and activity targets. Various aspects of sales job are included in order to judge the overall performance of sales personnel. It is a measure that summarizes the overall performance of sales personnel in a single table.

1. Calculating and comparing the performance of salespersons through weighted combination target system

Step 1: Calculate the percentage of target achieved by a salesperson by using the following formula.

> Percentage of sales target achieved $=($ Actual performance $/$ Target $) \times 100$

Step 2: Calculate weighted performance. The value of a weight symbolizes the importance of an activity for the company.

[^7]Step 3: Calculate sales performance as point scores.

$$
\begin{aligned}
& \text { Sales performance (point scores) } \\
= & \text { Weighted performance/Total weight }
\end{aligned}
$$

Example: Remo is the sales manager at Bluestar Cooling Systems Ltd. He has recently hired two salespersons Ajay (A) and Bala (B) on temporary basis to push the sales of mini deep freezers. Both the salespersons are assigned quarterly targets based on their experience in the field. The targets comprise of tasks such as sales volume generation, adding new customers, calling potential customers and providing product demo. At the end of the quarter, Remo reviewed the actual performance (refer to Table 11.1) of both the salespersons with a view to offer the better performing salesperson a permanent employment in the company. Help Remo in determining who should get the permanent employment at Bluestar Cooling Systems Ltd.

Table 11.1
Quarterly Targets and Actual Sales Performance of Ajay (A) and Bala (B) at Bluestar Cooling Systems Ltd

|  | Target |  | Actual <br> Performance |  | Weight |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | A | B | A | B |  |
| Sales volume <br> generation | $₹ 80,000$ | $₹ 95,000$ | 72,000 | 68,400 | 3 |
| New customers | 30 | 40 | 21 | 36 | 2 |
| Calls on <br> prospects | 60 | 110 | 54 | 121 | 1 |
| Product <br> demonstrations <br> done | 200 | 300 | 160 | 270 | 1 |

For determining the better performer between Ajay and Bala, first of all Remo must calculate the percentage of target achieved by both the salespersons for each of the assigned task. As mentioned in Table 11.2, it is calculated by dividing actual performance by the assigned target and multiplying by 100 . At this stage, it is observed that Bala is outperforming Ajay on all tasks, except sales volume. The next step that Remo has to follow is to multiply percentage of target achieved by their respective weights. The task of generating sales volume has the highest importance for Bluestar Cooling Systems Ltd and hence the highest weight. In the final step, sales performance point scores are calculated for both the salespersons by adding their respective scores and dividing them by total of weights, that is, 7 . So the point score of Ajay is 580/7 $=82.85$ and of Bala is $596 / 7=85.14$.

As per the above calculations, it is evident that salesperson Bala (B) is outshining Ajay (A), and Remo should offer the permanent employment to Bala.

Table 11.2
Calculating Better Performer between Ajay (A) and Bala
(B) at Bluestar Cooling Systems Ltd

|  | Target |  | Actual <br> Performance |  | $\%$ Target |  | Weight | Target $\times$ Weight |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | A | B | A | B |  | A | B |
| Sales <br> volume <br> generation | 80,000 | 95,000 | 72,000 | 68,400 | 90 | 72 | 3 | 270 | 216 |
| New <br> customers <br> generation | 30 | 40 | 21 | 36 | 70 | 90 | 2 | 140 | 180 |
| Calls on <br> prospects | 60 | 110 | 54 | 121 | 90 | 110 | 1 | 90 | 110 |
| Product <br> demo <br> done | 200 | 300 | 160 | 270 | 80 | 90 | 1 | 80 | 90 |
| Total |  |  |  |  |  |  |  |  |  |
| Point <br> score |  |  |  |  |  |  | $580 / 7$ <br> $=82.85$ | $596 / 7$ <br> $=85.14$ |  |

2. Calculating and comparing the performance of salespersons through full line target system

Sometimes targets are set for different products in a product line. In such cases, solely depending upon the total sales volume generated could turn out to be a wrong criterion to evaluate the performance of a salesperson. A full-line point target system is used to appraise the performance of the salespersons. Steps to appraise the performance remain same as calculating and comparing the performance of salespersons through weighted combination target system. The only difference is made by the relative importance of selling a product in comparison to others in the product line.

> Example: Sid (S) and Pal (P) are the best performing salespersons at Fresh Pvt. Ltd, a leading name in FMCG products. Presently, both are handling body care product line, including three products, namely shampoo, talcum powder and bathing soap. For Fresh Pvt. Ltd, bathing soap is the most valuable product in the product line and carries the maximum weightage. The target and actual performance of Sid and Pal for the month of June 2021 is given in Table 11.3. Both are able to generate same total sales volume for the product line. Have both performed equally well for the company? Determine.

Table 11.3
Sales Volume Targets and Actual Performance of Sid (S) and Pal (P) at Fresh Pvt. Ltd in June 2021

|  | Sales Volume <br> Target (in ₹) |  | Actual <br> Performance (in ₹) |  | Weight |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Product | S | P | S | P |  |
| Shampoo | 40,000 | 20,000 | 20,000 | 40,000 | 1 |
| Talcum powder | 30,000 | 30,000 | 30,000 | 30,000 | 2 |
| Bathing soap | 20,000 | 40,000 | 40,000 | 20,000 | 3 |
|  |  | Total | 90,000 | 90,000 |  |

Although as per the given information, both Sid and Pal have generated same sales volume for the product line, but it needs further exploration, keeping in view the relative importance of products to the company. Calculating the percentage of target achieved, it is evident that both the salespersons are performing at par for the product talcum powder, but opposite result are there for shampoo and bathing soaps. On calculating point scores of Sid and Pal, it can be stated that Sid clearly outshined Pal for the most valuable product for the company, that is, bathing soap, but in the case of shampoo, Pal is performing better. The final call on better performance depends on the total point scores of Sid and Pal as mentioned in Table 11.4.

Table 11.4
Calculating Better Performer between Sid (S) and Pal
(P) at Fresh Pvt. Ltd in June 2021

|  | Sales Volume <br> Target (in ₹) |  | Actual Performance (in ₹) |  | \% Target |  | Weight | Target $\times$ Weight |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Product | S | P | S | P | S | P |  | S | P |
| Shampoo | 40,000 | 20,000 | 20,000 | 40,000 | 50 | 200 | 1 | 50 | 200 |
| Talcum powder | 30,000 | 30,000 | 30,000 | 30,000 | 100 | 100 | 2 | 200 | 200 |
| Bathing soap | 20,000 | 40,000 | 40,000 | 20,000 | 200 | 50 | 3 | 600 | 150 |
| Total |  |  |  |  |  |  | 6 | 850 | 550 |
| Point score |  |  |  |  |  |  |  | $\begin{array}{\|c\|} \hline 850 / 6 \\ =141.66 \end{array}$ | $\begin{array}{\|c\|} \hline 550 / 6 \\ =91.66 \end{array}$ |

Overall, as per the above calculations of point scores, it is evident that salesperson $\operatorname{Sid}(\mathrm{S})$ is performing better than $\mathrm{Pal}(\mathrm{P})$, in spite of equal sales volume generation for the product line.

Note: Similarly, we can simultaneously compare the sales performances of all the salespersons in a company.

## CHECK YOUR UNDERSTANDING

1. Mr Harish is the business development executive at RR Financials Ltd. In the months of July and August 2021, he was able to get investments of ₹ 45,000 against the target of ₹ 57,000 by selling mutual funds to the existing customers. He also managed to open 45 new Demat accounts against a target of 30 . The weights assigned to investments and new account were 3 and 2, respectively. Calculate the performance of Mr Harish in point score system.
2. Following is the performance of two salespersons Xavier (X) and Yash (Y), both handling oral hygiene product line of K Ltd. Both are able to generate same total sales volume for the product line.

|  | Sales Volume Target <br> (in ₹) |  | Actual <br> Performance (in ₹) |  | Weight |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Product | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{X}$ | Y |  |
| Shampoo | 60,000 | 60,000 | 50,000 | 30,000 | 1 |
| Talcum <br> powder | 60,000 | 60,000 | 50,000 | 55,000 | 2 |
| Bathing <br> soap | 20,000 | 20,000 | 5,000 | 20,000 | 3 |

Are they performing at par for K Ltd? If not, determine who is performing better: Xavier or Yash?

## Experience the Real Life

Try to connect with the branch manager of any life insurance company in your city and enquire about how they appraise the performance of their insurance advisors. Are they adopting the target-based performance measures for appraisal? If yes, is it matching with your understanding?

## ADDITIONAL INSIGHTS AT A CLICK

1. Measure Performance and Set Targets

This guide highlights the importance of performance measurement and target-setting for a business organization. It details you about wisely choosing a key performance indicator (KPI) to measure and suggests examples in a number of key business areas. It also highlights the main points to bear in mind when setting targets for your business.
https://www.infoentrepreneurs.org/en/guides/ measure-performance-and-set-targets/
2. How to Measure Sales Performance

The article emphasizes on the revenue as the ultimate performance indicator. It states that it is important to keep in check the sales activities if the sales output is not up to the mark. Overall, it provides another dimension to explore while understanding the sales target and related performance measurement. https://medium.com/ama-marketing-news/how-to-measure-sales-performance-6798abfdbbdb

## 12 <br> monaging the Product portfolio


You must be knowing about Unilever. If not, here is a brief introduction: They are the makers of most FMCG brands that you and I use daily, for example, Surf, Pepsodent, Vim, Lux, Brooke Bond, Dove, Sunsilk, Close-up, Hamam, Rin, Lipton, Bru, Kissan, Lakme and Pears.

Can you guess how many total brands Unilever has and how many product categories it deals in?

Here are a few hints: In September 1999, there was a news headline in a publication called Grocer, 'Unilever planning to ditch 1200 brands.' Then in February 2001, there was a news headline in the famous newspaper called The Guardian that read, 'Unilever to drop more brands,' and in this news item, there was a line that read, 'The Anglo-Dutch consumer goods group announced last year it was cutting back the number of its brands from 1600 to 400.' In the same news item, the chairman of Unilever was quoted saying that he would like the number to be more compact than 400! ${ }^{1}$

The managerial complexity does not end here!
Under each of these brands, multiple products are sold. For example, under the brand Dove, the company sells soaps, shampoos, conditioners, moisturizers, body lotions, baby products, hair oil, body scrub, etc. Under Dove shampoo, you have hair therapy shampoo, intense repair shampoo, daily shine shampoo, nutritive

[^8]solutions shampoo, etc. ${ }^{2}$ For each of these types of shampoo, there are 3-4 different packaging ( 250 ml , 500 ml and 750 ml ). Same is true for all other products.

And that is just for Dove! Imagine a similar range for all the products and their variants sold under each brand!

By now, you would be wondering, how big is the company and how on earth do they manage such a large number of products, product variants and brands. Yes, it is indeed a Herculean task to create such a large number of great brands and then to manage them well in the market!

There are several other companies like Unilever who have extensive range of products and brands that they manage such as $P * G$, Pepsi and Nestlé.

## MARKETING METRICS

One tool that comes in handy to manage the products, product variants and brands is product mix. This chapter would introduce you to this tool and how it helps the marketing heads in taking decisions.

Continuing with the case in point, the kind of managerial complexity that is faced by Unilever and similar companies which have an extensive product and brand range makes it very challenging for the product and brand managers to take decisions about what new product to launch, which product or brand to kill/drop and how to manage each item that the company sells in a way that they do not confuse the customers but at the same time offer them extensive variety and cover all the segments in the market.

[^9]That is where the tool called 'product mix' comes in for the rescue of marketing managers. Product mix helps marketers to have a bird's eye view of all the product categories, product variants and brands that a company sells and is meant to facilitate the management and decision-making related to the products a bit simpler for the managers.

## PRODUCT MIX

It is the sum of all the products sold by a company. It is made up of 'product lines', which in turn are made of 'product items'. Let us look at what these things are:

1. Product item: It is the 'individual product' that the customer buys. For example, if a customer purchases a Dove soap, pink colour, 75 grams, this is a product item. It can be based on pack size, flavour, model, etc. This is the 'last unit of the brand' that a customer finally purchases for consumption.
2. Product line: It is the group of 'similar' or 'closely related' products put together in a group. For example, HUL can put all soap brands and their variants under one 'product line' named 'soaps'.

Note: A company can choose to group the products in one line on 'any' basis. This is entirely the company's choice. Companies make product lines on any basis they deem fit. For example, a company selling soaps and shampoos may decide to put all soaps into one product line called soaps and can have another product line called shampoos because they believe that the products are different and are used for different purposes. However, another company selling soaps and shampoos can decide to have only one product line called toiletries because they believe that they are used together and at the same place (bathroom) by the customer.

## MANAGING PRODUCT MIX

The first step in managing a product mix requires calculating the following dimensions.

1. Length of product line: Total number of brands in a product line
2. Depth of product line: Total number of product items in a product line (under all brands)
3. Breadth or width of product mix: Total number of product lines in a product mix
4. Length of product mix: Total number of brands in a product mix
5. Depth of product mix: Total number of product items in a product mix
Based on the above calculations, marketers can take many decisions such as what kind of product to launch, at what price and which product to drop.

Goodlife Ltd is a four-year-old company offering a range of FMCG products to the consumers in North India. Table 12.1 shows the total range of the company products. Calculate all the dimensions of product mix of Goodlife Ltd.

Table 12.1
Product Mix of Goodlife Ltd

| Soap | Shampoo | Beverages | Home Care |
| :--- | :--- | :--- | :--- |
| Brand Premium <br> Variant 1 (₹100) <br> Variant 2 (₹60) | Brand Premium <br> Variant 1 (₹150) <br> Variant 2 (₹135) <br> Variant 3 (₹125) | Brand Premium <br> Variant 1 (₹60) <br> Variant 2 (₹55) <br> Variant 3 (₹50) | Brand Premium <br> Variant 1 (₹80) |
| Brand Popular <br> Variant 1 (₹50) <br> Variant 2 (₹30) <br> Variant 3 (₹20) | Brand Popular | Variant 1 (₹130) | Brand Popular |
| Variant 2 (₹120) | Variant 1 (₹10) | Vrand Popular |  |
| Variant 2 (₹12) | Variant 2 (₹50) |  |  |
| Brand Regular <br> Variant 1 (₹10) |  | Variant 3 (₹15) | Variant 3 (₹20) |

On the basis of information shared in Table 12.1, the five dimensions of product mix of Goodlife Ltd are calculated in the following manner:

1. Length of product line:
a. Product lineSoap:
b. Product lineShampoo:
c. Product lineBeverages:
d. Product lineHome care:
2. Depth of product line: Total number of product items in a product line (under all brands)
a. Product lineSoap:

6 (Premium [2],
Popular [3], Regular [1])
b. Product lineShampoo:
c. Product lineBeverages:

5 (Premium [3],
Popular [2])
7 (Premium [3],
Popular [3], Regular [1])
d. Product lineHome care:
3. Breadth or width of product mix:
4. Length of product mix:

4 (Premium [1],
Popular [3])
4 (Soap, Shampoo, Beverages, Home care)
10 (Premium ([], Popular [4], Regular [2])
5. Depth of product mix:

22 (Soap [6], Shampoo [5], Beverages [7], Home care [4])

Observations: With the help of the above given product mix, marketers can easily see the following:

- There is a big gap between the two variants of soap under brand Premium. The marketer might like to close that gap.
- There is an overlap between the different variants of shampoo brands that it is offering. This might be
causing cannibalization between the brands and it might be confusing the customers.
- There is a big gap between two brands in beverages. There is no product available between ₹10 and ₹ 50 . The marketer might be losing revenues by not having any product in this range.
- Similar is the case with home care brands where there is a visible gap between ₹ 50 variant and $₹ 80$ variant.

Managerial decision-making: Based on the above observations, a marketer might take the following decisions:

1. Launch a variant under brand Premium of soap to fill the gap or adjust the pricing in a way that it maximizes revenues by increasing sales.
2. Adjust the pricing of shampoo brands in a way that cannibalization does not happen and consumers can clearly spot the difference between the variants and the brands' positioning.
3. Fill the gap between the two brands of beverages by either launching product variants under existing brands or launching a new filler brand. Same decision is required to be taken in home care brands.

Note: All the above decisions would be taken only if there is a market segment which would buy the variants or if the change in pricing would lead to maximization of revenues. There are cases where a visible gap is there in the product mix, but there is no market for those variants/brands. So based on the above product mix, the marketers will first analyse the market and competitors' product mix to assess the conditions before taking the decisions.

## CHECK YOUR UNDERSTANDING

1. Carlson Pvt. Ltd is a popular name dealing into sales of consumer appliances and electronics. Presently, it is offering four product categories, namely geyser, steam iron, mobile phone and fan, for its consumers. Various items offered under each product category are as follows.

| Geyser | Steam Iron | Mobile Phone | Fan |
| :---: | :---: | :---: | :---: |
| Brand X | Brand A | Brand P | Brand H <br> Variant 1 (₹800) |
| Variant 1 ( $₹ 1,500$ ) | Variant 1 ( ${ }^{\text {c }} 640$ ) | Variant 1 ( $₹ 6,000$ ) |  |
| Variant $2(₹ 1,350)$ | Variant 2 ( $₹ 550$ ) | Variant 2 ( $₹ 5,000$ ) |  |
| Variant 3 ( $₹ 1,300$ ) | Variant 3 (₹450) <br> Variant 4 (₹1,100) | Variant 3 (₹ 4,500 ) |  |
| Brand Y | Brand B | Brand Q | Brand I |
| Variant 1 ( $₹ 1,200$ ) | Variant 1 (₹250) | Variant 1 ( $₹ 10,000$ ) | Variant 1 (₹500) |
| Variant 2 ( $₹ 1,170$ ) | Variant 2 (₹200) | Variant 2 (₹ 12,000 ) | Variant 2 ( $₹ 1,000$ ) |
| Variant 3 ( $₹ 1,160$ ) |  | Variant 3 ( $₹ 15,000$ ) | Variant 3 (₹300) |
| Brand Z | Brand C | Brand R |  |
| Variant 1 (₹900) | Variant 3 (₹750) | Variant 1 ( $₹ 5,000$ ) |  |
|  |  | Variant 2 ( $₹ 3,000$ ) |  |

Calculate the following and give your observations of the product mix:
a. Length of product line
b. Depth of product line
c. Breadth or width of product mix
d. Length of product mix
e. Depth of product mix
2. The product mix information of two car companies AutoV Ltd and AutoX Ltd is mentioned below. Make your observations and recommend the decisions that the marketer at company AutoX should take.

Company AutoV (Prices in Lakh)

| Sedan | SUV | Van | Electric |
| :--- | :--- | :--- | :--- |
| Brand $\boldsymbol{X}$ | Brand A | Brand P | Brand H |
| Variant 1 (₹10) | Variant 1 (₹15) | Variant 1 (₹6) | Variant 1 (₹9.50) |
| Variant 2 (₹6) | Variant 2 (₹13.50) | Variant 2 (₹5) |  |
|  | Variant 3 (₹12) | Variant 3 (₹5.50) |  |

(continued)

| Sedan | SUV | Van | Electric |
| :--- | :--- | :--- | :--- |
| Brand Y | Brand B | Brand Q | Brand I |
| Variant 1 (₹5) | Variant 1 (₹13) | Variant 1 ₹10) | Variant 1 ₹8) |
| Variant 2 (₹3) | Variant 2 (₹12) | Variant 2 (₹12) | Variant 2 (₹10) |
| Variant 3 (₹2.50) |  | Variant 3 (₹15) | Variant 3 (₹7) |
| Brand Z <br> Variant 1 (₹2.50) |  | Brand R |  |

Company AutoX (Prices in Lakh)

a. Compare the product mix of the two companies in terms of:
i. Length of product line
ii. Depth of product line
iii. Breadth or width of product mix
iv. Length of product mix
v. Depth of product mix
b. Where are the overlaps and gaps in the product mix of these companies and how should they be addressed?
c. If there is data that the market of electric vehicles and SUVs is growing and the market of vans is declining, what would be your recommendations to these companies (base your answer only on the info given in the case).

## Experience the Real Life

Go to the website of any FMCG product company and note the details of its product mix and compare the same with that of a cement company. Observe the differences and discuss the reasons behind the differences between the two.

## ADDITIONAL INSIGHTS AT A CLICK

1. Product Mix Analysis: Strengthening Sales and Operations Planning with What-if Analysis The article discusses the evaluations of different product mix strategies, including assortment and stock-keeping unit (SKU) portfolio optimization. It also introduces to the readers how multidimensional analyses can be applied to product mix, increasing decision options for senior managers. https://www.supplychain247.com/article/strengthening_sales_and_operations_planning_analysis
2. The Best Way a Company Can Build and Manage Its Product Mix and Product Lines
It is a crisp article that introduces the readers to the fundamentals of product mix and related decisions. It guides about an optimum way through which a company can build and manage complex product mix.
https://smallbusiness.chron.com/way-company-can-build-manage-its-product-mix-product-lines-17330. html

# 13 what value does a customer see in youl Product? 

Marketers often talk about 'value'. You must have heard your teachers and/or bosses saying things like 'We need to add value' or 'Consumers are not seeing value in this' or 'Value is what the customers want and our job is to provide that.' In fact, marketing is often defined as the art of creating, communicating and delivering value. Such is the power of this term in marketing!

Marketers often try to do exactly what the definition (given above) says, but more often than not, consumers do not get value or they derive value in a way which is completely unexpected. Look at the following cases:

1. A washing machine company realized that its washing machine was extremely popular with the roadside dhaba (an eatery) in Punjab, and the dhabas used the washing machine to churn 'lassi'.
2. A hair dye marketing company realized that the customers in rural areas of Rajasthan were using its hair dye to colour the hair of their buffaloes so that they could fetch a better price at the animal fair. There are numerous such cases where customers have derived value from an unintended use of the product.
3. Toothpowder is a declining product category, but a toothpowder marketing company's data indicated that in certain areas, the sales of toothpowder was very high and it was being brought by some selected customers only. When they dig
deeper, they were surprised to know that these buyers were small companies which made utensils and were buying the toothpowder because the shine of the utensils increased considerably after washing the utensils with the toothpowder. The aforementioned marketers never communicated that to the customers, but customers found value in the product for these strange reasons and, hence, they were buying the brand.

On the contrary, marketers are also surprised by the customers when they do not accept genuinely good products or when they accept the not-so-good products wholeheartedly. This might have happened with you when you saw a movie which was brilliant according to you, your friends and the critics, but failed miserably at the box office and, at times, you and your friends see a movie which has done very well at the box office but you are left wondering: How can this pathetic movie work so well? What is in it that people liked?

Whatever may be the case, marketers know that customers will continue to buy their products only if they see value in it. Therefore, marketers are keen to know 'whether the customers are seeing value in their products and brands or not and how much value are they seeing in it', especially with reference to the competitors' offering.

The challenge, however, is to know how to measure that because value is essentially a subjective thing, as people perceive it differently (that is why the movie you liked didn't work and the one you didn't like worked!). Well, this chapter will introduce you to a simple yet effective technique through which you can measure value!

Value, simply put, is what the customer gets for what they give. Therefore, whenever you buy something, an exchange happens, wherein you get something in return but, at the same time, you have to let go of certain things such as money and effort. So what you get for what you give is value.

Just like 'beauty lies in the eyes of beholder', value is determined by customers. It is not the product or service, it is the 'worth' of what the customer has received, in their own eyes. In other words, value is not the quality of raw material, not the features of the product and neither it is the amount of hard work that has gone into making the product, but value is what the customers see in the product. It is the importance that customer assigns to the product/brand, which they have in exchange for their money or effort or both.

One indicator of the 'value' of your product, service or brand in the eyes of the customer is the price that they are willing to pay for it. If customers perceive high value in the product, they will be willing to pay a higher price, and vice versa is also true.

## VALUE AND RELATED CONCEPTS

Measuring what value do your target customers get from your offering is important because it directly affects your sales and your ability to charge a price premium. The simple formula to measure value of your offering in the eyes of customers is as follows.

$$
\text { Value }=\text { Benefits or perceived value/Cost of ownership }
$$

Therefore, in order to measure 'value', you need to measure what benefits your offering is giving to customers and put a number to it. Same is the case with the cost of ownership.

1. Perceived value: The answer to what is perceived value is actually a question: Why do you buy something. The 'reasons' are the 'benefits'. These can be functional (buying a shampoo to clean your hair), social (telling people that you use a premium brand of shampoo) or experiential (the cool sensation that a menthol shampoo provides as you use it).
2. Cost of ownership: Generally, we think that it's the price that we pay but that is just a part of the total cost of ownership. Cost of ownership refers to all the 'costs' that you will bear to search, buy, use and dispose of a product.
For example, many people are hesitant to buy air conditioners not because they cannot pay the price but because they believe that the monthly electricity bill will increase too much. Now, in this case, price as a part of cost of ownership is less, but the 'cost of using' the product is believed to be high. Customers incur many costs while searching, buying, installing, using and disposing the product. They obviously want to reduce these costs, and marketers must help them in doing so.

The idea is very clear: If you want to increase the 'value' of your product/service in the eyes of the customer, you will have to increase the benefits, lower the cost (of ownership) or do both.

## MEASURING VALUE

It is possible to measure value by adopting a step-by-step approach. It requires following three basic steps, namely measuring benefits, measuring cost of ownership and calculating value.

Step 1-Measuring benefits: Ask the customers to fill the information mentioned in Table 13.1.

You have bought our brand of car; what all did you expect from it and how did we do?

Table 13.1
Measuring Benefits

| Benefits (Customer <br> Will Fill These/You <br> Can Give Options if <br> You Are Sure) | How <br> Important Is <br> This Benefit <br> for You? <br> (A) | Rate the Car <br> on the 'Benefit' <br> (Give Marks <br> out of 10) <br> (B) | Score <br> $(\mathbf{A}) \times(\mathbf{B})$ |
| :--- | :--- | :--- | :--- |
| Quality |  |  |  |
| Service |  |  |  |
| Social status |  |  |  |
| Maintenance costs |  |  | Benefits <br> score |
| Residual value-Resale |  |  |  |
| Etc. | Sum of this <br> column <br> should be 100 |  |  |
| Total |  |  |  |

Once the above information is filled in by multiple customers, average benefits score is calculated.

Step 2—Measuring costs: Ask customers to fill the information in Table 13.2, based on their experience/assumptions.

How long do you plan to keep the car: $\qquad$ years (this is product's life)?

Table 13.2
Measuring Costs

| Costs (Customer Will Fill These Based on <br> Their Assumptions) | Customers' Costs |
| :--- | :--- |
| Cost of searching for the right car (visiting <br> dealers, banks, etc.) |  |
| Down payment |  |
| EMI per month $\times 12 \times$ Product's life |  |
| Taxes |  |

(continued)
(continued)

| Costs (Customer Will Fill These Based on <br> Their Assumptions) | Customers' Costs |
| :--- | :--- |
| Fuel per month $\times 12 \times$ Product's life |  |
| Insurance |  |
| Service/Maintenance per year $\times$ Product's life |  |
| Other costs |  |
| Total | Total customer's costs |

Once the above information is filled in by multiple customers, calculate the average scores.

Step 3-Calculating value: At this step, the value of the product is calculated as follows.

Value $=$ Benefits score (Table 13.1)/Total customers' costs (Table 13.2)

Let us continue with car as a product and see how actual calculation happens.

James is the head of research at the marketing research company Insight Ltd. Nova Motors Ltd, a car company, approached James. The car company is interested in knowing how much 'value' the customers perceive in their car. Nova Motors Ltd shared the list of customers who have purchased the car in the last year. Help James in calculating the value.
As mentioned earlier, Value $=$ Benefits/Costs. So James must follow the step-by-step approach for calculating value.

Step 1—Identify the benefits that are important to customers: Call the customers and ask them which benefits they derive from the car. You will get a list of benefits and from that list, you take the five most-cited benefits. Suppose, in this case, they are as follows:

1. Mileage
2. Status

## 3. Comfort

4. Safety
5. Low maintenance

Step 2-Quantify the benefits: Ask each customer in your sample/population to fill the information in Table 13.3, with what they think about the mentioned benefits.

Table 13.3
Measuring Benefits of the Car by Nova Motors Ltd


Benefits score $=730$
Step 3-Calculate the costs: Ask each customer in your sample/ population about the details of the expenses they incurred on the car (both one-time expense and recurring expenses). The customer response looks like this (Table 13.4).

How long do you plan to keep the car:
$\underline{8}$ years (this is product's life)?

Table 13.4
Measuring Customer Costs of the Car by Nova Motors Ltd

| Costs (Customer Will Fill These Based on <br> Their Assumptions) | Customers' Costs (in ₹) <br> (A) |
| :--- | :---: |
| Cost of searching for the right car (visiting <br> dealers, banks, etc.) | 1,000 |
| Down payment | 200,000 |
| EMI per month $\times \mathbf{1 2} \times$ Loan period <br> $(5$ years for this case) | 900,000 |
| Taxes | 50,000 |
| Fuel per month (₹4,000 for this case $\times$ <br> $\mathbf{1 2} \times$ Product's life | 384,000 |
| Insurance | 120,000 |
| Service/Maintenance per year $(₹ 15,000$ for <br> this case) $\times$ Product's life | $1,665,000$ |
| Costs score |  |

The customer's cost is $₹ 1,665,000$.
To sync it with the benefits score, let us divide this number by 10,000 (please note that this denominator would depend on the benefits and cost score and can vary from case to case

So customer's costs score $=$ Total of customer costs/10,000

$$
=1,665,000 / 10,000=166.5
$$

Step 4-Calculate value: The value of car by Nova Motors Ltd is calculated as follows:

$$
\begin{aligned}
\text { Value } & =\text { Benefits/Costs } \\
& =730 / 166.5 \\
& =4.4 \text { (approx) }
\end{aligned}
$$

## Notes:

1. Value can be negative, if the costs are higher than the benefits. Negative value signifies dissatisfaction and positive value signifies delight.
2. This is the calculation of one customer. James has to survey and get this score from the whole list that the company has shared. Once James has this 'value' score for all, take average of the score, and that is the value that customers derive from buying the car of Nova Motors Ltd.

## CHECK YOUR UNDERSTANDING

A mobile phone manufacturing company named Mango Mobiles Ltd has surveyed its existing customers. Following information is revealed after the survey.

1. The benefits that customers look for when they buy mobile phone are as follows:
a. Camera
b. Battery life
c. Design
d. Service centre
2. Where do the company and its closest competitors stand on these benefits?

| Feature | Mango | Competitor A | Competitor B |
| :--- | :---: | :---: | :---: |
| Camera | 450 | 400 | 500 |
| Battery life | 300 | 300 | 150 |
| Design | 100 | 100 | 150 |
| Service Centre | 350 | 300 | 150 |

3. Customers tend to keep the phone for two years.
4. Customers' costs for buying a phone are as follows.

| Cost | Mango | Competitor <br> A | Competitor <br> B |
| :--- | :---: | :---: | :---: |
| Down payment | 0 | 4,500 | 3,000 |
| EMI (per month) | 2,500 | 1,700 | 1,500 |

(continued)
(continued)

| Cost | Mango | Competitor <br> A | Competitor <br> B |
| :--- | :---: | :---: | :---: |
| Taxes (one time) | 750 | 600 | 750 |
| Insurance (annual) | 250 | 250 | 200 |
| Maintenance (annual) | 150 | 100 | 200 |
| Cost of searching (one time) | 500 | 200 | 600 |
| Power consumption (annual) | 250 | 300 | 350 |

5. The resale value of the phone after two years is as follows.

|  | Mango | Competitor A | Competitor B |
| :--- | :---: | :---: | :---: |
| Resale | 3,500 | 4,500 | 2,500 |

Calculate the value for customers for all the three companies and tell which company is offering the highest value and which company is offering the lowest value to the customers.

WHAT VALUE DOES A CUSTOMER SEE IN YOUR PRODUCT?

## Experience the Real Life

Identify a product that is used by all your family members (phone, soap, etc.) and ask each one of them: What 'value' do they derive from the product? What features are more important to them and which ones are less important? Using the method given in the chapter, calculate the value for each member of the family and map them with brands available in the market in terms of which brand would be preferred by which family member based on the value they seek from the product. Ask the family members if your guess is correct.

## ADDITIONAL INSIGHTS AT A CLICK

1. The 30 Things Your Customers Value Most

The article presents an element of value model for consumers and for business to business. The model carries 30 building blocks for value and presents them in the form of Maslow's hierarchy framework. It is a nice read on the topic.
https://www.thinkingbusinessblog.com/2018/08/23/ the-30-things-your-customers-value-most/
2. Measures That Provide Insight into Customer Value The article discusses the customer value metric, why there is need to create such metric, how it is created and how to interpret it.
https://visionedgemarketing.com/three-variables-to-create-a-customer-value-metric/
3. How to Measure Customer Value-and Why You Must Do So
The detailed article explains how to calculate customer value and various ways to enhance customer value. The article mentions two perspectives to measure customer value, namely financial value and customer focus. Overall, it is a great article to refer to, for increasing knowledge on the topic. https://www.mycustomer.com/marketing/data/how-to-measure-your-customer-value-and-why-you-must-do-so

## 14 how to forecast demand for a Ne山 Product?

Marketers usually get two kinds of nightmares: first, where they have the product and customers are not buying it, and, second, where customers are asking for the products and the marketers are not having it in stocks! Striking a fine balance between these two nightmare-ish scenarios is dependent on your skills of sales forecasting. If, as a marketer, you can forecast the sales nearly accurately, then you can avoid these two situations.

A lot rides on the figures of sales forecasting! If you are lucky, you will be asked to do forecasting for already existing products, but if you are not, you will be asked to forecast the sales of an absolutely new-to-the-world product which no one has seen or heard of, forget about using the product.

Consider this case:
Amit was the marketing head of a small company making toasters and geysers. Apart from other tasks, one important part of his job was to forecast the annual sales and tell the production department how many units of toasters and geysers were likely to be sold in the coming year.

Based on the figures that Amit would give, the production department would request the finance department to release money to buy raw material, packaging material, spare parts and new machinery (if required), etc. Based on the requests from the production
department, the finance department would arrange for money to buy all these things.

Amit was aware that a lot of people and departments depend on the numbers that be would give, and those numbers would directly and clearly affect the company's performance. As a result, he would take a lot of care in analysing past sales of the product, the competitors' strategy, consumer feedback surveys, etc.

One day, Amit was told by the CEO that the company had tied up with a German company to launch a new product in India, that is smart glasses. The CEO asked Amit to do sales forecasting for the same. The CEO clearly told Amit that the German company had agreed for this venture with a lot of difficulty, and they were very particular about numbers. Therefore, Amit must make sure that the forecasts are as close to accurate as possible.

Amit was awestruck! He had always done forecasting based on past data on sales, competitors and consumers. Now, there, no one had seen or heard about something called smart glasses! So how could one forecast the sales of a product that no one knew of and no one had seen or used!

What would you do, if you were in Amit's place? Where will you start? This chapter will introduce you to some interesting and useful starting points for such scenarios.

[^10]Sales forecasting techniques discussed in most marketing books are related to the products which are already existing in the market and for which the past sales data exist. So the advantage of 'hindsight' is available for marketers in those cases.

However, a marketer also needs to do sales forecasting under the 'business analysis' stage of 'new product development', but in this case, the product does not exist and, hence, there is no real data on which the forecasts can be based. So there are a lot of ambiguities to deal with and assumptions to be made regarding costs, sales, etc.

## ATR MODEL

The ATR model is a popular method of sales forecasting for new products.

Where
$\mathrm{A}=$ Awareness
$\mathrm{T}=$ Trial
$\mathrm{R}=$ Repeat (purchase)

The ATR model is based on 'diffusion of innovation' theory and, therefore, it is used to forecast sales on the basis of how many customers would be aware of the new product, how many of those would try and how many of those would repeat buy the product when the product would be launched in the market. The sale can be calculated by using the ATR model by using the following formula

Sales $($ value $)=[($ Market size $) \times(\%$ of customers who would be aware $) \times(\%$ of customers who would try at least once) + (No. of customers who would try at least once) $\times(\%$ of those who would repeat buy) $\times($ No. of repeat purchases in a year) $] \times$ Price per unit after trade margins

A premium healthy biscuit Nutribite is launched in three states of North India. The company of Nutribite brand wants to predict its sales value for the first year. On the basis of (logical) assumptions, the following figures are taken:

Number of health-conscious, upper and upper-middle class people in the three states: $1,000,000$
$\%$ of those who would become aware: $40 \%$
$\%$ of those aware who would try at least once: $25 \%$
$\%$ of those who would try and make repeat purchase: $15 \%$
Post trying, average number of repeat purchases per year: 6
Price per pack after trade margins: ₹12
Thus, with the given information, sales value of Nutribite for the first year can be calculated as follows.

Number of people who would be 'aware'

$$
\begin{aligned}
& =1,000,000 \times 40 \% \\
& =400,000
\end{aligned}
$$

Out of 'aware', number of people who would try at least once

$$
\begin{aligned}
& =400,000 \times 25 \% \\
& =100,000(\text { this is one-time sale })
\end{aligned}
$$

Out of 'those who will try at least once', number of people who would repeat buy

$$
\begin{aligned}
& =100,000 \times 15 \% \\
& =15,000
\end{aligned}
$$

Total number of people who go for repeat purchases

$$
\begin{aligned}
& =15,000 \times 6 \\
& =90,000(\text { this is repeat sale })
\end{aligned}
$$

Total buying

$$
=100,000+90,000
$$

$$
=190,000
$$

Sales value of Nutribite $=190,000 \times 12$

$$
=2,280,000
$$

Notes:

1. Assumption is that everyone is buying one pack at a time.
2. The reliability of this method depends on how reliable the numbers are. Choosing the number of customers who would be aware, try and make repeat purchases is difficult and marketers need to be careful. For example, the number of customers who would try the product would get affected by how many retailers agree to stock the product or competition in the market, etc.
Marketers who are about to launch a new product which is similar to some existing product in the market (like the example above) are in a better position to assess these numbers because they have some use cases to look at.

However, marketers who are about to launch a radically new product or new-to-the-world product face a challenging task because they do not have anything to refer to and, hence, they calculate on the basis of different scenarios which might occur in the market. This analysis is called 'sensitivity analysis'. It is primarily done to assess the impact of certain alterations which can change the assumed numbers used for calculation. A brief description of sensitivity analysis is given below.

## SENSITIVITY ANALYSIS

The technique used to determine how certain factors might impact your assumptions/calculations is called sensitivity analysis or 'what-if' analysis. This works on a simple model which is 'change the assumptions and observe the behaviour'.

In continuation with the previous example of premium healthy biscuit Nutribite, the following assumptions are made:

Number of health-conscious, upper and upper-middle class people in the three states: $1,000,000$
$\%$ of those who would become aware: $40 \%=400,000$
$\%$ of those who would try: $25 \%=100,000$
$\%$ of those who would repeat: $15 \%=15,000$
Average number of repeat purchases per year: 6
Price per pack after trade margins: ₹12
The forecasted sales were ₹ $2,280,000$
Now, suppose marketers assume that there might be two scenarios when Nutribite biscuit will be launched.

Scenario A: The competitor would try to protect its market share and, for that, it would launch a sales promotion scheme to prevent customers from trying and repeat buying the biscuit.

Scenario B: The competitor might reduce its price by ₹ 1 and, hence, the price of the newly launched biscuit would also be reduced accordingly.

So marketers of Nutribite would like to know how the sales value will get affected in the case of the above-mentioned scenarios (A and B).

Under the given conditions, the marketers of Nutribite biscuit may logically assume that the following.

Scenario A: With the impact of sales promotion scheme by the competitor, the number of customers who would try Nutribite biscuit will decrease by 5 per cent and because of that, customers who would have made repeat purchase will also reduce by 5 per cent. Hence, in this scenario, the numbers would change as follows:

Number of health-conscious, upper and upper-middle class people in the three states: $1,000,000$
$\%$ of those who would become aware: $40 \%=400,000$
$\%$ of those who would try: $20 \%=80,000$
$\%$ of those who would repeat: $10 \%=8,000$
Average number of repeat purchases per year: 4
Price per pack after trade margins: ₹12

So the sales value of Nutribite under scenario A would change to:

$$
\begin{aligned}
\text { Sales value } & =80,000+(8,000 \times 4) \times 12 \\
& =₹ 1,344,000
\end{aligned}
$$

Scenario B: The impact of price reduction by the competition would reflect in two ways: (a) The company would need to reduce Nutribite price to match the competitor. So the new price of Nutribite biscuit would be ₹11 instead of ₹12. (b) This reduced price might attract more customers to try and repeat buy the biscuit. So the impact on sales value would be like as follows:

Number of health-conscious, upper and upper-middle class people in the three states: $1,000,000$
$\%$ of those who would become aware: $40 \%=400,000$
$\%$ of those who would try: $28 \%=112,000$ (with lower price more customers would try)
$\%$ of those who would repeat: $17 \%=19,040$ ((with lower price, more customers would repeat buy)
Average number of repeat purchases per year: 4
Price per pack after trade margins: ₹11
So the sales value of Nutribite under scenario B would change to:

$$
\begin{aligned}
\text { Sales value } & =112,000+(19,040 \times 6) \times 11 \\
& =₹ 1,346,240
\end{aligned}
$$

As it can be observed from the above calculations, the sales value decreases under both scenarios, which might affect marketer's calculation of BEP and, hence, marketers need to come up with strategies to counter such scenarios.

Note: Not all scenarios will have a negative impact on the forecasts. There can be many factors which might affect the forecasts in a positive manner. These would then require a
different reaction from the marketer. For example, what if the government reduces the tax on biscuits and marketers pass on this benefit to the customer by launching the biscuit at a lower price. This might lead to a spike in the number of customers who would try and repeat buy the biscuits. In that case, marketers might need a plan for an increase in production capacity, etc.

## CHECK YOUR UNDERSTANDING

Kapsons Electronics Ltd is planning to launch a new TV in the market which is based on a revolutionary technology that clubs virtual reality and artificial intelligence into a TV. The company wants to sell the TV at a price of ₹ 85,000 for 25 -inch and ₹ 95,000 for 32 -inch model. Since there is no similar product in the market, the company has used marketing research to collect the following data:

For 25-inch model: With the marketing budget that it has set for the TV launch, in the first year, the company expects to spread awareness to 20 per cent of the total 50 lakh potential customers about the new TV. In the research that it has done, the company believes that 28 per cent of those who would be aware will make a purchase.

The respondents in the survey have also indicated that 10 per cent of those who would buy the TV might buy two units, as the culture of having multiple TVs in the home is increasing.

For 32-inch model: With the marketing budget that it has set for the TV launch, in the first year, the company expects to spread awareness to 30 per cent of the total 10 lakh potential customers about the new TV. In the research that it has done, the company believes that 20 per cent of those who would be aware will make a purchase.

The respondents in the survey have also indicated that 20 per cent of those who would buy the TV might buy two units, as the culture of having multiple TVs in the home is increasing.

However, the company is also aware that the new budget is coming and the price of consumer electronics might go up, thereby reducing the demand for both the models. For the 32 -inch model, the company expects a dip of 10 per cent in the number of customers who would have made the purchase and 5 per cent dip in those who would have bought two TV sets.

Similarly, the company expects a dip of 15 per cent in the number of those customers who would have bought the 25 -inch model and a dip of 8 per cent in those who would have bought two 25 -inch TV sets.

Referring to the mentioned data, perform the following:

1. Sales forecasting for both TV models in the first year
2. Sensitivity analysis to tell which model would get more affected by the increase in TV prices due to increased taxes

## Experience the Real Life

Check for the new products launched in the market in recent past and talk to a marketer about how they forecast its demand. Discuss this method with them and find its positives and negatives according to the marketer.

## ADDITIONAL INSIGHTS AT A CLICK



1. How to Predict Demand for Your New Product The article provides an insight about why it is trickier to forecast the sales of a new technology-based product. Also, it discusses the relevance and ways to compare different kinds of demand curves in relation to new products.
https://insight.kellogg.northwestern.edu/article/ how-to-predict-demand-for-your-new-product-2

## 2. New Product Sales Forecasting

The article specifically discusses the risks involved with launching a new product and how marketers should resort to year-on-year forecasted sale for a new product. It also highlights the higher level of prediction failure when the product is altogether new. Finally, the article discusses at length various ways which could be adopted for forecasting sales for a new product. https://www.decisionanalyst.com/whitepapers/sales forecasting/
3. How to Forecast Sales of a New Product or Service The article in a very crisp way discusses the approaches that a marketer can adopt while forecasting the sales for a new product. Two suggested approaches include breaking down items into units and informing the industry about the sales forecast.
https://www.allbusiness.com/how-to-forecast-sales-for-a-new-product-or-service-35418-1.html
4. Ecommerce and the Importance of Forecasting This advertorial discusses that in e-commerce industry, the role of forecasting is ever-increasing, with the shift in peaks and much longevity of many seasonal sale peaks. It highlights that previous trends are now not that much reliable for forecasting, and newer dimensions must be looked upon. In general, it enhances the current knowledge base of the reader about the concept of sales forecasting.
https://fashionunited.uk/news/business/ecommerce-and-the-importance-of-forecasting/2021110859096

## 15 Deciding rice tags

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Ajit was working on developing an app which would offer a platform to connect vehicle owners with the local garages. Through this app, the customers would be able to book vehicle repair and service slots from the garages in their locality. While working on the app, he never thought about how he will price this service because he always thought that pricing is simple and straightforward, where you just add your costs and the profit margin, and that would give you the price to be charged.

So Ajit thought that he would require two figures to arrive at the price: (a) costs and (b) profit margin. The second figure, that is, the profit margin, was clear to him. For the first figure (costs), he decided that if he finishes other things first, he will have a clearer idea of the costs and, so, he started working on other things and left this calculation for the end.

When Ajit finally sat down one day to fix the price of his service, he realized his mistake because he was getting several ideas to price his service and all of them look well justified and strong but were in conflict with each other and were leading to very different prices for the same service. The most challenging part was that with each method of pricing, the overall business model, target segment and competition would change, for which Ajit was too late.

Here are some ideas that Ajit was having:
Ajit's first idea of arriving at a price was based on what he always felt-sum up the costs and then
add the profit margin. The issues here were: (a) in an app-based business, the costs were almost negligible, so then how to calculate the price? and (b) the costs would also depend on the number of customers served (the larger the number of customers served, the lesser the costs), and Ajit was not clear on how to get that number because the business hadn't even started and there was no past sales data to predict that.

Ajit's second idea was from a pure marketing perspective, wherein Ajit thought that the price should be what the consumers wanted to pay. Now the question was: How to know that? Different consumers would have different expectations from the service and, hence, would quote a different price. Some consumers might even ask for a free access to the app as some other providers were offering. Moreover, undertaking a research study would cost time and money and would also require certain skills. Where would those come from?

The third idea was to charge around as much as competitors were doing. The basic advantage of this type of pricing was that customers would expect a price based on what they have been paying. Ajit thought, 'One cannot be very different from other existing players!' So then what will happen if the costs in Ajit's case were higher than other players? And since Ajit was a new player in the market, he would have less customers and, of course, his cost of serving those few customers would be high. 'Then I am certainly going to start with losses,' Ajit said to bimself.

If you were Ajit, what would you do? All marketers and entrepreneurs face this challenge: How to price the offering? This chapter will introduce you to some useful starting points.

[^11]Price is the money that a customer must pay to get the product or service from the marketer. Although pricing a product or a service is a high-level decision which is usually taken by a cross-functional team from marketing, finance, etc., it is always good for marketers to have a basic idea on how the pricing is done. Setting up price is always a challenging task, and it increases manifold if we have to fix the price of a service. Despite the challenges, if we understand the methods of setting up a price for a product, it would make our task much easier. There are three basic methods of pricing:

1. Competitor-based pricing
2. Cost-based pricing
3. Value-based pricing

## METHODS OF PRICING

Let's discuss the above-mentioned pricing methods one by one.

## COMPETITOR-BASED PRICING

In competitor-based pricing, the price of the product is set on the basis of what the competitor is charging. This typically happens when (a) there is a strong market leader or (b) the market (i.e., customers) has a strong prevailing reference price and it is too price sensitive to let it change easily.

When there is a strong market leader present in the market, then it sets and dictates the price. Of course, one can charge lower than that price, but charging more than the leader's price is difficult.

Second, if there are a lot of players (your competitors) in the market charging a similar price for a long term, then customers might be so used to of paying that particular price for the product that any change towards the higher side might lead to a negative reaction by the customers. Therefore, the price of
your new product in this case would be around that reference price which is strongly set in the minds of customers.

It is obvious in both the cases mentioned above that there is no point charging a drastically low price because you will lose money on the table. So in competitor-based pricing, there is little scope for calculation because the price is decided based on what others are charging.

## COST-BASED PRICING

It is the most common pricing mechanism which is still extremely popular with firms across the globe. As clear from the name, in this method, the two factors that decide the price are cost of making a product and the desired profit margin that the firm wants to earn.

## METHOD

Step 1: Calculate the costs of production for one unit of product (labour, raw material, etc.).

Step 2: Add the profit margin that the company wants to earn.
Step 3: Add the margin that the channel members would earn (dealer, retailer, etc.).

The result of the above steps would be the price to consumer.
Note: Only variable costs are taken into consideration in this calculation. Variable costs are those which change with production, that is, they go up with increase in production and decrease when the production is reduced. An example would be that of raw material. (Variable costs are unlike the fixed costs which are stable, like cost of building).

> Example: Zenith Computers Ltd is in the personal computer system manufacturing business since 2011. Recently, they are planning to launch their upgraded personal computer system for school-going children.

Mr Raghav, the product head, has been assigned the task of deciding the price of the computer system. On discussion with the cross-functional team of experts, Mr Raghav comes to know that cost inputs for manufacturing one system are: raw material (₹30,000), labour (₹1,000) and packaging (₹1,000). The company desires to earn a 20 per cent profit margin and offers 20 per cent and 10 per cent as retailer and dealer margin, respectively. How much price should Mr Raghav fix for the personal computer system?

As per the cost-based pricing method, the following steps are adopted to calculate the final price of the personal computer system.

Step 1: Calculating the costs to make one computer

1. Raw material: ₹ 30,000
2. Labour: ₹ 1,000
3. Packaging: $₹ 1,000$

Total costs: $\mathrm{a}+\mathrm{b}+\mathrm{c}=₹ 32,000$
Step 2: Profit margin required: $20 \%$
Calculating $20 \%$ of the total cost as the profit margin

$$
\begin{aligned}
& =32,000 \times 20 / 100 \\
& =₹ 6,400
\end{aligned}
$$

On adding profit margin to the total cost

$$
\begin{aligned}
& =32,000+6,400 \\
& =₹ 38,400
\end{aligned}
$$

Step 3: Calculating channel partner's margins and adding to get the final price

1. Calculating and adding dealer margin of $10 \%$

$$
\begin{aligned}
& =38,400 \times 10 \% \\
& =₹ 3,840 \text { (add this amount) } \\
& =38,400+3,840 \\
& =₹ 42,240
\end{aligned}
$$

2. Calculating and adding retailer margin of $20 \%$

$$
\begin{aligned}
& =42,240 \times 20 \% \\
& =₹ 8,448 \text { (add this amount) } \\
& =42,240+8,448 \\
& =₹ 50,688
\end{aligned}
$$

So Mr Raghav of Zenith Computers Ltd must fix the final price as ₹50,688 for its personal computer system. It is the price a consumer has to pay for the computer system.

While cost-plus pricing is extremely popular, it has several disadvantages. The most important one is that it ignores what the customers want to pay and what the competition is offering to the customers. The second big problem with cost-plus pricing is that most of the time, it is not possible to determine the unit's production cost unless you know the price. This happens because the production cost per unit varies with the number of units produced because of economies of scale.

Let's try to understand the issue with the help of an example.

Prasad, a potter, earns his living by creating pots for household consumption. Now consider the following information about Prasad's work:

| Fixed costs | $=₹ 100$ |
| :--- | :--- |
| Units produced | $=10$ |
| Cost of production per unit | $=₹ 100 / 10$ |
|  | $=₹ 10$ |

However, if Prasad produces 20 units instead of 10, then Cost of production per unit $=₹ 100 / 20$
$=₹ 5$
Whether Prasad will produce 10 units or 20 units also depend on its price. So without price, it is not possible to calculate the cost of production per unit.

To solve this problem of cost-plus pricing, 'customer-driven pricing' or 'value-based pricing' is done. However, please note that there are several advantages of cost-plus pricing as well. Ease of calculation is just one of them.

## VALUE-BASED PRICING/CUSTOMER-BASED PRICING

Value-based pricing, opposite to cost-plus pricing, starts with customers, competition and company. It follows the classic marketing sequence, that is, first the company chooses its target segment and then it analyses the competitors and decides what position it would take. According to that position, pricing is set and a reverse calculation is then done to calculate how much should be the cost of producing each unit.

In other words, while the cost-plus pricing starts with the cost of production and with the price that the consumer would pay, value-based pricing goes in the reverse order.

## METHOD

Step 1: Calculate what the target segment wants to pay.
Step 2: Deduct the margin that the channel members would earn (dealer, retailer, etc.).

Step 3: Deduct company's margin.
The result would be the amount in which the unit has to be produced (cost of production).

Carrying on with the previous example, suppose the target segment of Zenith Computers Ltd wants to pay ₹ 25,000 for a computer, and the company wants to earn 20 per cent profit margin. The competition stays with the policy to pay 10 per cent to the dealers and 20 per cent to the retailers as their respective margins. What should be the amount within which Zenith Computers Ltd has to manufacture a personal computer system to meet the expectations of its target segment?

In such a case, the pricing of the computer would be done as follows.

Step 1: Target segment wants to pay $=₹ 25,000$
Step 2: Deduct channel partner's margins

1. Calculating and deducting dealer margin of $10 \%$

$$
\begin{aligned}
& =25,000 \times 10 \% \\
& =₹ 2,500 \text { (deduct this amount) } \\
& =25,000-2,500 \\
& =₹ 22,500
\end{aligned}
$$

2. Calculating and deducting retailer margin of $20 \%$

$$
\begin{aligned}
& =22,500 \times 20 \% \\
& =₹ 4,500 \text { (deduct this amount) } \\
& =22,500-4,500 \\
& =₹ 18,000
\end{aligned}
$$

Step 3: Calculating and deducting company's 20\% margin

$$
\begin{aligned}
& =18,000-20 \% \text { of } 18,000 \\
& =18,000-3,600 \\
& =₹ 14,400
\end{aligned}
$$

So Zenith Computers Ltd will have to manufacture each unit of its personal computer systems at or below ₹ 14,400 to meet the target segment price expectations.

By referring to the example, it can be observed that the company, channel partners and customers, all are happy with this price setting. Of course, this method has its own limitations, but it is still better than cost-plus pricing in terms of achieving the objectives of the company.

## CHECK YOUR UNDERSTANDING

1. Edubag Ltd, a backpack manufacturing company which targets college and school students, realizes that the school students are less price sensitive (as their parents pay for the bags) in comparison to the college students. As per the market research, school students are willing to pay $₹ 1,500$ for their bag, while college students wish to pay ₹ 850 only.

The manufacturing of both types of bags is also different, as school bags are required to be bigger and stronger in comparison to college bags. The break-up of the cost of both types of bags is as follows.

|  | School Bag | College Bag |
| :--- | :---: | :---: |
| Raw material (in ₹) | 600 | 350 |
| Labour (in ₹) | 350 | 250 |
| Designer (in ₹) | 300 | 150 |

The company wants to earn 20 per cent profit on both is: distributor 7 per cent, dealer 10 per cent and retailer 15 per cent.

Find out the difference between the prices of each type of bags, if the company follows
a. Cost-plus pricing
b. Value-based pricing
2. Compare the pros and cons of cost-plus pricing and value-based pricing, considering the above scenario.

## Experience the Real Life

Choose any FMCG product and assume that you are a manufacturer of that product. How will you know how much the target customers would be willing to pay for your product? Give a step-by-step process that you will follow to figure that out. Use hypothetical data, if required.

## ADDITIONAL INSIGHTS AT A CLICK

1. The 5 Most Common Pricing Strategies

The article is an value addition to existing knowledge of reader. It emphasizes on making a sincere and in-depth effort while fixing the prices. It article introduces five pricing strategies that can be adopted by a marketer. Also, relevance and application of value-based pricing are discussed in this interesting article.
https://www.bdc.ca/en/articles-tools/marketing-sales-export/marketing/pricing-5-common-strategies
2. Understanding the Basic Concepts of Pricing This fundamental article on pricing introduces the reader to all the basic pricing strategies prevalent in the market. By understanding the purpose of each strategy, a marketer can redefine its pricing strategy for future success.
https://www.yourarticlelibrary.com/marketing/ pricing/pricing-understanding-the-basic-concepts-of-pricing-explained/2988716

## 16 Hand in slove: :lasticityy and picing

Shekhar is a shrewd businessman and runs a chain of departmental stores named Fresh-n-Fast. Fresh-n-Fast has 13 stores across the metropolitan city of Bengaluru. Each store carries approximately 1,200,000 product items or SKUs, and these products are not same at all stores because the products required in posh localities are different than the non-posh localities. So all in all, there is a big range of products that Shekhar's company deals in.

In addition, Fresh-n-Fast also has a website and an app where all the products are listed and customers can buy them from either of these. The products purchased through the website or the app are then delivered to the customers from the offline store.

Shekhar realized it pretty soon that in retail, pricing is a critical factor because essentially the same products are sold by all retail stores and, hence, price becomes a critical pull factor for the customers. Prices of the products need to be adjusted according to seasons, occasions, demand fluctuations, etc. However, retailers always face the dilemma that how much adjustment should be done in the price. This is a tricky question because if the prices are reduced more than what the customer is willing to pay, then you are losing money on the table and if the prices are increased beyond what the customers are willing to pay, then the sales would drop drastically.

So Shekhar always looked for opportunities to adjust the prices to take the advantage of seasons, occasions, etc. For example, being in this business, he could understand that the prices of the seasonal products are to be increased just before the season arrives and should be continued to sell at higher prices till the season is about to end and, then, the prices are to be reduced so that the inventory of the seasonal products is cleared before the season ends. Similarly, Shekhar could guess that government employees get a salary bike at two points in a year, so be could increase the prices of some items around those two points. Also, Shekhar knew that since customers cannot remember the prices of all products sold at a retail store, they make the image of the retail store by the prices of certain products, like in the case of grocery, the customers would 'label' a store as 'good value' or 'high priced' based on certain items, such as oil, ghee and sugar. So with experience, Shekhar understood that he needed to reduce the prices of such 'lamp-post items' to create an image in customers' minds that Fresh-n-Fast is a store that helps them in saving money.

However, the same question (asked above) bothered him in the beginning of his career: How much the price should increase/decrease as per the context, so that maximum sales revenue can be generated?

How would you answer this question for Shekhar? What method/approach will you suggest him to use so that he can know how much the price can be tweaked?

The answer is hidden in price elasticity and income elasticity.

This chapter explains how to apply these concepts to reach at the correct price which will maximize the sales. The applicability of these concepts goes well beyond retail and is valid in all industries. These
concepts are particularly important for marketers because they are responsible for finalizing the price changes of their products.

You never know, your boss might call you now and ask: How much price change would you recommend for the coming season? Can you see yourself sitting in front of your boss and trying to figure out the answer? If yes, go on and read the chapter carefully! It will help!


It is a well-known fact that for most products and services, a change in price would lead to change in its demand. That's basic economics. Since marketers have to change the price of their products (because of various reasons), it is only natural for them to think that if we change the price, how the demand would change as a response. In order to do that, marketers calculate the price elasticity of their product or service.

## PRICE ELASTICITY

It is a measure of 'market responsiveness', that is, it reflects how the market would respond in terms of quantity demanded if there is a change in its price. In simple words, it is a measure of how much demand would change, if the price of the product or service is changed. In case the demand of the product or service remains unaffected in spite of the change in its price, that is, the market does not respond to the price change, we would say that the demand is inelastic. However, if the demand fluctuates due to the change in price, we would say that the product's demand is elastic.

There are two ways to calculate price elasticity, and both the ways yield same results. The formulae for calculating price elasticity are as follows.

$$
\text { Price elasticity }=\frac{\% \text { change in quantity demanded }}{\% \text { change in price }}
$$

$$
\text { Price elasticity }=\frac{\frac{\mathrm{q} 2-\mathrm{q} 1}{\mathrm{q} 1}}{\frac{\mathrm{p} 2-\mathrm{p} 1}{\mathrm{p} 1}}
$$

Where
$\mathrm{q} 1=$ Original quantity demanded in the market before the price change
$\mathrm{q} 2=$ Changed quantity demanded in the market after the price change
$\mathrm{p} 1=$ Original price (before the change)
$\mathrm{p} 2=$ New price (after the change)

## INTERPRETATION OF THE FORMULA AND ITS RESULTS

1. Elasticity is the ratio of 'the percentage change in quantity demanded' to 'the percentage change in its price'. If an increase in price leads to decrease in quantity demanded, this ratio will be negative and vice versa.
2. Demand of the product is considered inelastic when the result of the above formula is greater than -1.0 (the minus sign is used here because of the inverse relationship between price and demand, that is, if the price goes up, [usually] the demand goes down). Inelastic demand means that 1 per cent change in price will lead to smaller change in quantity demanded by the market/consumers.
3. Similarly, the demand of a product is considered elastic when the result of the above formula is less than -1.0 . Elastic demand means that for 1 per cent change in
price, the change in quantity demanded by the market/ consumers would be larger.
Surya Electricals Ltd is a well-known name in home appliance industry. One of its popular products is hand blender. The demand pattern of hand blender is shown in Table 16.1. What will be the price elasticity for every price change?
In this case, using both the formulae mentioned under 'price elasticity' concept:

Price elasticity for the first price change using first formula

$$
\begin{aligned}
& =\frac{\% \text { change in quantity demanded }}{\% \text { change in price }} \\
& =\frac{(8,000-10,000) / 10,000 \times 100}{900-800 / 800 \times 100} \\
& =\frac{-20}{12.5}=-1.6
\end{aligned}
$$

Also, price elasticity for the first price change using the second formula

$$
\begin{aligned}
& =\frac{\frac{8,000-10,000}{10,000}}{\frac{900-800}{800}} \\
& =\frac{-0.2}{0.125}=-1.6
\end{aligned}
$$

Table 16.1
Demand Pattern of Hand Blender by Surya Electricals Ltd

| Price of Product A? <br> (in ₹) | Quantity Demanded <br> by the Market <br> (in ’000 Units) |
| :---: | :---: |
| 800 | 10 |
| 900 | 8 |
| 1,000 | 6 |

Similarly, price elasticity for the second price change using first formula

$$
\begin{aligned}
& =\frac{6,000-10,000 / 10,000 \times 100}{1,000-800 / 800 \times 100} \\
& =\frac{-40}{25}=-1.6
\end{aligned}
$$

Also, price elasticity for the second price change using second formula

$$
\begin{aligned}
= & \frac{\frac{6,000-10,000}{10,000}}{\frac{1,000-800}{800}} \\
= & \frac{-0.4}{0.125}=-1.6
\end{aligned}
$$

So the interpretation of the above value is that when price is increased by ₹ 100 , the market demand for hand blender of Surya Electricals Ltd reduced by 2,000 units. So the price elasticity is -1.6 .

Conclusion: For every 1 per cent increase in price, the demand will fall by 1.6 per cent. Here, the price elasticity of -1.6 means that the quantity demanded will be approximately 1.6 times less for the 1 per cent percentage increase in price of the product/service. As mentioned above (in interpretation), a positive number would indicate that the quantity demanded would be that times higher for the percentage change in decrease in price of the product/service. And if this number would have been 1 , that would have meant that the quantity demanded would remain the same and there would be no response of the market for the price increase or decrease.

Now marketers can take the decision about changing the price on the basis of prediction about how the market is going to react and whether it is acceptable or not.

## INCOME ELASTICITY

There are many products which we buy or plan to buy when our income will go up. Similarly, there are products which we buy less or stop buying when our income goes down. Marketers are interested in knowing how we (customers) will react in terms of buying their products, when our income changes, so that they (marketers) can change the price accordingly.

Similar to the concept of price elasticity that measures the change in quantity demanded by the customers when the price of the product changes, the concept of income elasticity measures the change in quantity demanded by the customers when their income changes.

The formulae to measure the income elasticity also look similar to those of price elasticity.

$$
\begin{aligned}
& \text { Income elasticity }=\frac{\% \text { change in quantity demanded }}{\% \text { change in income }} \\
& \text { Income elasticity }=\frac{\frac{\mathrm{q} 2-\mathrm{q} 1}{\mathrm{q} 1}}{\frac{\mathrm{i} 2-\mathrm{i} 1}{\mathrm{i} 1}} \\
& \text { Where } \\
& \text { q1 }=\text { Original quantity demanded in the market before } \\
& \text { the price change } \\
& \text { q2 }=\text { Changed quantity demanded in the market after } \\
& \text { the price change } \\
& \text { i1 }=\text { Initial income (before the change) } \\
& \text { i2 }=\text { Final income (after the change) }
\end{aligned}
$$

Note: The difference between income elasticity and price elasticity is their relationship with price change. Usually, when the price goes up, the quantity demanded goes down and when the income
goes up, the quantity demanded also goes up. Vice versa is also true in both the cases. Of course, there are certain exceptional products which do not follow this rule. Be careful about those products. After the announcement of new Pay Commission, the income of a D2 category of a Central government employee increased by 10 per cent. As the income went up, they started buying more of organic cereal, and the demand went up from 8 kg to 10 kg per quarter. In this case, what will be the income elasticity?

Income elasticity is calculated and checked through both the formulae. So income elasticity in this case is

$$
\begin{aligned}
& =\frac{10-8 / 8 \times 100}{10} \\
& =\frac{25}{10}=2.5
\end{aligned}
$$

Also,

$$
\begin{aligned}
& =\frac{\frac{10-8}{8}}{\frac{1}{10}} \\
& =\frac{0.25}{0.1}=2.5
\end{aligned}
$$

So for every 10 per cent increase in income, the demand would grow by 2.5 per cent, assuming that the price remains unchanged.

Interpretation: When marketers are aware that the per capita income is going up or down, they can use this to forecast the impact on the demand of their product. For example, in case the income goes up and marketers know that the supply of the product is going to be fixed, that is, cannot be increased, they can consider increasing the price of the product.

## CHECK YOUR UNDERSTANDING

1. Calculate the price elasticity of demand for each of the following and give your interpretation of the answer. a. The price of a smartphone is currently ₹20,000, and the quantity demanded is 40,000 . Next year, the price falls to $₹ 18,000$, and the quantity demanded rises to 60,000.
b. The price of pens today is ₹ 10 , and the quantity demanded is 1 lakh. Next year, the price rises to $₹ 12$, and the quantity demanded falls to 950,000 .
c. The price of a daily newspaper today is ₹2, and the quantity demanded is 20 lakh. Next year, the price falls by $₹ 0.50$, and the quantity demanded rises to 20.1 lakh.
2. Astrix Ltd, an electronics manufacturer and retailer, sells laptops, PCs and calculators. The current prices are ₹95,500 for one unit of laptop; ₹38,800 for one unit of PC and ₹ 400 for one unit of calculator. This year, the firm sold 10,000 laptops, 20,000 PCs and 100,000 calculators. The income of the target segment has increased by 10 per cent, and the company has decided to increase the prices of all three products by 10 per cent as well.

Market research has suggested that the income elasticity of demand for laptops, PCs and calculators is $1.5,2.5$ and 0.5 , respectively. Answer the following questions:
a. What will be the result of this price increase on the company's revenues?
b. If the price elasticity of laptops, PCs and calculators would have been $-1.5,-2.5$ and -0.5 , respectively, then would it be better for the company if the prices would have been reduced by 10 per cent instead of increasing the price?
Support your arguments with calculations.

## Experience the Real Life

Check the consumption pattern of certain things at your house. Observe and calculate how the consumption increases and decreases with change in price and change in income. If the same change happens in 1 million families simultaneously, how will it affect the demand of the product?

## ADDITIONAL INSIGHTS AT A CLICK

1. The Oil Price Crash in One Word: 'Inelasticity' This wonderful article beautifully explains how the concept of elasticity is applied in a real-life market situation. Through this article, the understanding of the concept under discussion will be reinforced. https://www.bloomberg.com/news/articles/2020-04-20/ the-oil-price-crash-in-one-word-inelasticity
2. Pandemic Shines Spotlight on Price Elasticity It is an interesting piece of information about how elastic prices are to dramatic shifts in retail sales and other high-profile categories of economic activity (e.g., in the travel sector) during pandemic times. https://canada.constructconnect.com/joc/news/ economic/2020/08/pandemic-shines-spotlight-on-price-elasticity

## 17 <br> pricing wateriall


When Raj started his career in marketing in 1981, things were simple. He joined a TV manufacturing company as sales executive. At that time, the company was offering three types of TV sets. Now, in 2022, he is the chief marketing officer at the same company, and the company is now offering the complete range of consumer electronics, including TVs, washing machines, refrigerators, microwave ovens, irons, mobile phones and Bluetooth speakers, and the complete range of company's products now includes 348 different types of products.

There are other things also that have changed. For example, the company now has pan India presence, which was earlier limited to Northwest India when Raj joined. In addition, in 1981, the company was selling its TVs only through the conventional channel, consisting of state-wise distributor $>$ city-wise dealers $>$ retailers > consumers. However, now the company is selling its products through a plethora of channels such as company's own showroom chain, company's website, various e-retailers, multi-brand showrooms, franchisee stores and, of course, the conventional channel also continues! With so many products being sold at so many channels to sell and under different terms and conditions, it was difficult for Raj and his team to gauge and control the prices of their products.

For example, big e-retailers buy products at a large volume, along with some freedom to set their own price
and share the margin based on the prices that they sell the products at. In contrast, the conventional channel, the distributors, dealers and retailers, all are controlled by the company to keep the prices as decided by the company. Finally, there are other channels which would fall somewhere between these two extremes. Raj's company gets different amounts from different channels because each channel offers different discounts to their customers and, based on the final price that they receive from their customers, they pay Raj's company.

As a result, the prices, discounts, delivery costs, installation schedules, and terms and conditions of aftersales service would vary for the market and also for Raj. This variation has emerged as a major challenge for Raj, as he is not clear about which channel is fetching the highest price for his products or, in other words, which channel is bringing the most profit to his company.

If you would have been in Raj's position, how would you deal with this issue? With ever-increasing channels and they getting/asking for more freedom to set the prices, the revenue coming from each channel varies, and this issue has become a major problem for many marketers like Raj.

This chapter explains the technique that can offer a new perspective to deal with this issue.

To deal with the issue explained in the case in point above, a popular technique is pricing waterfall. Pricing waterfall explains or measures the difference in the listed maximum retail price (MRP) and the final price paid by the customer. It traces all the spots in the distribution channel where a price change happens.

Since marketers often sell their products through various channels, it is very much possible that different channels quote a different price of the product to the end customer. So pricing waterfall is a useful tool for marketers to see that how much each channel is charging for the product, through which channel the consumers are paying the most, etc.

With pricing waterfall, marketers can decide which channel is fetching the highest price for the product and from which channel the consumers need to be moved. This can be understood from a simple example. Suppose you want to buy a mobile phone of brand X and the same is available at

1. The website of the company
2. A multi-brand outlet like Reliance Digital
3. The franchisee-owned exclusive showroom of the company
4. An online retail store like Amazon or Flipkart There is a possibility that all these avenues are charging a different price for the same mobile phone.

## HOW CAN DIFFERENT CHANNELS QUOTE DIFFERENT PRICES TO THE CUSTOMER?

Based on the dealing with each channel, the company gives different margins and also runs different promotion schemes for each channel option. So since each channel gets the product at a different price and margin, they also charge the customers differently. Also, different channels get different benefits from the company. So what they pass on to the customers also varies. Some pass the benefits received as it is, while others pass on a little less and so on. Finally, since the cost structure of these channels varies, they quote different prices to the customers.

JK Helen Kurtis Ltd is a well-established name in the deodorant market. The most popular deodorant brand of the
company is Park Heaven. The company tags Park Heaven with an MRP of ₹ 100 . The company uses two channel options, namely A and B , to reach out and sell its deodorant to the final customer, the details of which are as follows:

Price the company gets from channel A
$=$ MRP ₹ 100 - Dealer discount ( $10 \%$ ) - Retailer discount (20\%) - Display promotion to retailer (10\%)

Price the company gets from channel B
$=$ MRP ₹ 100 - Dealer discount ( $8 \%$ ) - Retailer discount ( $12 \%$ ) - Display charges ( $10 \%$ ) - Annual rebate (5\%) Cooperative advertising (3\%)

The operations and distribution planning team at JK Helen Kurtis Ltd wants to know the following:

1. What is the final price that the company is getting from each channel?
2. Which is the more profitable channel for the company? To get answers to the above questions, we have to first determine the price the company is getting from each distribution channel and then compare the two prices to reach out to a conclusion. So,

Price the company gets through channel A

$$
\begin{aligned}
& =[\{(100-10 \%)-20 \%\}-10 \%] \\
& =₹ 64.80
\end{aligned}
$$

Price the company gets through channel B

$$
=[\{(((100-8 \%)-12 \%)-10 \%)-5 \%\}-3 \%]
$$

$$
=₹ 69.23
$$

So although from the face of it it appears that channel A would be more profitable for the company, in reality, it's channel B which is fetching a better price to the company.

Note: It should be noted that the above example shows the price per unit of the product that the company is getting from each channel. From that perspective, channel B seems to be more profitable. However, what if channel B sells 100 units, whereas channel A sells only 10 units of company's products? In that case, marketers should not only calculate pricing waterfall for per unit price but should also multiply the per unit price with the overall proportion of sales (units) happening through that channel.

## CHECK YOUR UNDERSTANDING

1. Easylife Ltd is a well-known home appliances company. It sells a range of products, out of which toaster is the most popular. The MRP of the toaster is $₹ 1,500$. The company decides to sell the product through three different distribution channels whose details are as follows:

- The first channel is the company's own showroom which takes the product from the company's warehouse and sells it. The margin for the warehouse manager is 2 per cent of the product's MRP. At the store, a customer gets an average discount of 4 per cent on MRP.
- The second channel is a chain of multi-brand retail stores. The company directly supplies the products from the factory to this retail chain. The chain's margin is 5 per cent.
- The third channel is an online retail store which charges 0.5 per cent of product's price as listing fees and 4 per cent on each sale that happens through its website.
Find out:

1. What is the final price that Easylife Ltd is getting from each channel?
2. Which is the most profitable channel for Easylife Ltd?
3. Rockstrong Ltd sells its high-end bicycle Neon with an MRP of ₹ 20,000 . It sells through only one channel in the state of Maharashtra, whose details are as follows:

The distribution channel of Rockstrong Ltd is: Company $\rightarrow$ Distributor of state $\rightarrow 10$ dealers in each of the 5 cities $\rightarrow 20,000$ retailers in the state equally divided under the dealers $\rightarrow$ End consumers.

The total sale through the channel is 100,000 units. You can assume that the total sale is equally divided among the retailers: distributor (margin 10\% of product's MRP), dealer (margin 15\% of product's MRP) and retailer (margin 20\% of product's MRP). In addition, the company gives 2 per cent of product's MRP as display incentives to its retailers. The company also shares the advertising done by dealers in their respective cities, which comes to around 4 per cent of the product's MRP.

However, the company has analysed that only 25 per cent retailers take the display incentives and only 4 dealers take the cooperative advertising expense reimbursement. Find out the final price that the company is getting from the channel.

> Experience the Real Life
> Choose a product that is sold through a multi-brand store as well as exclusive company store (it can be shoes or mobile phones or TVs). Visit both the stores and talk to the store managers about the total sales of company's products and margins they get and they offer to the consumer. Make a pricing waterfall for both the stores and assess which is more profitable for the company.

## ADDITIONAL INSIGHTS AT A CLICK

1. Use the Pricing Waterfall to Drive Profits The article states that a small increase in price can result in manifold increase in the profits for a company. So it is important to get hold over the pricing, and pricing waterfall is the appropriate tool for it. The article also provides few example through which the concept of pricing waterfall is understood in real-life business situations.
https://www.pricingsolutions.com/pricing-blog/ use-the-pricing-waterfall-to-drive-profits/
2. An Expert's Guide to Price Waterfalls and Why They Matter
It is a seminal work to read to get a grip on the concept of pricing waterfall. The article develops the understanding of the concept from fundamental to advance level. It also gives an overview about how the pricing waterfall concept is used in B 2 B scenarios. https://revenueml.com/2020/04/price-waterfalls-2

## 18 looking into channel partner's rol


'We cannot work with you! This financial year would be the last year of our association,' the head of the dealers' association told Arpit before hanging up the phone.

Arpit is the chief marketing officer of Stylo, a new luggage company based out of Delhi. Stylo's founders were IIT-IIM guys who studied the dynamics of the luggage industry and then started the company with unique products. Stylo started offering unique colours and designs in each of its product such as backpacks, office bags, suitcases and duffle bags. They also launched very new materials with which the luggage was made. Stylo's USP was light-weight luggage with unique designs. The customers liked the designs but the take-off from the shelf was good but not great because the customers were not clear about the durability and reliability of the new brand.

Stylo's dealer network was present all across the country and supported the sales. There were 1,890 dealers catering to approximately 35,000 retail stores. When Stylo was launched, being a new brand, it used the push strategy to motivate dealers to join the company and then push its products. Stylo offered bigher margins than the competitors and ran aggressive trade promotion schemes. Arpit was in-charge of marketing initiatives, and he knew that this model was not sustainable for long time. So once Stylo's management realized that the brand had a standing in the market and, hence, it could sell itself
so the dealer's margins will have to be optimized, Stylo restructured the dealers' margin and now the margin stood at 2.85 per cent, which was earlier 4.25 per cent, while the industry average was 3.25 per cent. The dealers were infuriated and protested. After a lot of discussion, the dealers' association called Arpit and communicated their decision that they would not be able to work with Stylo.

Even the sales force of Stylo was not happy, as they knew that they won't be able to make new dealers, which was one of the KPIs, neither would they be able to sell in the market without existing dealers. So they were unhappy, as now they would not be able to meet the targets and, as a result, they won't be able to earn incentives.

On the other hand, Arpit and the founders knew very well that even the new margin that Stylo was offering to the dealers was still better than many competitors with which the dealers were working, and it offered higher returns than the industry average as well. So, in their minds, they were very clear that there was no question of rolling back the decision to reduce the margin. However, they agreed that they made a mistake of not explaining the calculations and rationale of the new margins (that how it is still better than most competitors and will offer better earnings to the dealers than the industry average) to the sales team and the dealers.

So that is where the problem lies! Since the sales team and the dealers do not understand the calculations and logic behind the new margin, both of them are unhappy, whereas the company is convinced that the new margin only looks lower and, calculated properly, it still offers a great deal to the dealers.

In most cases, the sales force is ill-equipped to do these calculations. They just work as courier


#### Abstract

service and only communicate the margin and trade promotion schemes as they are told by their seniors. However, there is a difference between margin and dealers' earnings, and this is very important to know because then you can convince the dealers that although the margin 'appears' to be lower, it is still better than most other players and the dealers would earn more than the industry average.

This chapter will introduce you to some nuances of calculating how much the intermediaries are earning when they work with you versus the competitors.




Dealers and distributors invest a lot in a company's business. They buy or rent the warehouses, keep inventory of company's stock, take the stock to the retailers and sell on credit; they also collect damaged or expired goods from retailers and later settle the dues with the company. All in all, they have a lot of skin in the game and, obviously, they would like to earn profit and returns on their investment, and rightly so. This is where these concepts-profit margin and dealer or distributor's ROI-come into the picture.

## ROI VS PROFIT MARGIN

It is important to note that ROI is not the same as profit margin. Although both these terms are important metrics, they answer different questions. For example, a dealer is planning to make new investment in their business by offering more credit; in such a case, ROI is important because it will tell you how much additional money the dealer will make if they make that additional investment. On the contrary, if they are selling four different products and want to drop one now, here the
profit margin on each product is important to know to decide which product to drop. In other words, profit margin is just the profit that you get on sale of a product, whereas ROI is the return on the whole investment that the dealer or distributor has put in the business.

So it might be possible that your company offers lesser margins to dealers or distributors but offers higher ROI than competitors. So, in that case, it would be better for you to take the discussion on ROI where you can prove that doing business with you is a good idea.

Significance: If you are a marketing student, chances are that you would at least start with a sales role, which is most likely to take you to dealers and/or distributors who would ask you: What is the profit margin? Or how much are we earning by investing in your business or how much will we be earning if we will invest in your business? To answer this most frequently asked question, you need to know how to calculate both these things.

The formula to calculate profit margin is as follows.

Profit margin $=$ Profit/Revenue $\times 100$

| Method | Example |
| :--- | :--- |
| Profit margin $=$ Profit/Revenue $\times$ | Sales price: ₹10 per unit |
| 100 | Sales volume: 100 units |
|  | Revenue: ₹ $10 \times 100$ units $=$ |
| Where | $₹ 1,000$ |
| Profit $=$ Revenue - Costs Revenue | Cost: ₹3 per unit |
| - Sales price $\times$ No. of units sold | Total cost: ₹ $3 \times 100=₹ 300$ <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Profit $=₹ 1,000-₹ 300=₹ 700$ <br> $100=70 \%$ |

The formula to calculate dealer or distributor's ROI is as follows.

> Dealer or distributor ROI
> $=$ Net profit/Net investment $\times$ Number of rotations

Net profit, net investment and number of rotations are calculated as follows.

## CALCULATING NET PROFIT

|  | Method | Example |
| :---: | :---: | :---: |
|  | Sales for the year $\times \text { Margin }$ | $\begin{array}{r} ₹ 5,000,000 \\ \times 3 \% \end{array}$ |
|  | Gross profit <br> - Expenses <br> (Salesperson salary + Petrol + Electricity + Depreciation on vehicle, computers, etc. + Rent + Interest on loan, etc.) <br> Net profit | $\begin{array}{r} \overline{150,000} \\ -120,000 \\ \overline{30,000}+ \end{array}$ |

## CALCULATING INVESTMENT

There are two ways in which investment can be calculated. First is considering 'all' the investment made in the business, including the capital investments, and second is looking at investment as 'investment in working capital' only. Generally, dealers and distributors are concerned about the 'investment in working capital' because often the supply of cash is limited in business and, thus, its availability becomes critical. Moreover, when the business grows, dealers and distributors require more inventory and have to give more credit in the market, and for both of these, they need more working capital. So dealers
and distributors are interested in calculating ROI on working capital because they aim to maximize their profits by reducing investment requirement in working capital.

Based on this, we are considering investment as investment in working capital only.

| Method |
| :--- |
| Investment $=$ Average investment in stock (AIS) + Average market credit <br> (AMC) + Average claims outstanding (ACO) |

Where
AIS $=($ Value of stock or inventory at the beginning of the period + Value of stock or inventory at the end of the period)/2

Note: Value of stock or inventory $=$ Price of goods bought in a period - Discounts received on it + Tax and freight paid on it.

Following are the details of value of stock of Rajshree Fabrics Ltd for the period 1 April 2019 to 31 March 2021. Calculate average annual inventory held by the company for the given period.

Period: 1 April 2019 to 31 March 2020
Value of stock or inventory at the beginning (1 April 2019):
₹1 crore
Value of stock or inventory at the end (31 March 2020):
₹3 crore
Average annual inventory held by Rajshree Fabrics Ltd during 2019-2020 $=(1$ crore +3 crore $) / 2=₹ 2$ crore $\mathrm{AMC}=$ Total credit sales at the start of the period + Total credit sales at the end of the period/2
$\mathrm{ACO}=\mathrm{As}$ a thumb rule, it is taken as 5 per cent of monthly revenue, but you can obviously measure it accurately based on the actual claims pending for that period.

## CALCULATING ROTATION

| Method | Example |
| :--- | :--- |
| Rotation = Value of good <br> purchased in a period/Value of <br> average inventory held during <br> that period | Inventory or stock brought during <br> the period = ₹10 crore |
|  | Average annual inventory or stock <br> held = ₹2 crore <br> Rotation $=10 / 2=5$ <br>  <br>  <br>  <br>  <br>  <br> Which means 5 rotations of <br> inventory or stock happened in year <br> $2019-2020$ |

## Notes:

1. If the dealer has taken loan and added some of their own money to start the business, then only their share of money is considered for 'investment' (Not the loan that they have taken. The loan part is considered/ adjusted under 'interest on loan', which is considered as 'expense').
2. If the dealer has taken overdraft facility from the bank, then they pay for the stock through that overdraft facility. In that case, the 'interest paid on the overdraft facility' should be considered as 'expenses', and the investment should be reduced by the overdraft amount.
Quanto Traders have a dealership of four herbal beauty products selling companies, including Rose Herbal Ltd. Mr Abhishek, the sales manager of Rose Herbal Ltd, wants to calculate:
a. Rose Herbal Ltd Share of revenue in Quanto Traders business
b. Rose Herbal Ltd Share of costs in Quanto Traders business
c. Returns to Quanto Traders for doing business with Rose Herbal Ltd

The above queries of Mr Abhishek of Rose Herbal Ltd are solved as follows:
a. Share of Rose Herbal Ltd in Quanto Traders revenue or turnover: If the total revenue/turnover of the dealer is $₹ 1,000,000$ and Rose Herbal Ltd sales share in that is $₹ 200,000$, then the contribution of Rose Herbal Ltd to the Quanto Traders turnover is $200,000 / 1,000,000$ $\times 100=20 \%$.
b. Share of Rose Herbal Ltd in Quanto Traders costs: First, divide all the costs into direct and indirect. Direct costs are those which the dealer is bearing just for your company, for example, Quanto Traders has hired a salesperson for Rose Herbal Ltd only who is paid $₹ 6,000$ per month, so this will be a direct cost. Indirect costs are those which are shared with other companies, such as rent of warehouse where the stock of all the four companies is kept and electricity expenses. Calculate all indirect expenses and take out equivalent of your share of revenue or turnover. For example, all indirect costs sum up to ₹20,000 per month. Now, as mentioned in point ' $a$ ' above, the share of Rose Herbal Ltd in dealers' turnover is 20 per cent, so take 20 per cent of the total indirect expenses as your share of indirect expenses, so here: $20,000 \times 20 / 100=₹ 4,000$.

Add all direct costs associated with your company with the share of indirect expenses that belong to Rose Herbal Ltd. So, here in this case:
Share of dealer's costs that belong to Rose Herbal Ltd $=$ Direct costs + Share in indirect costs
$=₹ 6,000+₹ 4,000=₹ 10,000$ per month
c. Returns to Quanto Traders for doing business with Rose Herbal Ltd:

Returns $=$ Earnings - Expenses
Where
Earnings $=$ Turnover $\times$ Gross margin
Expenses $=$ Calculated as above

## CALCULATING EARNINGS

If the gross margin offered by Rose Herbal Ltd to the dealer is 8 per cent:

Monthly sales of Rose Herbal Ltd $=₹ 1,000,000$
So the earnings of dealer for Rose Herbal Ltd
$=(1,000,000 \times 8) / 100=₹ 80,000$ per month.

## CALCULATING EXPENSES

Expenses $=₹ 10,000$ per month (calculation given above in the previous example)

## CALCULATING RETURNS

Based on the earning and expenses as calculated above, the 'returns' from Rose Herbal Ltd to the Quanto Traders are as follows:

Returns = Earnings - Expenses
Returns $=₹ 80,000-₹ 10,000=₹ 70,000$ per month

## ADDITIONAL IMPORTANT CONCEPT OF AVERAGE NVENTORY HOLDING PERIOD

| Method | Example |
| :--- | :--- |
| Average inventory holding | Average annual inventory held: |
| period = Duration or period/ | 3 crore +1 crore $/ 2=2$ crore |
| Number of rotations | Inventory or stock brought during |
| Where | $2019-2020=₹ 10$ crore |
| Rotation = Value of good | Rotation $=10$ crore $/ 2$ crore $=5$ |
| purchased in a period/Average | rotations of inventory happened in |
| inventory held during that | year 2019-2020 |
| period | So inventory holding period $=365 / 5$ <br> $=73$ days |

So the larger the inventory holding period, the higher the working capital that will be stuck in the business, which will eventually lower the dealer's ROI.

1. If the sales price of a product is $₹ 10,005$ per unit and its sales in a particular territory in a month is 10,000 units, the manufacturing cost of each unit of the product is ₹ 3,509 .

The company has employed two salespeople for that area, whose respective salaries are ₹ 20,000 and $₹ 30,000$ per month. The company also spends ₹ 5,000 on their conveyance; along with that, their vehicles depreciate at the rate of ₹ 50 per month.

The company's office is in a rented space, and the rent is ₹ 45,000 for a quarter. The company also pays $₹ 15,000$ per month for electricity.

With this information, calculate:
a. Total revenue that it brings to the company
b. Profit margin that the product fetches for the company
c. Gross profit and net profit of the company and interpret the answer
2. Tolstoy is a dealer of Benson Ltd, a company manufacturing electronic toys. Tolstoy had a closing stock of ₹ 5 crore in the financial year ending 31 March 2021. He purchased company's products worth ₹ 12 crore during the year, and the average inventory he held during the 12 months is valued at ₹ 5 crore.

Based on the above given information, calculate the following and give logical interpretations of the answers:
a. The inventory at the beginning of the financial year
b. Number of inventory rotations that Tolstoy had during the year

## Experience the Real Life

Identify an FMCG or consumer electronics company which has a strong presence in your city. Visit two dealers of the same company. Talk to them about how they calculate margins that they get by working with the company. Observe the differences in their answers. What do those differences suggest? Is there a method of calculation similar to what is discussed in the chapter? If no, how are calculations made?

## ADDITIONAL INSIGHTS AT A CLICK

1. Calculating Distributor or Dealer ROI

It is an informative article on determining the distributor or dealer ROI. The concepts and process are explained by using an easy-to-understand example. It provides a comprehensive idea about how ROI in the context of chapter is calculated. It is a must-read on the topic. https://brandalyzer.blog/2016/05/04/calculating-distributor-or-dealer-roi/\#:~:text=The\ equation\% 20is\%20simple\%20\%E2\%80\%93\%20Return,on\% 20Investment\%20\%3D\%20Returns\%2F\%20Net\%20 Investment
2. Calculating ROI for Your Wholesale Business: A How-to Guide
It is a quick guide on determining the ROI for wholesale business, especially on e-commerce platform. All the relevant formulae are mentioned and explained to enhance the knowledge on the topic under consideration.
https://www.tradegecko.com/blog/wholesale-/ guide-to-calculate-your-wholesale-business-roi

## 19 <br> successtul chonnal patnee selection


Jagan, a fresh graduate, was recruited as a sales representative by a small FMCG company which was based out of Chennai. The company came into existence five years back and, so far, it has been operating only in the southern part of India. After the initial success, the owner of the company decided to enter North India.

After completing his two-week induction at the company headquarters, which predominantly covered product knowledge and cursory overview of company's policies and procedures, Jagan was assigned the Jodhpur territory in the state of Rajasthan. Jodhpur is the second largest city in Rajasthan and the largest district in Asia. There were 10 large districts in this territory, and Jagan's first target was to build a dealer network in the territory in 1 month. Obviously, without extensive dealer network, the company could not even dream of making its presence in the territory.

It was a strange situation for Jagan. He was visiting Rajasthan for the first time and, hence, was not aware of the state, its people and business practices. Moreover, he had no clue on how to make dealers, because he was neither a trained marketer nor did the company train him on this at the orientation programme. All in all, he was new to sales, it was his first job, and he did not know anything about his territory and about making dealers!!

He called the regional manager (North India) and requested him for guidance. The regional manager
laughed and said, 'Young man, just go and meet other FMCG dealers in each city and pick the one who is going to be the best for us!' With that idea, Jagan arrived at Jodhpur, Rajasthan, and gave an advertisement in the local newspaper describing his company and products and called for people from Jodhpur who were interested in taking the dealership of his company.

On the day of meeting, there were 43 people waiting in his lobby. Jagan called them for a brief discussion where he explained his products, policies and expectations, and tried to understand their aspirations, fears and expectations from the company. After initial screening itself, Jagan was left with four interested parties. However, he could not decide that out of these four, which two were the most suitable ones. Here is a brief profile of the four candidates:

1. A veteran in FMCG dealership business and with a very sharp brain, but his reputation wasn't that strong.
2. A guy with impeccable reputation, financial muscle and sales infrastructure, but overall less experienced in business and that too of some other industry.
3. A young fresh MBA (Marketing) from the USA who belonged to Jodhpur and wanted to start his business there. He was a fresher, but his father was into chemical business and had excellent reputation and connections in Jodhpur. This guy looked hungry for success but was inexperienced and so was his father in FMCG business.
4. Top candidate in terms of experience, infrastructure, financials and reputation but was not very keen about Jagan's company because he already
had dealership of five FMCG giants. He came just because he felt that a new dealership would add to bis economies of scale.
If you would be Jagan, who would you pick and why?
This chapter will tell you about a simple technique to select the best dealers for your company.

Channel in marketing refers to the 'intermediaries' between the company and the end consumer. These might include distributor, dealer, wholesaler, retailer, etc. These channel partners also include online retailers, modern trade, etc. Needless to say, with ever-increasing number of options available to take the products to the end consumers, marketers face the decision of 'choice', that is, choosing from available options which channel partner would best serve their purpose. Of course, a marketer can choose to have all types of channel partners on board but, often, marketers are selective in their choice.

In an effort of determining the most suitable channel partner(s) combination, a marketer has to apply some logical techniques. Following is a simple and popular technique used by marketers for this purpose.

## WEIGHTED SCORE METHOD

This is a simple method to choose the best distribution channel partners. In this method, first the important factors which the manager believes are a 'must-have' in their distribution channel partner are listed. Then based on their relative importance in the eyes of manager, weights are assigned to these factors. As with weights, the sum of the weights assigned should be equal to 1 .

Then the different distribution channel partners/alternatives are rated on these factors in terms of - 'how strong they are on
each factor'. The weights are then multiplied with the ratings given to each potential distribution alternatives. Once that is done, the manager can choose the distribution alternatives with the highest scores.

Sunbright Ltd is planning to enter the detergent market in the Western part of the country. The company is fully aware of their late entry into the market and wants to cover up the delay in market entry by aggressive push of its products in the market. For that purpose, it is looking for dealers who have powerful selling ability and large market coverage apart from other regular things that a company looks for in a dealer such as investment ability and market knowledge. Three dealers have applied for the dealership and Ganesh, the marketing manager, must choose one among them. Help Ganesh in selecting the most suitable dealer.

For determining the most suitable dealer, Ganesh should choose the weighted score method and adopt the following steps.

Step 1: Initially, Ganesh, the marketing manager, prepares a list of the traits/factors that are important for a dealer to have so that they can achieve company's objectives. Suppose the list looks like this:

1. Selling ability
2. Infrastructure
3. Market coverage
4. Business knowledge
5. Customer relations
6. Investing ability

Step 2: In the second step, Ganesh assigns a weight to the predecided factors based on the relative importance of a factor for the company. It looks like this (Table 19.1).

Table 19.1
Relative Channel Factor Importance for Sunbright Ltd

| S <br> No. | Factor | Factor Importance for the <br> Company |
| :---: | :--- | :---: |
| $\mathbf{1 .}$ | Selling ability | 0.30 |
| $\mathbf{2 .}$ | Infrastructure | 0.15 |
| $\mathbf{3 .}$ | Market coverage | 0.30 |
| $\mathbf{4 .}$ | Business knowledge | 0.10 |
| $\mathbf{5 .}$ | Customer relations | 0.05 |
| $\mathbf{6 .}$ | Investing ability | 0.10 |
|  | Total | 1.00 |

Step 3: Then the marketing manager rates each of the three potential channel partners on these parameters. The ratings look like this (Table 19.2).

Table 19.2
Rating Potential Channel Partners on Predefined Factors
$\begin{array}{|c|l|c|c|c|c|}\hline \text { S } \\ \text { No. }\end{array}$ Factor $\left.\begin{array}{c}\text { Factor } \\ \text { Importance for } \\ \text { the Company } \\ \text { (a) }\end{array} \quad \begin{array}{c}\text { Dealer 1 } \\ \text { Rating } \\ \text { (b) }\end{array} \begin{array}{c}\text { Dealer 2 } \\ \text { Rating } \\ \text { (c) }\end{array} \begin{array}{c}\text { Dealer 3 } \\ \text { Rating } \\ \text { (d) }\end{array}\right]$

Step 4: Then the marketing manager multiplies the weight of each factor with the score that each dealer has got on that factor. The table now looks like this (Table 19.3).

Table 19.3
Comparison of Potential Channel Partners' Score

| S <br> No. | Factor | Dealer 1 <br> Score <br> $(\mathbf{a} \times \mathrm{b})$ | Dealer 2 <br> Score <br> $(\mathbf{a} \times \mathrm{c})$ | Dealer 3 <br> Score <br> $(\mathrm{a} \times \mathrm{d})$ |
| :---: | :--- | :---: | :---: | :---: |
| $\mathbf{1 .}$ | Selling ability | 0.9 | 1.2 | 1.35 |
| $\mathbf{2 .}$ | Infrastructure | 0.6 | 0.75 | 0.6 |
| $\mathbf{3 .}$ | Market coverage | 1.2 | 1.2 | 1.35 |
| $\mathbf{4 .}$ | Business knowledge | 0.1 | 0.1 | 0.4 |
| $\mathbf{5 .}$ | Customer relations | 0.05 | 0.1 | 0.15 |
| $\mathbf{6 .}$ | Investing ability | 0.3 | 0.5 | 0.2 |
|  | Total | 3.15 | 3.85 | 4.05 |

A careful study of the results from the tables above shows that dealer 1 has scored the lowest, so he is out from the race. The point to be noted is that despite having higher ratings as mentioned in Table 19.2, dealer 2 would be rejected and dealer 3 would be the best option for the marketing manager in his current situation. This is because dealer 3 is stronger in areas which are of importance (selling ability and market coverage) than dealer 2 . So in spite of having an overall better profile, dealer 2 is not that suitable for Sunbright Ltd right now.

## CHECK YOUR UNDERSTANDING

Futuristic Ltd, a technology-based company, has launched a new AI-based intention predictor machine which is totally new to the world and, hence, there is no direct competition. The company wants to set up its distribution network by appointing dealers in all state capitals. These dealers would be selling to wholesalers as well as to customers. The company wants dealers who can put in effort to educate the retailers and customers about the new product. Educating the retailers and customers would also require investment on dealer's part. Moreover, because the company has
launched several versions of the product simultaneously, they want the dealers to be able to invest in inventory so that the retailers and customers can see the full range of the product at the dealer's place. The dealer must have an office/infrastructure in the main market of the city. Other than that, the company would prefer young, educated people to be their dealers who have good reputation in the market. It would be good if the dealer has experience in selling tech product, but it is not a mandatory requirement because the company will give them training in any case.

You are the marketing head and are assigned this task of appointing dealers. You decide to use the weighted score method for this task. Using hypothetical data based on the information given in the question, explain how you will proceed and choose the dealer.

## Experience the Real Life

Talk to two marketing managers or dealers of (a) FMCG products and (b) consumer electronics in your city and figure out on what parameters do they appoint dealers and what

## ADDITIONAL INSIGHTS AT A CLICK

1. 10 Criteria for Selecting the Right Channel Partner The blog addresses an extremely important issue related to identification of channel partner selection criteria. A selection criterion is the foundation on which the rest of the process is built. The blog provides an insight about various criteria.
http://www.integratis.com/blog/10-criteria-for-selecting-the-right-channel-partner
2. The Importance of Choosing the Right Channel Partner
This article presents a strong reason why a marketer should choose its channel partner wisely. The article states that a good channel partner can boost sales, create new revenue streams and offer sharing of resources.
https://www.comparethecloud.net/articles/the-importance-of-choosing-the-right-channel-partner/\#: ~:text=Channel\%20partnerships \% 20can \% 20 prove\%20hugely,choose\%20their\%20channel\%20 partner\%20wisely
3. How to Find the Right Channel Partners

This crisp article focuses on the fact that a marketer can have any number of channel partners but getting a right mix of channel partners is the key to success. https://www.b2bmarketing.net/en-gb/resources/ articles/how-find-right-channel-partners

## 20 messuing intermediaies' periformance

If a company opens its store in a market and asks you how to evaluate the performance of the store or how to calculate store's ROI, what would be your answer?

If you are like most people, you would immediately say 'sales done from the store', and if you have a more logical mindset, you might say 'sales done from the store minus the costs of running the store, that is, how much the store is making or the profitloss generated from the store should be the metrics'.

Well, there are other dimensions.
There is a high-end mall in the city of Jaipur which is located in one of the poshest localities of this mini-metro city. There are all kind of stores in the mall which one can expect in such a mall. However, there is one aberration. In that mall, there is a store that belongs to a company that makes bedsheets and towels. This company is a market leader in this category but is facing the heat from new-age online competition.

Now, the presence of this store is strange and shoppers also look at the store with a kind of disbelief like the store doesn't belong here. That is because one usually does not see linen stores in malls. Some might say, so what? The company wants sale to happen and so they have opened this store! What is the big deal? Well, when the authors checked with the store manager about the costs and sales figures, he did not
reveal the figures but clearly said that it is meagre, which was very much expected but then he concluded with a strange point. He said, 'In any case, sir, the store has not been opened for that purpose.' When we asked then what is the point? He said, 'visibility'.

When analysed the benefits of having this store in that mall from that perspective, it looks like a very creative move. The presence in the mall helps in building and reinforcing the premium image of the brand in the mind of the target customers. Second, with so much of marketing clutter, it is difficult to grab attention of the customer, and since this store looks strange and a bit out of place, consumers pause for a while when they see this store and the brand gets consumers' attention (compare this with hoardings or TV ads of linen which do not get much attention and also cost a fortune). The store serves as a customer experience zone where consumers can touch and feel the products, which regular advertising would never achieve. The upper and upper-middle class people who flock to such malls multiple times in a week can see the brand and its products every time, which reinforces brand values and strengthens the brand associations and, last but not least, whatever sales that happen from the store is a bonus!

So the point is that all distribution channels are not meant to achieve one purpose. Some are meant to achieve certain marketing objectives, while others are meant to do some other things. Hence, marketers must not evaluate all distribution channels with one metric!

So if the company is using an omni-channel strategy, where it uses various channels to reach the customers, then it must realize that channels have different strengths and, therefore, some are good at
building awareness and recall, while others are good at offering consumers an experience and then there are some channels that sell better. So you would have to assess the performance of each channel on a metric that judges it on the purpose it serves and that cannot always be sales!


Marketing channels include all channel partners which contribute in bringing the product from the company's factories to the end consumers, that is, they connect the company with its customers. Channel partners are an integrated part of the value chain. They are one of the biggest contributors to sales/ revenue generation. If managed well, the channel can be a source of sustainable competitive advantage.

In today's times, most companies sell through multiple channels. For example, you can buy a fridge or a shirt from exclusive showrooms, multi-brand showrooms and brand's own website as well as from online retailers. In that scenario, it becomes important for the company to assess the performance of each channel that it uses so that necessary strategies are made.

## MEASURING THE PERFORMANCE OF EACH CHANNEL

To measure the performance of each channel, a two-step procedure is followed. The first step involves calculation of pocket price and next the channel's profitability and performance are calculated. The two steps are explained as follows.

Step 1-Calculating pocket price: The amount that the company gets from selling at each channel is calculated, and this amount is called pocket price. Pocket price that the company receives from each channel varies from channel to channel because there are costs involved in dealing with each channel. These 'costs'
include drafting the contracts, shipping and handling, invoicing and book-keeping, commission paid and discounts given. So if one of the channels that the company sells through has more channel partners involved, (distributor, dealer, etc.), then the discounts given to these players would add to the costs of dealing with that channel. So all channels have a 'transaction cost' associated with it which affects the pocket price that the channel gives to the company. Also, the prices at which the products are sold vary from channel to channel, so the sales revenue also varies, even if the units sold are same.

> A healthcare equipment company Medtech Ltd divides its customers into three categories: large accounts, medium accounts and small accounts. Large accounts are directly managed by the company itself, medium accounts are handled by commission agents and small accounts are managed by the distributor who supplies to the retailers who provide the product to the customers. The pocket price that the company earns from each channel is as follows:

## 1. Large Accounts

Sales (in unit):
Sales price (per unit):
100,000

Total sales revenue:
₹10
Transaction costs (5\%):
₹1,000,000

Pocket price:
₹50,000
₹1,000,000 - ₹50,000
= ₹ 950,000
2. Medium Accounts

Sales (in units):
Sales price (per unit):
75,000
Total sales revenue:
₹ 11.5
Agent's commission (2\%):
₹862,500
₹ $862,500 \times 2 \%$
= ₹ 17,250
Transaction costs ( $5 \%$ ): (₹862,500 - ₹17,250)
$=₹ 845,250 \times 5 \%$
$=₹ 42,262.50$

Pocket price:

$$
\begin{aligned}
& ₹ 862,500-\text { (₹17,250 } \\
& +₹ 42,262.50) \\
& =₹ 802,987.5
\end{aligned}
$$

3. Small Accounts

Sales (in units):
Sales price (per unit):
Total sales revenue:
Distributor discount (3\%): ₹1,105,000×3\% = ₹ 33,150
Retailer discount (5\%): (₹ $1,105,000$ - ₹ 33,150 ) = ₹ $1,071,850 \times 5 \%$
= ₹ $53,592.50$
Transaction costs ( $10 \%$ ): (₹ $1,071,850$

- ₹53,592.5)
= ₹ $1,018,257.5 \times 10 \%$
= ₹ 101,826
Pocket price:

$$
\text { (₹ } 33,150+₹ 53,592.5
$$

$$
+₹ 101,826)
$$

$$
=₹ 916,431.5
$$

So the average pocket price for Medtech Ltd is

$$
\begin{aligned}
& =(₹ 950,000+₹ 802,987.50+₹ 916,431.50) / 3 \\
& =₹ 889,806
\end{aligned}
$$

Step 2-Measuring channel profitability and performance: From the pocket price received from each channel, the cost of goods sold (see notes after the chapter for details) is deducted to get the margin. Margin from different channels can be different and is an indicator of how good they are for the company. The larger the margin from a particular channel, the better it is. Although margin is an important indicator, it does not tell the complete story. Since margin only considers cost of goods sold (i.e., only the direct costs) but does not include cost of making the sale, it has its own limitations. So it might be that a channel is giving more margins to the company but
has very high costs to maintain and sell through that channel. In this case, margin would be high but, overall, the channel might not be effective for the company.

To cover the limitations of margin, there are other metrics to measure channel's suitability for the company such as marketing contribution, marketing return on sales (ROS) and marketing ROI.

1. Marketing contribution: Marketing contribution is the revenue generated for each unit sold after deducting the sales and marketing expenses incurred by the company. These costs typically include advertising and promotion costs, shipping costs and salesperson's costs. It is essentially margin after the adjustment of sales and marketing costs. So, as mentioned above, it might be possible that a channel gives high margin, but its marketing contribution is low, and that can make the channel less attractive for the company. Marketing contribution is calculated as follows.

> Marketing contribution $=$ (Pocket price - Cost of goods sold) - Marketing and sales expenses
2. Marketing ROS: Marketing ROS is a metric that tells how much marketing expenses are required or incurred to get the 'sales'. Since different channels require different marketing and sales support, they will vary on marketing ROS. For some channels, the marketing would be much more efficient than others. So the efficient the channel is, the better it is for the company. Marketing ROS is calculated as follows.

```
            Marketing ROS =
(Marketing contribution/Pocket price) }\times10
```

3. Marketing ROI: Marketing ROI is a metric that tells how much marketing expenses are required or incurred to get the 'profit'. It is an indicator of how effective marketing has been in generating profit. Essentially, it compares the amount of money you spend on marketing and the amount of profit you gain from it. So it might be that channel ' P ' consumes a lot of marketing budget but leads to lesser profit in comparison to channel ' $T$ ', which takes less of marketing budget and gives comparable profits. So in this case, channel T's performance would be considered better than that of channel P. Marketing ROI is calculated as follows.

> Marketing ROI $=$
> (Marketing contribution/Marketing and sales expenses) $\times 100$

Example: In continuation with the example of Medtech Ltd discussed earlier, here are the details of cost of goods sold and marketing and sales expenses for each channel. Based on the information shared in Table 20.1, calculate margin, marketing contribution, marketing ROS and marketing ROI to judge channel performance.

## JUDGING THE PERFORMANCE OF ALL CHANNELS FROM THE NUMBERS

As you can see in the above example, the company-owned channel has the least margin, but its marketing ROS and ROI are good. Similarly, the second-highest margin comes from the distributor-retailer channel, but its marketing ROS and ROI are least among the three.

This tells us that the company-owned channel is the best when it comes to efficiency in marketing and the kind of sales

Table 20.1 Data of Medtech Ltd

| Particulars | Company- <br> owned <br> Channel | Commission <br> Agent | Distributor- <br> Retailer |
| :--- | ---: | ---: | ---: |
| Pocket price | 950,000 | $802,987.50$ | $916,431.5$ |
| Cost of goods sold | 600,000 | 450,000 | 550,000 |
| Gross margin | 350,000 | $352,987.5$ | $366,431.5$ |
| Gross margin (\%) ${ }^{\mathrm{a}}$ | 36.8 | 43.9 | 39.9 |
| Marketing and sales expenses (₹) | 100,000 | 150,000 | 250,000 |
| Marketing and sales expenses (\%) ${ }^{\mathrm{b}}$ | 10.5 | 18.7 | 27.3 |
| Marketing contribution ${ }^{\mathrm{c}}$ | 250,000 | $202,987.5$ | $116,431.5$ |
| Marketing ROS $(\%)^{\mathrm{d}}$ | 21.8 | 25.3 | 12.7 |
| Marketing ROI $(\%)^{\mathrm{e}}$ | 250 | 135.3 | 46.6 |

The required calculations for Medtech Ltd are as follows:

```
\({ }^{\text {a }}\) Gross margin (\%) \(=\) Pocket price - Cost of goods sold)/Pocket price \(\times 100\)
    \(=(950,000-600,000) / 950,000 \times 100=36.84 \%\)
\({ }^{\mathrm{b}}\) Marketing and sales expenses (\%)
    \(=\) Marketing and sales expenses/pocket price \(\times 100\)
    \(=100,000 / 950,000 \times 100=10.52 \%\)
\({ }^{c}\) Marketing contribution
    \(=\) Pocket price - Cost of goods sold) - Marketing and sales
                        expenses
    \(=(950,000-600,000)-100,000=250,000\)
\({ }^{\mathrm{d}}\) Marketing ROS \(=\) Marketing contribution/Pocket price \(\times 100\)
    \(=250,000 / 950,000 \times 100=21.8 \%\)
\({ }^{\mathrm{e}}\) Marketing ROI \(=\) Marketing contribution/Marketing and sales expenses \(\times 100\)
    \(=250,000 / 100,000 \times 100=250 \%\)
```

it generates for each marketing rupee spent. The marketing spent on company-owned channel is the least but that generates a lot of sales for the company, although the profitability of this channel is the least.

Note: Cost of goods sold includes only the direct costs involved in 'making' or 'producing' the goods such as raw material and labour. It does not include indirect costs such as administrative costs, sales and marketing expenses.

Kaya Ltd, an FMCG company, sells beauty and wellness products for girls and boys in the age group of 16-22 years. To reach out to its target customer, the company is using three distribution channels, including a newly added channel, that is, online retailers. Refer to the information shared in the table and answer the questions.

| Particulars | Distributor- <br> Dealer- <br> Retailer | Online <br> Retailers | Own <br> Website |
| :--- | :---: | :---: | :---: |
| Annual sales (units) | 500,000 | 700,000 | 300,000 |
| Price per unit (₹) | 10 | 9.5 | 9 |
| Transaction costs (₹) | 2 | 1.5 | 0.5 |
| Distributor margin (\%) | 2 | NA | NA |
| Dealer margin (\%) | 3.5 | NA | NA |
| Retailer margin (\%) | 5 | 3 | NA |
| Cost of goods sold (₹) | 250,000 | 350,000 | 150,000 |
| Marketing and sales <br> expenses (₹) | 100,000 | 50,000 | 25,000 |

From the above details, find out the following:

1. Which channel gives the highest pocket price and which gives the lowest pocket price?
2. Which channel gives the highest margin and which gives the lowest margin?
3. Which channel has the maximum marketing contribution and which channel has the least?
4. Which channel has the highest marketing ROS and which has the lowest?
5. Which channel has the highest marketing ROI and which has the lowest?
6. After finding all the above, explain which channel is the best for the company and which is the least beneficial.

## Experience the Real Life

- Identify a business in your city and visit them to understand how the above figures come into action and check how the business measures the channel performance.
- Identify advertisements where a company is persuading consumers to move from one channel to another (from offline retail store to website or from website to app, etc.) and deliberate why would they be doing so. Is it more profitable for the company if the consumers buy/ shift from one channel to another?


## ADDITIONAL INSIGHTS AT A CLICK

1. A Simple Guide to Marketing ROI (Formulas and Examples)
It is an interesting article about marketing ROI, explaining the relevance of measuring it for an organization. Each term is explained with an example for better understanding. The thrust area of the article is marketing ROI in the field of digital marketing. https://blog.hubspot.com/marketing/measure-content-marketing-roi
2. Measuring Channel Performance

It is a crisp article on nitty-gritty associated with measurement of channel performance. It discusses what mistakes to avoid before measuring the channel performance. After that, the article highlights the measurement points and the complete process of measurement.
https://www.channeldynamics.com.au/measuring-channel-performance/

## 21

## нош to manage inventory for a retall store?

## Target's Out-of-Stock Catastrophe

Target is one of the largest retailers in the USA. In 2015, huge stocks of pink Barbie SUVs were piled high at its distribution centres. The stocks were so large that it killed the retailer's plan to enter the Canadian market. It sounds strange, but it is true.

According to Reuters, the barcodes on the Barbie toy cars didn't match the numbers in the computer system. Target was trying to grow too fast, too quickly, without focusing on adequate systems. The mismatched inventory left shelves empty and customers frustrated and cost the third largest store chain in the USA more than $\$ 2$ billion.

Since then, Target has announced plans to cut down on the wide assortment of brands, sizes and flavours usually offered on its shelves. The company's CEO Brian Cornell says that the change will help the retailer be more efficient and focus on what consumers are buying. Target says that the roll-out of this strategy will happen slowly across its 1,800 stores.

Source: https://www.business2community.com/product-management/6-times-horrific-inventory-control-almost-killed-companies-01659644

As you can notice from the case above, one of the largest retailers of UK faced serious challenges because of inadequate inventory management practices. Most commonly, poor inventory management reflects in out-of-stock situations or overstocking, and either of these can be lethal for a retailer. An out-of-stock situation is equivalent to losing out on sales and missing opportunities, while an overstocking situation would lead to capital getting stuck in unnecessary inventory. Needless to say, it is imperative to maintain right stock at the right time and at the right place and that is where inventory management for retail comes into the picture.

## BASICS OF RETAIL INVENTORY MANAGEMENT

To understand the nuances of inventory management in a retailing scenario, it is important to know the following concepts:

1. Stock-to-sale ratio
2. Space- to-sale ratio
3. Days of cover
4. Average inventory value

These concepts are elaborated below with examples.

## STOCK-TO-SALE RATIO

Stock-to-sale ratio is the ratio of the inventory available for sale versus the quantity actually sold. For every unit sold, how many units were on hand? For every single sale I made of that particular item, how many did I have in stock at that time? It is calculated as follows.

Stock-to-sale ratio $=$ Current stock available/Quantity sold

A store can use this ratio to make critical inventory management decisions. In general, a low value of this ratio is good for
business. A low value might suggest that sales are high and inventory levels are low. It means that the business can quickly get rid of its inventory by way of sales and thus represents efficient operations. A high value of this ratio could mean two things. Either the category is witnessing a major increase in its inventory or the category's sales are dwindling for some reason. We can use this ratio for comparison with similar stores.

Sachin is the area manager of the footwear retail chain Foot Magic Pvt. Ltd, dealing primarily in running shoes category. Presently, Sachin is looking after three stores located in Surat market. All the three store managers claim to have efficient operations. The status of sale and stock of the three stores for running shoes categories is mentioned in Table 21.1. Help Sachin in identifying which store is having most efficient operations.
Stock-to-sale ratio is a common measure to check the efficiency of operations of a store. So we can calculate stock-to-sale ratio of all the three stores selling running shoes and compare. Whichever store is having lowest stock-to-sale ratio can be referred as efficiently operating. On applying the formula for calculating stock-to-sale ratio, that is, Current stock available/ Quantity sold, the ratios of the three stores XT1, LP7 and NS4 can be calculated as $2.56,1.44$ and 5.24 , respectively.

Table 21.1
Details of Stock and Sales

| Store Code | Location | Category | Current <br> Stock (Pairs) | Sale (Pairs) |
| :--- | :---: | :--- | :---: | :---: |
| XT1 | L1 | Running <br> shoes | 256 | 100 |
| LP7 | L2 | Running <br> shoes | 577 | 400 |
| NS4 | L3 | Running <br> shoes | 262 | 50 |

As stock-to-sale ratio of store LP7 located at L2 is lowest (1.44), it is performing better than the other stores.

## SPACE-TO-SALE RATIO

The abbreviation SSPD is used to denote store sales per square foot. It is an important KPI, and it measures how much sales revenue you are able to generate for each foot of retail space provided. It also indicates your efficiency in use of space and could be used as an input for providing insights for improving store layout, merchandising, staff performance, etc. Its usefulness increases when the performance of individual categories is compared to the space allotted. Sales per square foot can be calculated as follows.

SSPD $=$ Total net sales/Total floor area
A store can use this ratio to make critical space management decisions. It helps you decide the layout of your counters and enables you to have the right product assortment in the place allocated. It also increases the visibility of the product and any promotions. Overall, it increases your bill and basket value.

Decathelon Sports, a prominent sports good retail store in Model Town, Delhi, has two display walls selling sports goods and sports apparel, respectively. The store manager wishes to know which display wall is generating better revenues for the store. The details related to wall size and sales are mentioned in Table 21.2.

Space-to-sale ratio is a common measure to check the efficiency of a sales counter. So we can calculate space-to-sale ratio of both the display walls and compare. Whichever display is having more space-to-sale ratio can be referred as better performing. On applying the formula on the given information for calculating space-to-sale ratio, that is, Stock sales per

Table 21.2
Details of Display Wall Area and Sales

| Display Wall | Wall Size | Stock Sales per Day (₹) |
| :--- | :---: | :---: |
| Sports goods | $8 \mathrm{ft} \times 8 \mathrm{ft}$ | 14,400 |
| Sports apparel | $6 \mathrm{ft} \times 6 \mathrm{ft}$ | 8,600 |

day/Net sales area, the ratios of the two display walls, that is, sports goods and sports apparel, can be calculated as ₹ 225 ( $14,400 / 64$ ) and ₹ 239 ( $8,600 / 36$ ), respectively.

As space-to-sale ratio of the wall displaying sports apparel is higher than the sports goods display wall, it can be concluded that sports apparel display wall is performing better.

## DAYS OF COVER

Days of cover show the number of days required to sell the current inventory. Days of cover are also known as days of inventory or days on hand, which signifies for how much time (hours, days, months) the current inventory will last. To calculate days of cover or days on hand, you need to know the information on several elements such as 'cost of goods sold', which is calculated as follows.

Cost of goods sold $=$ Beginning inventory + Purchases during the period - Ending inventory

At the beginning of the financial year, your garment store has ₹ 60,000 worth of inventory of woollen sweaters and, at the end of the year, it has ₹ 25,000 worth of woollen sweaters in inventory. During the year, another ₹ 180,000 of woollen sweaters are purchased. The final cost of goods sold is, therefore: $₹(60,000+180,000-25,000)=₹ 215,000$ for the year.

## AVERAGE INVENTORY VALUE

This is another important element in the calculation of 'days of inventory'. As the value of inventory is bound to change over the course of an accounting period, therefore, while comparing to the cost of goods sold, it is advisable to calculate an average value for inventory. Average inventory is calculated as follows.
$\quad$ Average inventory value
$=($ Beginning inventory value + Ending inventory value $) / 2$

Continuing with the ongoing example, the average inventory value of the garment store is $(₹ 60,000+₹ 25,000) / 2=₹ 42,750$ for the time period.

Once the quantity of the cost of goods sold and average inventory value is known, 'days of inventory' are calculated as follows.

> Days of inventory $=($ Average inventory value $/$
> Cost of goods sold $) \times$ Days in accounting period

Applying the previous values for cost of goods sold and average inventory, days of inventory at the garment store for the year are $(42,750 / 215,000) \times 365=72$ days.

Once the days of inventory or days of cover are calculated, the retailer has to answer an important question, which is: How many days of inventory should one carry? The answer to this question is highly dependent on the 'lead time' of the suppliers, which is, the time taken by a supplier to deliver the goods. Consider a situation: If you have inventory that would last for 72 days and your suppliers take 90 days to resupply, then it can cause a customer delivery gap of 18 days. Such gap between the demand of a product by a customer at a retail store and the non-availability of the product generates stock-out situation.

The store manager of Numero Uno store at Panaji has a closing inventory of 1,100 pieces of denims. Considering the past trends during the same period, it is projected that the store could sell 475 pieces per month in the next quarter. The area manager is asking the store manager about the days of cover he has to avoid a stock-out situation. Help the store manager.
The current stock held by the Numero Uno store is 1,100 pieces and average sales per month is 475 pieces. Days of cover for the store manager of Numero Uno store is $(1,100 / 475) \times 30=69$ days. As the sales trend goes for next 90 days, the store will face a stock-out situation after 69 days until replenishment is done.

CHECK YOUR UNDERSTANDING

1. Zara, a prominent name in cosmetics and fashion accessories, is operating through 87 exclusive outlets across India. Jimmy, the store manager at Zara store, Andheri, Mumbai, is having the responsibility to generate maximum sales out of the store and report about the performance of each counter of the store to Sahil Sharma, the area manager. The store is having two counters to display each category of merchandise. The first counter is about fashion accessories with the dimensions $8 \mathrm{ft} \times 6 \mathrm{ft}$. This counter generates a monthly sale of ₹ 2.4 lakh. On the other hand, the second counter displaying cosmetics is of the dimension $10 \mathrm{ft} \times 8 \mathrm{ft}$, and it generates an average sale per day of $₹ 12,000$. Sahil is asking Jimmy to report the better performing counter of his store. You can assume 30 days in a month.
2. Henna, a fresh graduate from Delhi, materialized her dream project and opened her first retail store for women handbags with the brand name Lavasa. She started the store with 40 handbags, amounting
₹ 75000 , and expanded the business with $₹ 300,000$ of more merchandise during the next 3 months. At the end of the first quarter, she has ₹ 15,000 of merchandise with her. Now, being a novice in the field of inventory management, she is confused about how much time the present inventory will run if the same scenario continues. Can you guide Henna?

## Experience the Real Life

Visit a multi-brand garment retailer in your town and observe the product categories sold at each counter. With the permission of the store owner, ask from the counter salespersons about the area allocated for each counter and how much stock that area carries. Also, try to enquire about the average monthly sales of each counter. With such information, can you provide some inputs about the retail inventory management of the store?

## ADDITIONAL INSIGHTS AT A CLICK

1. What Is the Retail Inventory Method and How Do You Use It?
The text in this wonderful blog post provides a systematic information about the inventory management specifically targeting retail inventory. The text is supported by a video to enhance the understanding of the relevant concepts.
https://www.vendhq.com/blog/retail-inventorymethod
2. Out-of-Stocks Are More Costly than Losing a Salebut There's a Fix

The text in the form of opinion, in a very crisp manner, highlights the issues generated due to out-of-stock situations. The next part of the article suggests simple strategies to handle the situation and its avoidance in future.
https://www.supplychaindive.com/news/reduce-retail-out-of-stock-AT-Kearney/545439/
3. The Top 15 Most Useful Retail Math Formulas This article mentions the most prominently mathematic calculations used by a retailer. Through a simple and straightforward approach, the meaning of components and their basic calculations are explained. https://www.thebalancesmb.com/retail-math-formulas-2890409

## GLOSSARY OF ADDITIONAL KEY TERMS

Knowing and using the following terms will make you look like an expert in retail inventory management:

- Cost of goods sold (COGS): It is the price paid for a product, plus any additional cost necessary to get the merchandise into inventory and ready for sale, including shipping and handling.
- Dead stock: Stock that was never sold to or used by customers and usually held in warehouses for future sales.
- Fill rate: It is the percentage of customer or consumption orders satisfied from stock at hand. It is a measure of an inventory's ability to meet the demand.
- Stock-keeping unit: SKUs are unique tracking numbers/ letters that you assign to each of your products, indicating style, size, colour and other attributes.
- Stock on hand ( SOH ): It is the stock currently available at the stores.


## 22 location matters: where to open a store?


They say that in retail, the three elements for success are location, location and location! That was true earlier and is becoming truer in today's age and time of online retail, with offline retailers increasingly facing the heat of competition from online retailers.

What is the inherent advantage of Amazon over Walmart or Flipkart over Big Bazaar? One obvious point is that Amazon ${ }^{1}$ and Flipkart can expand quickly and reach areas where Walmart and Big Bazaar took ages to reach and probably will take ages to reach! That 'location' advantage is enormous in scaling up the business. So one way that offline players deal with online retailers is through choosing the right location for their store. The correlation is clear: Location drives footfall, and footfall drive sales. In fact, the story of Walmart's success is a case in point!

So everyone knows that Walmart was not the first retail chain in the USA, but what they did, as far as choosing store location, was a first! When Walmart started, there were many established retailers in the USA, and as one could guess, they were concentrated on urban locations. At that point (and even now), it seems logical that a retail store should be located where the concentration of

[^12]customers is high and that is why established chains first open their stores in metro cities and then gradually come in mini-metro cities and then reach smaller cities.

Walmart did the opposite! It chose semi-urban or rural first because its business model warranted that. The business model of Walmart was simple: open large stores in places where land was cheap and rents were low, buy large stock at lower price to fill the stores, and then transfer the advantage of low costs (cheaper land, lower rent and quantity discounts) to the customers in terms of lesser price. So the customers got everything at a lower price and hence were willing to travel to these locations where Walmart was. The rest is history.

You might be wondering that although Walmart managed to keep the costs low, who was coming to Walmart's stores in remote locations to buy this stuff?

Well, Walmart chose its location very strategically. Yes, the stores were located in the middle of nowhere, but they were in the centre of multiple small towns. Hence, all these small towns would become the catchment area for the store, which meant a large number of customers available per store. Moreover, since there was less organized retail in these areas, that meant virtually no competition.

The rest is history! So you understood how location of the store can play a vital role in the retailer's business. Continue reading to know some simple scientific methods to do trade area analysis so that you can choose the right location for your store.


A trade area or catchment of a retail store is a geographic region from which a retailer gets its bulk customers (generally in the range of $60 \%-80 \%$ ) for the merchandise offered. It is the measurement of extension of a retail store's customer base.

It is also understood as the farthest distance consumers are ready to travel to purchase retail goods and services offered.

Through trade area analysis, one can identify the locations of store's customers, number of customers pertaining to a trade area and potential areas to increase the store's customer base.

Trade area is dynamic in nature and can contract or expand depending upon various influencing factors such as population, proximity of other competing business districts, your area's business mix, demographics and movement-related infrastructure, including streets and highways.

## METHODS OF DETERMINING TRADE AREA

Over a period of time, various methods to determine the retail trade area have been tested and used. Few of the popular methods are discussed further.

## REILLY'S LAW OF RETAIL GRAVITATION

The law states that the trade centres draw consumers from neighbouring communities in proportion to the trade areas' populations and in inverse proportion to the distances between the communities and the trade areas.

$$
\frac{B_{a}}{B_{b}}=\left(\frac{P_{a}}{P_{b}}\right)\left(\frac{D_{b}}{D_{a}}\right)^{2}
$$

Where
$\mathrm{B}_{\mathrm{a}}=$ Proportion of the trade from the intermediate city attracted by city a
$\mathrm{B}_{\mathrm{b}}=$ Proportion of the trade from the intermediate city attracted by city b
$\mathrm{P}_{\mathrm{a}}=$ Population of city a
$\mathrm{P}_{\mathrm{b}}=$ Population of city b
$\mathrm{D}_{\mathrm{a}}=$ Distance from the intermediate town to city a
$\mathrm{D}_{\mathrm{b}}=$ Distance from the intermediate town to city $b$

## CONVERSE'S BREAKING POINT MODEL

Reilly's law of retail gravitation is modified by P. D. Converse, and it states that the trade area boundaries of two neighbouring cities could be estimated by applying breaking point model. At breaking point in trade between two cities, the business drawn by city A is equal to business drawn by city B . The model assumes that population in both the cities is homogeneous and geography is flat without any movement hindrances. Breaking point of trade area between two cities is measured through the following formula.

$$
\text { Breaking point }=\frac{\text { Distance between cities } \mathrm{A} \text { and } \mathrm{B}}{1+\sqrt{\frac{\text { Population of city } \mathrm{A}}{\text { Population of city B }}}}
$$

Black and Decker Ltd wishes to enter into the northern India market with its heavy machine tools super store. VP-Operations at Black and Decker Ltd is interested in capturing the customer base of two cities, that is, Chandigarh and Mohali, with a single store. The population of the two cities is 5,000,000 and 4,500,000, respectively. The two cities are 32 km apart. Help the $V P$-Operations in identifying the breaking point between the cities for an informed location decision.

By applying breaking point model on the given information, the breaking point between Chandigarh and Mohali is calculated as follows.

$$
\begin{aligned}
\text { Breaking point }_{\mathrm{CM}} & =\frac{32}{1+\sqrt{\frac{4,500,000}{5,000,000}}} \\
& =32 /(1+0.948)=16.16 \mathrm{~km}
\end{aligned}
$$

Table 22.1
Data Regarding Population and Distance

| Name of the City | Population | Distance from City <br> 'O' (in km) |
| :---: | :---: | :---: |
| A | $3,500,000$ | 70 |
| B | 750,000 | 25 |
| C | $1,500,000$ | 40 |
| D | $2,200,000$ | 50 |

So the breaking point from Chandigarh to Mohali is 16.16 km and from Mohali to Chandigarh is ( $32-16.16=15.84$ $\mathrm{km})$. The values could assist the VP-Operations of Black and Decker Ltd to decide the location of their super store.

Breaking point model could also be used to plot a trade area for a given geographical location. Let's try to understand this through an example.

> PC Ltd wishes to open a pet care and accessories store in city ' $O$ ', which is surrounded by four other cities namely $A, B, C$ and $D$. All the four cities already have similar stores from the competitors. The owner of PC Ltd wishes to know the geographical boundary from where the potential clients could come. The data related to the population and distances of four cities located in four different directions from the central city ' $O$ ' with the population of 5,000,000 is mentioned in Table 22.1.

In order to provide the relevant information to the owner of PC Ltd, the breaking point for each city from the central city ' O ' needs to be identified and to plot the trading area accordingly.

$$
\begin{aligned}
\text { Breaking point }_{\mathrm{OA}} & =\frac{70}{1+\sqrt{\frac{3,500,000}{5,000,000}}} \\
& =70 / 1+0.84=38.04 \mathrm{~km}
\end{aligned}
$$

$$
\begin{aligned}
\text { Breaking point }_{\mathrm{OB}} & =\frac{25}{1+\sqrt{\frac{750,000}{5,000,000}}} \\
& =25 / 1+0.15=21.73 \mathrm{~km}
\end{aligned}
$$

$$
\begin{aligned}
\text { Breaking point }_{\mathrm{OC}} & =\frac{40}{1+\sqrt{\frac{1,500,000}{5,000,000}}} \\
& =40 / 1+0.30=30.77 \mathrm{~km}
\end{aligned}
$$

$$
\begin{aligned}
\text { Breaking point }_{\mathrm{OD}} & =\frac{50}{1+\sqrt{\frac{2,200,000}{5,000,000}}} \\
& =50 / 1+0.44=34.72 \mathrm{~km}
\end{aligned}
$$

So considering the values of central city ' O ' in relation to other cities, that is, 38.04 km for city A, 21.73 km for city B, 30.77 km for city C and 34.72 km for city D , the trade area is plotted and shown as Figure 22.1.

Figure 22.1
Trade Area of City 'O'


## HUFF'S MODEL OF TRADE AREA ATTRACTION

It states that the probability of a given consumer visiting and purchasing at a given site is a function of the distance to that site, its attractiveness, and the distance and attractiveness of competing sites. The probability $\left(\mathrm{P}_{i j}\right)$ that a consumer located at $i$ will choose to shop at store $j$ is calculated according to the following formula.

$$
P_{i j}=\frac{\frac{S_{j}}{T_{i j}^{\lambda}}}{\sum_{j=1}^{n} \frac{S_{j}}{T_{i j}^{\lambda}}}
$$

Where
$\mathrm{P}_{i j}=$ Probability of a consumer at a given point of origin $i$ travelling to a particular shopping centre $j$
$\mathrm{S}_{j}=$ Size of a shopping centre $j$ (measured in terms of the square footage of selling area devoted to the sale of a particular class of goods)
$\mathrm{T}_{i j}=$ Travel time involved in getting from a consumer's travel base $i$ to a given shopping centre $j$
$\lambda=$ A parameter which is to be estimated empirically to reflect the effect of travel time on various kinds of shopping trips.

Also, we can calculate the expected number of consumers from a given town $i$ that would shop at shopping centre $j$, as follows.

$$
\mathrm{E}_{i j}=\mathrm{P}_{i j} \times \mathrm{C}_{i}
$$

Where
$\mathrm{E}_{i j}=$ Expected number of consumers at $i$ that are likely to travel to shopping centre $j$
$\mathrm{P}_{i j}=$ Probability of consumers at $i$ that will shop at shopping centre $j$
$\mathrm{C}_{i}=$ Number of consumers at $i$

Example: Hypermart TenX is located at the heart of Pune city and has a floor area of 2,500 sq. m . It takes 5 minutes, 10 minutes and 15 minutes to reach TenX by consumers residing in three different zones $A, B$ and $C$, respectively. The population of zones A, B and C are 15,000, 22,000 and 37,000, respectively. Suppose a consumer has to buy a daily use product such as toothpaste ( $\lambda=1$, as it is important in daily use). Apply Huff's model to calculate the expected number of consumers that would shop at TenX and discuss the results.

Applying Huff's law, the probability of consumers travelling from zones $\mathrm{A}, \mathrm{B}$ and C for shopping at TenX is as follows.

For zone A, $\mathrm{P}_{5}=\left(2,500 / 5^{1}\right) /\left(2,500 / 5^{1}+2,500 / 10^{1}+\right.$ $\left.2,500 / 15^{1}\right)=54.54 \%$
For zone $\mathrm{B}, \mathrm{P}_{10}=\left(2,500 / 10^{1}\right) /\left(2,500 / 5^{1}+2,500 / 10^{1}+\right.$ $\left.2,500 / 15^{1}\right)=27.27 \%$
For zone $\mathrm{C}, \mathrm{P}_{15}=\left(2,500 / 15^{1}\right) /\left(2,500 / 5^{1}+2,500 / 10^{1}+\right.$ $\left.2,500 / 15^{1}\right)=18.18 \%$

From above results, we can state that as the travel time of consumers to reach a store increases, the probability of consumers visiting the store decreases.

Expected number of consumers from zone A visiting TenX

$$
=(54.54 / 100)(15,000)=8,181
$$

Expected number of consumers from zone B visiting TenX

$$
=(27.27 / 100)(22,000)=6,000
$$

Expected number of consumers from zone C visiting TenX $=(18.18 / 100)(37,000)=6,727$
Total consumers $=8,181+6,000+6,727=20,908$

1. Ambala with population of $2,500,000$ and Karnal with population of 1,300,000 are 55 km and 25 km from Kurukshetra, respectively, in opposite directions. Apply Reilly's law to calculate the proportion of trade each city will get from Kurukshetra.
2. D Mart has its mega store located at the city centre in Jaipur. It has a total floor area of $3,000 \mathrm{sq}$. m. It takes 10 minutes, 15 minutes and 20 minutes to reach D Mart by consumers residing in three different pockets Altus, Baltus and Caltus, respectively. The population of pockets Altus, Baltus and Caltus are 18,000, 24,000 and 34,000 , respectively. Suppose a consumer has to buy a product umbrella which is not very important in daily use $(\lambda=2)$. Apply Huff's model to calculate the expected number of consumers that would shop at D Mart and discuss the results.

> Experience the Real Life Identify two popular restaurants located at different parts of your city. Measure the distance between them. Meet both the restaurant owners and check the farthest place from where their customers are frequently visiting the restaurant. Do you see any overlapping of customer locations? Also, conduct a small survey to check whether the customers from one area are ready to visit to the restaurant at the other location. Why or why not?

## ADDITIONAL INSIGHTS AT A CLICK

1. Trade Area Analysis

This article takes the reader on an in-depth journey of trade area analysis. It discusses the factors that influence trade areas, types of trade areas and trade areas using focus groups, geographic data, actual customer data, etc. All in all, it is worth a read. https://fyi.extension.wisc.edu/downtown-market-analysis/understanding-the-market/trade-areaanalysis/
2. Retail Trade Area Analysis Using the Huff Model The article specifically provides a detailed understanding of one most popular model to identify trade, that is, Huff's model. A pictorial way is used to establish better understanding of the concept. https://www.directionsmag.com/article/3207

## 23 advertising agency's picing

In one of the cases, a marketer named Charlie was assigned this role of negotiating and finalizing an advertising agency, and because he did not understand the language and calculations that are used by the agencies in their pricing, Charlie signed the contract under the impression that he will be paying ₹ 30,000 to the agency after the work. However, he was shocked to receive a bill of ₹78,000. He picked his phone and called the head of the agency. The head of the agency called Charlie to the agency office and explained the whole thing and then Charlie realized that he failed to understand what the agency was telling him when negotiations were going on!

The head of the agency told Charlie about different kinds of fees such as date fee (working for your company on dates that are convenient to your company), onboarding charges, booking fees, technology fees, baggage fees, seat fees, mark-ups and retainers. Charlie realized that he had made a mistake by not preparing before the negotiations.

Second, in any case, in a professional relationship, 'how much would you charge for that?' is an awkward question for the client as well as the solution provider, especially in the first couple of meetings. Therefore, many clients and advertising agencies try to avoid it till they can, which is another mistake!

Moreover, professional service providers such as consultants, lawyers and advertising agencies do
not like to talk much about their prices either. They don't want to reveal their secrets or details of their pricing mechanisms, because the clients would then understand the pricing model and would be in a better position to negotiate.

But think that if you are in a marketing role (like Charlie), you will have to deal with advertising agencies and negotiate with them about the price. Therefore, it would be good to understand the basics of pricing strategies used by advertising agencies.

Without knowing and understanding the pricing mechanisms, you cannot select the right agency for your company and without knowing the lingo and strategies used by advertising agencies, you cannot talk/negotiate with them because you won't understand what they are saying and calculating, like Charlie!

So if you don't want to become Charlie, then go on, read the chapter and learn about how advertising agencies price their services.

And this is why this chapter!


An advertising agency is an independent team of professionals who help the clients in achieving their promotion-related goals through advertising-related services. Such agencies assist their clients in planning, preparing, implementing and evaluating various activities of advertising campaign. An advertising agency works on both traditional and modern media options for running a campaign. In lieu of providing their expertise to their clients, these agencies charge a fee. An understanding of the charged fee structure explains how the advertising agencies make money. In other words, it describes how much a client has to pay as advertising agency remuneration or compensation.

## BASE FEE

Advertising agencies do not charge the same fee from each client. The amount of fee varies from task assigned and the eventual agreement between the agency and the client. In order to decide the fee to be charged, the agency has to determine the total cost of operating expenses. It includes all the expenses that an advertising agency has to incur to remain operative. Generally, rent, equipment, salaries and perks, furnishings, etc., constitute for operating expenses. Once the total operating expenses are calculated, the amount is reduced down to the level of calculating average hourly rate. The following example can help in understanding the base fee calculation in a better manner.

Example: Andromeda Ltd is a well-known name among the top advertising agencies in the region. To run its day-to-day business, it has to pay ₹20,000 per month as rent, ₹ 6,000 per month for utilities, ₹ $1,200,000$ per month as salary, ₹100,000 per month as additional perks and ₹ 26,000 per month as equipment charges. Andromeda Ltd follows a five-day-week pattern and ensures eight working hours per day for smooth functioning of the company. Calculate (a) operating expenses per annum for Andromeda Ltd and (b) the average fee the agency must charge per hour to remain operative.
As per the information shared by Andromeda Ltd about its various expenses, the first step is to calculate the total operating expenses. Operating expenses can be calculated on a monthly or annual basis as mentioned in Table 23.1.

Once the total monthly operating expenses are calculated, average fee per hour needs to be calculated to come down to a base figure to be charged as minimum fee. The calculation of average fee per hour is mentioned in Table 23.2.

Table 23.1
Calculating Operating Expenses per Annum

|  | Amount (in ₹) |
| :--- | ---: |
| Rent | 20,000 |
| Utilities | 6,000 |
| Salaries | $1,200,000$ |
| Perks | 100,000 |
| Equipment charges | 26,000 |
| Total operating expenses per month | $1,352,000$ |
| Total operating expenses per annum |  |
|  | $(1,352,000 \times 12)$ |

Table 23.2
Calculating Average Fee per Hour

|  |  | Amount (in ₹) |
| :--- | ---: | ---: |
| Total operating expenses per month |  | $1,352,000$ |
| Total operating expenses per week | $1,352,000 / 4$ | 338,000 |
| Total operating expenses per day for <br> 5-day week | $338,000 / 5$ | 67,600 |
| Total operating expenses per hour for <br> 8 working hours per day | $67,600 / 8$ | 8,450 |
| So ₹8,450 comes out to be the base figure that Andromeda Ltd can use <br> to decide its minimum fee. |  |  |

In addition to the above example, we can consider another scenario to enhance our understanding. Generally, more than one expert of advertising agency works with the client. Also, these experts perform different tasks. In such a case, it is advisable to charge the base fee per hour, that is, ₹ 8,450 per person for high-end services such as client meetings and concept building and charge a lower rate for low-end services such as copy work or other clerical works. For example, if four agency people are working with the client at an average rate of $₹ 2,200$ per hour
for 6 hours a day, still the agency is in a position to meet its operating expenses. So an advertising agency charging anything above its operating expenses tends to contribute towards profits.

After the basic understanding of the base fee structure of advertising agency, further models of pricing can be explored.

## COMMISSION-BASED PRICING MODEL

It is one of the oldest models used by advertising agencies to earn revenue in the form of commission. The basic premise of this model is that advertising agencies are considered as agents of media houses, selling media time and space to the client. In return, the media houses are paying commission to the advertising agency on the sales made. Earlier, the go-market rate of percentage of commission was 15 per cent. In some cases, it is now reduced to $2-3$ per cent due to fierce competition in the market. The calculation method of commission-based method is as follows.

> G Mart, the client of Burnett advertising agency, seeks its help to choose and book a media slot for their forthcoming advertising campaign. The advertising agency recommends and books the slots worth ₹ 200,000 in popular TV channels of Star Network. Burnett spent ₹7,000 for conducting the related research before recommending and booking the slots. How much money did Burnett earn on this assignment?

In this case, when Burnett books the slot, it gets 15 per cent discount from Star Network. So,
The amount charged to G Mart by ₹200,000

Burnett:
The amount charged by Star Network ₹170,000 from Burnett:
The amount earned as commission by ₹30,000 Burnett: (gross income)

Net income of Burnett: ₹23,000
Although it is an old model, it has its applicability due to ease of use and understanding.

## RETAINER-BASED PRICING MODEL

Retainer fee is a fixed amount paid by the client to the agency at a fixed interval of time, that is, monthly, quarterly or halfyearly, to manage the client's marketing and promotional activities. The amount calculation depends upon the nature of work, size of the client's company and their marketing budget.

Suppose the task assigned to the advertising agency is to increase the level of awareness about brand X of the client and convince them to visit the website of the client during next year. To achieve these objectives, the advertising agency has to put a lot of efforts for their advertising campaign. The activities can be summarized into two parts: (a) initial set-up (quarter 1 of the year) of campaign, including planning, discussion, designing, production and launch, requiring relatively more man-hours in short span of time and (b) launching of ongoing campaigns (quarters 2, 3 and 4 of the year) in the line of initial campaign over longer duration of time. In such a case, the proportion of billable hours for initial phase could be relatively more as compared to the remaining phase. Assuming that the advertising agency is charging ₹ 5,000 per hour and Q1 requires 300 man-hours, while Q2-Q4 require 450 manhours, the total fee to be charged by the agency is as follows.
Q1:

$$
300 \times 5,000=1,500,000
$$

Q2-Q4:
$450 \times 5,000=2,250,000$
Total fee:

$$
1,500,000+2,250,000=₹ 3,750,000
$$

Now sometimes the client finds it difficult to pay the initial set-up amount to pay in advance even without getting any results. So the retainer-based pricing model is applied, and the total fee is amortized into 12 equal monthly instalments, that is, $3,750,000 / 12=₹ 312,500$. This amount can be quoted as retainer's fee. Such calculation reduces the initial burden on the client and creates a relatively win-win situation.

## PROJECT-BASED PRICING MODEL

The project-based compensation model is useful for the projects having clarity from starting to the finishing of the project. It is a simple method, wherein a fixed amount of fee is agreed upon by both the client and the agency. Before coming to the

## MARKETING METRICS

 fixed fee amount, clarity is established about the expectations of both the parties. In this method, an advertising agency charges the fixed amount based on the level of time, efforts and other costs attached to the campaign. A profit margin is added to come at the final fee for the committed task. Such kind of model is suitable for limited scope and well-defined advertising campaigns.A general practice to calculate project-based fee is mentioned below as follows.

Assumptions: (a) Competition is not strong, (b) advertising agency is established and (c) target margin is 20 per cent.

Step 1: Calculate the hourly cost of each employee working on the project, excluding administrative people. Multiply the cost with 3 . It is the hourly rate for that employee.

Step 2: Estimate the number of hours each employee will incur for the project. Multiply the number of hours with the hourly rate of the employee.

Step 3: Add a buffer percentage to meet the contingencies that may arise during the completion of project. It could be 25 per cent.

> Project-based fee $=[(1+$ Buffer $\%) \times($ Cost basis multiplier $\times$ Hourly cost basis $\times$ Estimated number of hours $)]$

Note: The value of cost basis multiplier (i.e., 3) and buffer percentage (i.e., $25 \%$ ) can be reduced but at the stake of targeted margin. Also, the success of the model depends upon the accuracy of time taken and efficiency of employees to finish the task in time. In case of misjudgement, the cost incurred above the committed fee will be borne by the agency lest the profit.

Nova Ltd is a three-year-old name in the cosmetics industry in the western part of the country. In a move to expand their footprints pan India, Nova Ltd contacted O*S Adworlds Ltd, the leading advertising agency in the country, to run an awareness campaign for them. ƠS Adworlds Ltd is required to quote a fixed fee for the fullservice project. Help ƠS Adworlds Ltd in estimating the fee to be quoted for completing the project.

O\&S Adworlds Ltd starts its calculation by identifying the involvement of various departments and the number of experts required in completion of the project. Let's assume that project completion requires one expert each from the strategy, design, production and communication departments. That makes four experts in all who will dedicatedly work on the project. The next step is to estimate the number of hours each expert will spend on the project at different stages of the campaign (refer to Table 23.3). The next step is to calculate total hours, hourly cost of each expert and rate. After considering the buffer percentage, apply the formula for calculating project-based fee for each department. Finally, the fees for all the departments are

Table 23.3
Calculating Project Fee Quote by O\&S Adworlds

|  | Department Item | Strategy | Design | Production | Communication |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Discussion | 6 | 4 | 2 | 3 |
|  | Planning | - | 20 | - | - |
|  | Development | - | - | 40 | - |
|  | Content | - | - | - | 25 |
|  | Launch | - | - | 6 | - |
|  | Total hours | 6 | 24 | 48 | 28 |
|  | Hourly cost | 4,000 | 600 | 500 | 800 |
|  | Rate (hourly cost $\times 3)$ | 12,000 | 1,800 | 1,500 | 2,400 |
|  | Subtotal (hours $\times$ rate) | 72,000 | 43,200 | 72,000 | 67,200 |
| $\frac{\mathscr{C}}{\underline{\underline{1}}}$ | Buffer (25\%) | 18,000 | 10,800 | 18,000 | 16,800 |
| $\stackrel{\text { 岂 }}{ }$ | Total | 90,000 | 54,000 | 90,000 | 84,000 |
| 亮 | The project fee to be quoted by O\&S Adworlds Ltd $=90,000+54,000$ $+90,000+84,000=₹ 318,000$. |  |  |  |  |

added to calculate the total project fee to be quoted by O\&S Adworlds Ltd as shown in Table 23.3.

## HYBRID PRICING MODEL

As the name suggests, a hybrid model of pricing is the combination of two or more pricing models for charging a fee by the advertising agency. Keeping in view the pros and cons of various pricing models, sometimes, two models are clubbed together to estimate the final fee. For example, an agency may go for a commission-based pricing for TV, while it may adopt a retention fee model for generating the traffic online. Hybrid models are popular due to their flexibility and suitability for both agency and clients.

## CHECK YOUR UNDERSTANDING

1. The operating expenses of KLM Ad Agency are ₹ 850,000 per annum. Calculate the base fee per hour they must charge from their client to meet their operating expenses. Also, if five executives are working with the client for four hours a day, calculate the average rate that needs to be charged from the client to meet the operating expenses. You can make suitable assumptions regarding the number of working days and time.
2. Revisit the example of O\&S Adworlds Ltd and its client Nova Ltd. What will be the project fee if a. Cost basis multiplier is 1 and buffer is 15 per cent b. Cost basis multiplier is 2 and buffer 5 per cent

## Experience the Real Life

Contact an advertising agency in your city and enquire about the services it offers. If available, choose any two services and check how much the agency charges for each service. Also, ask for bifurcation of the fees the agency is charging for the service. If possible, you can further approach other agencies and create a compare and contrast table to gather better understanding of prevalent practices of advertising agencies.

## ADDITIONAL INSIGHTS AT A CLICK

1. How an Agency Makes Money from Advertising?

It is a very crisp article discussing the intricacies of fee charging mechanism of advertising agencies. It addresses the very popular query of the readers that how advertising agencies are making money. https://www.advertisingcrossing.com/article/900044453/ How-An-Agency-Makes-Money-From-Advertising/
2. How to Calculate Your Agency Fee Structure

The article pinpoints the fundamentals of advertising agency fee and various approaches to understand the agency fee structures. It also mentions the applicability of various fee structures by discussing various conditions under which a fee structure could be adopted.
https://blog.hubspot.com/agency/calculate-agencys-fee-structure
3. How Do Marketing Agencies Get Paid?

In this theory-based article, various approaches of advertising agency regarding agency fee are discussed. A simple comparison of each approach is possible by the reader, as merits and demerits of each approach are clearly explained.
https://lightyearmarketinggroup.com/how-do-marketing-agencies-get-paid/

## 24 <br> planning media for Best results


Suppose you want to communicate about your new 'kid's toothpaste' which is launching next month. You have kept a marketing communication budget aside, so you are relaxed that it will be taken care of. However, when you call a meeting of your marketing managers, you are surprised to see that there are a lot of questions that you need to answer, and setting a budget was just one piece of the puzzle!

Your colleagues want your views on where should you put your money, that is, on which media platform should you bet to achieve your marketing objective most efficiently and effectively. Which media platform would serve you the best: TV, radio, print, social media or OTT?

Even if you decide that you would communicate using all mediums, then you will have to answer 'in what ratio?' You would obviously know that all platforms can't be assigned an equal amount of your budget, but if it has to be disproportionate, then on what basis, media platform A should get more money than media platform B. What would be the criterion to assess/judge different media vehicles?

Another issue is that suppose you decide using TV, then the question would be on what channels? Guess what, there are more than 900 TV channels in India. Similarly, if you think you would use print, then would you go for magazine ads or a paid infomercial in the newspaper? Then questions like 'which magazine' or 'which newspaper' are waiting for you!

Suppose you decide that you would go for product placement in movies, and you go to Netflix for that purpose. Netflix would ask you which genre of movies you would prefer to put your product into, and if you ask them how many genres are there, you are in for a shock! Netflix has more than 75,000 ways of describing movies!

Then there is a question of timing: Will you run your message on all mediums at the same time or at different times? Similar questions would come up for all the mediums!

It is apparent that having a marketing communication budget is not sufficient; one also needs to know where to spend it, that is, on which media, how much and at what time. More importantly, you would also need to know how to judge different media vehicles or platforms so that you can decide which one would serve your marketing objectives.

That, in other words, is called media planning.
Every marketer has some budget, but those who win are the ones who use it wisely! That wisdom to plan for the media vehicles in accordance with the marketing objectives differentiates the boys of marketing from the men!

Grab a coffee and get ready to learn some basic techniques of media planning which will give you a kick-start in answering the aforementioned questions!


Whether you are operating a small, medium or large business, identifying a right combination of media to promote your product is always a challenge. The challenge exists due to a constraint on the availability of information and budgetary resources. Before selecting a specific media vehicle to promote
your product through a designated message, it is important to know the utility of each media vehicle in achieving the promotional objectives of the firm. More popular media vehicles such as TV, magazines and radio are generally classified as broadcasting and print media. Media planning is essential and helps in optimizing the effectiveness of your advertising campaign. It is the process of strategically selecting a mix of media platforms to place ads over a period of time in order to achieve an advertiser's campaign goals. Whenever media planners develop an advertising campaign, they are often looking for striking a right balance among three important elements, that is, gross rating points (GRPs), reach and frequency.

## COMMON TERMS ACROSS MEDIA PLATFORMS

If you are working in the field of advertising and more specifically media planning, it is pertinent to have an understanding of basic terms used in the domain. Following are some of such important terms used in advertising and media planning.

- Target audience: It is the demographic group that has been identified as the key consumer group for the brand. All marketing/advertising activity is concentrated on reaching/appealing to this group. For a product like electric shaver, a company such as Philips might be defining their target audience as men aged between eighteen and forty-five years of age. Clearly defining the target audience helps the company in appropriately designing all marketing and communication activities.
- Universe: It is the actual number of individuals within the defined target audience. As an example, in a given market for electric shavers, if 5 million men belonged to the age group of eighteen-forty-five years, then that 5 million will constitute as the universe. All further measurements of marketing efforts would be done by keeping this universe as a reference point.
- Spot: A spot is a single broadcast or insertion of an advertisement. For example, if a company promotes its brand through an advertisement at Sony channel before the starting of a popular comedy show, The Kapil Sharma Show, at 9.30 PM on Saturday night, we can say that the company has booked and used a spot with Sony Network. Typically, an advertising placement includes multiple spots.


## IMPORTANT TERMS AND CALCULATIONS IN POPULAR MEDIA

In spite of increasing acceptance of digital media in current scenario, TV or electronic media as well as newspaper/ magazines as print media are still holding their grounds. At the time of media planning, the media planner comes across various terms and related calculations to make an informed decision. Following subsections discuss the key terms used in the context of an advertisement/commercial on TV and in newspaper/magazine.

1. Terms and calculations for TV advertisements: Table 24.1 presents the key terms used while taking media planning decisions in the context of TV advertisements.
Seeko Electricals Ltd is planning to launch their new range of kitchen geysers during festival season. They have defined their target audience as housewives in the age group of twenty-one-fifty years. To promote their new product range, the company has decided to go for TV as media platform. The following schedule is constructed by the company by choosing popular TV channels for running the advertising campaign in order to influence the target audience (Table 24.2). The universe for the target audience is 7,800,000 and the total campaign cost is ₹110,000.

Table 24.1
Key Terms and Formulae for TV Advertisements

| Term | Understanding | Formula |
| :--- | :--- | :--- |
| Rating | The percentage of the <br> target audience who saw <br> the commercial <br> 1 rating point $=1 \%$ of <br> target audience | Rating $=\frac{\text { Audience achieved }}{\text { Defined universe }} \times 100$ |
| GRPs | The sum of all ratings <br> achieved in a campaign <br> GRP levels are generally <br> measured and reported <br> on a four-week basis | GRP $=\Sigma$ All ratings achieved |
| Reach or <br> coverage | The percentage of the <br> target audience who <br> saw the commercial at <br> least once during a given <br> campaign period | $=\frac{\text { Universe } \times \text { Rating }}{100}$ |
| erage persons | Average persons is the <br> number of people who, <br> on average, will be <br> exposed to each spot | Average persons |
| Frequency | The number of times, <br> on average, the audience <br> reached sees the <br> commercial during a <br> given period | Average frequency $=\frac{\text { Total GRPs }}{\text { Reach }}$ |
| Cost per <br> GRP or <br> Cost per <br> point | The cost of buying one <br> rating point | Cost per GRP or CPP $=\frac{\text { Cost }}{\text { GRPs }}$ |
| Cost per <br> thousand <br> (CPT) or <br> Cost per mille <br> $($ CPM) | The cost of reaching <br> 1,000 individuals within <br> the campaign target <br> audience | CPT $=\frac{\text { Cost } \times 100}{\text { GRPs } \times \text { Universe }} \times 1,000$ |

After the campaign, the company is looking for the answers to the following questions:

1. What GRPs did this campaign achieve?
2. What is the average frequency?

Table 24.2
Schedule and Response of Advertising Campaign of Seeko Electricals Ltd

| Programme | Rating | Unduplicated <br> Reach (\%) | Cumulative <br> Reach (\%) |
| :--- | :---: | :---: | :---: |
| ETC Top 20 | 19 | 19 | 19 |
| Big Boss | 14 | 11 | 30 |
| Hindi movie | 9 | 3 | 33 |
| KBC | 13 | 7 | 40 |
| Dance Plus | 21 | 8 | 48 |
| CID | 7 | 2 | 50 |
| TKSS | 15 | 5 | 55 |
| Patiala Babes | 18 | 8 | 63 |
|  |  | 63 | 63 |

3. What is the cost per GRP?
4. What is the cost per thousand?
5. If Patiala Babes was not the part of the schedule, how many GRPs would the campaign have achieved and what would the campaign reach have been?
To answer the questions, the first step is to carefully study the information shared about the campaign response and apply the suitable formula.
6. GRPs of the campaign

$$
\begin{aligned}
& =19+14+9+13+21+7+15+18 \\
& =116
\end{aligned}
$$

2. Average frequency $=116 / 63$

$$
=1.84
$$

3. Cost per GRP $=110,000 / 116$

$$
=948
$$

4. Cost per thousand $=[(110,000 \times 100) /(116 \times$

$$
7,800,000)] \times 1,000
$$

$$
=₹ 12.16
$$

5. If Patiala Babes is dropped, then

$$
\text { Revised GRP }=116-18
$$

$$
=98
$$

Revised reach $=63-8$

$$
=55 \%
$$

## 2. Terms and calculations for newspaper/magazine

 advertisements: Table 24.3 presents the key terms used while taking media planning decisions in the context of newspaper/magazine advertisements.Example: Parker Writing Solutions Ltd opted for print media to launch its new range of high-end roller ball pens, targeting top male executives of the corporate sector. The company placed the print ad in the special edition of popular business magazine 'Business Today'. If 550,000 men saw the print ad in Business Today and the universe for men is 1.5 million, what rating did the campaign achieve?

As the universe size is 1.5 million, and out of that, 550,000 saw the print advertisement, the rating for the campaign is calculated as follows.

$$
\begin{aligned}
\text { Rating } & =\frac{\text { Audience achieved }}{\text { Defined universe }} \times 100 \\
& =\frac{550,000}{1,500,000} \times 100=36 \%
\end{aligned}
$$

Table 24.3
Key Terms and Understanding for Newspaper/Magazine Advertisements

| Term | Understanding |
| :--- | :--- |
| Circulation | The number of copies each edition sells |
| Readership | The total number of readers for each title |
| Composition | The number of readers per title who fall into our target <br> audience-expressed as a percentage of the readership |
| Rating | The percentage of the target audience who saw the insertion <br> 1 rating point $=1 \%$ of target audience |

## CHECK YOUR UNDERSTANDING

1. Goldwin Ltd is planning to broadcast 10 radio spots to promote its spices at a cost of $₹ 10,000$ each for the Delhi market.

| Item | Value |
| :--- | ---: |
| Total number of spots | 10 |
| Rate per spot | $₹ 10,000$ |
| Universe | 827,900 |
| Rating | 2.10 |
| Reach | 86,930 |

From the above information, calculate total media cost, average persons, GRP, cost per point and cost per mille.
2. Mr Rohan, General Manager-Media Communication, Max Media Ltd, is conducting a meeting of 20 trainees working in the media planning department. He wants to know the learning of the trainees after completion of 30 days with the company. Rohan gave following five questions to the trainees for a quick response:
a. 350 GRPs and $7.0=$ ? Reach

Average frequency
b. 80 per cent Reach $=$ ? GRPs and 5.0 Average frequency
c. 400 GRPs and

80 per cent Reach
d. 300 GRPs and 55 per cent Reach
$=$ ? Average frequency
$=$ ? Average frequency
e. 350 GRPs and $=$ ? Average 60 per cent Reach frequency
Can you answer the above questions quickly?

## Experience the Real Life

Visit your local radio station and try to contact the person in-charge for marketing. Try to enquire about the reach of the radio station and how they calculate it. Also, ask for the rate chart for booking a spot on the radio channel.

## ADDITIONAL INSIGHTS AT A CLICK

1. A Beginner's Guide to Media Planning \& Buying The article is suitable for all those who wish to reach and communicate with their target audience in an efficient manner. It is also suitable for the readers looking to make a career in media planning or buying. https://mediatool.com/2018/04/18/a-beginner-s-guide-to-media-planning-buying/
2. Media Formulas

This particular article is a ready reckoner and provides crisp understanding about all popular mediarelated formulae. All in all, it provides no nonsense and on-target information about media terms and its calculations.
https://radioconnects.ca/everything-audio/formulas/

## 25 нello: igitial media

A new FMCG company which has licensed some international brands of soaps, shampoos, shower gels and other toiletry products to sell in India recruited Ajay and Mohit as marketing heads of North India and South India, respectively.

All the products sold under the international brands were expensive, premium and meant for a niche! The target segment for these products was middleaged, upper-class and upper-middle-class, educated professionals and executives from urban areas.

Since the customers were almost equally distributed in North as well as South India, both Ajay and Mohit got identical marketing budget to promote the brands and the products. Obviously, there was a sense of competition between them.

When it came to the decision that which platforms to be used to promote the brand, Ajay and Mohit had different ideas.

Ajay was of the view that they should use TV channels and social media with high TRP rating because high TRP means larger number of audience and that would automatically not only cover the target but also build brand awareness in other segments, and that can translate into additional demand/sales. An issue with channels with high TRP is that they charge higher price from advertisers. Ajay was alright in spending that amount, even though it meant lesser ads because of limited budgets because Ajay thought
that the large size of the audience would cover for sales even though the ads will be fewer.

Mohit, on the other hand, did a quick market research with a sample from target customers and mapped their profiles with their media habits and with their likelihood to buy. He reached the conclusion that the most potential customers have a very different taste in terms of media habits than what one would observe in audiences of popular TV channels and social media platforms. So Mohit's opinion was to select TV channels and social media platforms not on TRP but the ones where the target customer is spending time.

Which strategy is more fruitful for the company?
In the next six months, Ajay ran out of budget with very little sales in his territory, while Mohit still had some budget left with him and his sales were almost double of Ajay, although in Ajay's territory brand awareness was higher than that of Mohit. What happened?

Since all the other things were almost same (target customer profile, size of market, marketing budget, etc.), the difference in performance was due to selection of media vehicles (TV channels and social media platforms). Since the media vehicle chosen by Mohit were talking to the target customers and the number of messages were more, it translated into sale,. whereas Ajay's selection of media vehicles which talked to a broader audience led to higher brand awareness in Ajay's territory. But since these were not the 'target customers', it did not convert into sales.

So to achieve your marketing objectives, selecting the right media platforms is critical. This chapter will help you in deciding which media vehicle would be a good choice for you!

[^13]With the growth of digital media, marketers are now having newer ways to get connected with their consumers and customers. Overall, the marketing communication options for the targeted audience could be classified into three categories, namely paid media, owned media and earned media. Jointly, all the three categories create a strategic framework, that is, POEM framework. This framework helps in organizing one's digital marketing strategy. In other words, a POEM framework is useful in taking strategic decisions related to marketing communication mix in the digital arena.

Organizations use the POEM model to drive brand awareness, distribute content, engage prospects and guide them through the sales funnel. A marketing communication manager is expected to strike a perfect balance among the three types of media options to get the desired results.

## MARKETING METRICS

## THREE MEDIA IN POEM FRAMEWORK

The three media of POEM framework are paid, owned and earned media. Each of the media and its measurement technique is discussed in the next sections.

## PAID MEDIA

In paid media, an organization pays to the third party to advertise their content through sponsored ads on social media platforms, paid searches, display advertisements, pop-ups, etc. It includes any marketing communication activity that you pay for. Paid media method aims to extend the reach of your brand or content to those audiences that otherwise would not have known about it. Eventually, it enables to generate more traffic for the organization.

## MEASURING PAID MEDIA

Paid media can be measured by using traffic-conversionrevenue model. Here, traffic or web traffic is the number of
users visiting the website and the conversion is when a visitor to the website achieves a desired goal. This model discusses that the success of a campaign is measured by looking at various KPIs related to how much traffic is created, how many leads are generated and eventually revenue earned vis-à-vis the investment. For interpretation of results, key indicators such as average cost per click (CPC) through the campaign along with cost per acquisition and ROIs are also considered. To clearly assess the success of an ad campaign, objective is always treated as the benchmark. It is important to know in advance whether the campaign aims at generating awareness or increasing revenue. Table 25.1 displays some of the important key indicators and their meaning.

Redo Ltd is considered as a prestigious watch brand since last 50 years. Recently, they planned to enter into the field of digital marketing to promote their latest range of watches. They bired DigiMark to run the advertising campaign of the company. The results of four digital advertising campaigns of Redo Ltd across various performance indicators are shown in Table 25.2. The vice-president of marketing at Redo Ltd is interested in knowing the relative success of each campaign. Analyse the results and identify the order of success of the campaigns at the three decision levels.
Referring to the calculation formulae given in Table 25.1 and information shared in Table 25.2, following conclusions regarding the four advertising campaigns can be shared.

## At Decision 1

It is a traffic monitoring-related decision. As CPC of campaign A is lowest at $₹ 194$, it could be considered as the best campaign so far, while campaign C is least promising. The order of success of campaigns at decision 1 is $\mathrm{A}>\mathrm{D}>\mathrm{B}>\mathrm{C}$.

Table 25.1
KPIs under Paid Media

| KPI | Meaning |
| :---: | :---: |
| Total cost (₹) | Total cost incurred to run the campaign. |
| Traffic Monitoring KPIs-What Is This? |  |
| Impressions | Number of people who have seen your ad. |
| Clicks | Number of people who have clicked on your ad after seeing it. |
| Click-through rate (CTR; \%) | A measurement in which a percentage is assigned to how many people click your ad versus total number of impressions. <br> Clicks $\times 100 /$ Impressions |
| CPC (Average ₹) | CPC is how much you're spending on a per-click basis for the traffic you're driving through your account. <br> Total cost/Clicks |
| Quality score | This is used by Google to measure the relevance of your ads to the keywords you're targeting. Factors include CTR, landing page quality and relevance of the keyword to the ad. |
|  | Conversion Monitoring KPIs |
| Conversion | Clicks leading to leads, sign ups, app downloads or enquiries, etc. |
| Conversion rate (\%) | A measurement in which a percentage is assigned to a number of leads generated versus how many people click on your ad Leads generated $\times 100$ /Clicks |
| Cost per conversion (₹) | This is how much you're spending on a per-click basis for the traffic you're driving through your account. <br> Total cost/Number of leads generated |
|  | Revenue Monitoring KPIs |
| Sales | Number of leads turning into actual purchases |
| Cost per sale (₹) | Total cost/Number of visitors purchasing |
| Revenue (₹) | Total sales - Total cost |
| ROI (\%) | Revenue $\times 100$ /Cost per sale |

Table 25.2
Campaign Performance of Redo Ltd

| Performance <br> Indicator | Campaign <br> A | Campaign <br> B | Campaign <br> C | Campaign <br> D |  |
| :--- | ---: | ---: | ---: | ---: | :--- |
| Total cost (₹) | 196,000 | 285,000 | 480,000 | 116,200 |  |
| Impressions | 31,210 | 16,580 | 22,400 | 8,320 |  |
| Clicks | 1,010 | 390 | 605 | 250 |  |
| CTR (\%) | 3.24 | 2.35 | 2.70 | 3.00 |  |
| CPC (Average ₹) | 194 | 731 | 793 | 465 | Decision 1 |
| Quality score | 3 | 5 | 4 | 7 |  |
| Conversion | 152 | 43 | 42 | 12 |  |
| Conversion <br> rate (\%) | 15 | 11 | 7 | 5 |  |
| Cost per <br> conversion (₹) | 1,289 | 6,628 | 11,429 | 9,683 | Decision 2 |
| Sales | 18 | 8 |  | 5 | 10 |

HELLO! DIGITAL MEDIA

## At Decision 2

It is a conversion monitoring decision. As cost per conversion of campaign A is lowest at $₹ 1,289$, it could be considered as the best campaign so far, while it is extremely high at 11,429 for campaign C . The order of success of campaigns at decision 2 is $\mathrm{A}>\mathrm{B}>\mathrm{D}>\mathrm{C}$.

## At Decision 3

It is a revenue monitoring decision. As the ROI of campaign $D$ is highest at 370 per cent, it could be considered as the best campaign. The order of success of campaigns at decision 3 is $\mathrm{D}>\mathrm{B}>\mathrm{A}>\mathrm{C}$.

## OWNED MEDIA

Owned media is related to the content on which you have ownership. Anything you create and publish on a channel you own and use it to generate awareness and build user engagement falls under owned media. Organizations using owned media follow the pull marketing strategy to reach out their customers. Under owned media, organizations have full control over the content and the way it is presented. It offers content-based value to the audience and let the audience decide about the time of action as per their convenience. The value-driven content often acts as a catalyst for earned media. Owned media examples include your websites, blog sites, social media channels, email marketing, word-of-mouth marketing (e.g., referral programme on your Twitter handle) or anything you publish on a web property.

## MEASURING OWNED MEDIA

For measuring owned media, several metrics are used. Most of the metrics are related to the social media channels such as your Facebook page, Twitter account and YouTube channel (Table 25.3). The measurement of such owned media is possible using the analytics platform of the social network you are adopting or dedicated platforms like Google or Adobe Analytics.

Table 25.3
KPIs under Owned Media

| Owned <br> Media | Key Indicators Used in Measurement |
| :--- | :--- |
| Website, blog | Page views, unique visitors, duration of visit, number <br> of people shared or liked your content, CPM, CPC, <br> impressions |
| Mobile <br> marketing | Initial engagement: Clicks to call, clicks to store locator, <br> clicks to offer, clicks to app download, clicks to microsite <br> Conversions: Sales, coupons redeemed, email or SMS <br> sign ups, request for information, poll or survey <br> completed, videos viewed |

(continued)

| Owned <br> Media | Key Indicators Used in Measurement |
| :--- | :--- |
| Facebook | Total likes, number of unique customers looking at <br> your content (through unpaid distribution), impressions <br> (number of times a post from your page is displayed), <br> engaged users (number of people clicked on your post), <br> engagement rate (Number of people acted on your post <br> $\times 100 / N u m b e r ~ o f ~ p e o p l e ~ w h o ~ s a w ~ y o u r ~ p o s t), ~ c o s t ~ p e r ~$ <br> mention (Total amount spent on ad campaign $\times 1,000 /$ <br> Impressions), cost per engagement (Total amount spent <br> on ad campaign $\times 1,000 /$ Post engagement), cost per <br> view (Total amount spent/3-second video views) |
| Twitter | Followers (number of direct audience), completion rate <br> (number of people who have completed viewing full <br> video), cost per engagement, cost per view, CPC, CTR, <br> impressions |
| YouTube | Views (only 7-10 seconds or more view is counted), <br> subscribers (number of people signed up to receive <br> content), likes/dislikes (an indicator of content value), <br> favourites, sharing, video view rate (Number of times a <br> video has been viewed/Number of impressions), cost per <br> view (calculated for all 30 seconds or more viewings) |
| SlideShare | Followers, views, comments, downloads, shares |
| Pinterest | Followers, number of boards, number of pins, likes, <br> repins, comments, impressions, clicks, engagement rate, <br> cost per mention, cost per engagement |
| Cost component includes cost of web hosting, designer/developer, <br> content creator(s), themes, domain, plugins |  |
| Page views, unique visitors, number of people shared or <br> liked your content, cost per mention, CPC, impressions |  |

Note: The list is not exhaustive and a greater number of media options and key indicators may be included.

A success situation for an ad campaign using owned media mix could be a combination of getting a greater number of unique visitors/followers more downloads or sharing, lower
cost per view, higher number of completion rate, higher video view rate, etc. Do remember that nothing is paid to promote a brand under owned media, and the growth is organic in nature. In order to understand monetary relation of owned media, look at the following example.

Suppose you organize a free webinar on the topic of mobile phone repairing. Your target customer group comprises of mobile phone repair technicians. To attend the webinar, the participant has to register for free by clicking on the link and fill in details, including name, contact number, emails and location, along with a permission to allow sales team representatives to contact them. During the webinar, you promote mobile phone repairing kits (₹ 4,500 per kit, including 40\% margin). The total cost of webinar (including advertisement spend, design cost and actual presentation cost) is ₹50,000.
Few questions that can be answered from the available data (Table 25.4) are as follows:

- ROI from the campaign $=(20,2500 / 50,000) \times 100=$ 405\%

Table 25.4
Details of Webinar-based Revenue across Owned Media

| Owned <br> Media <br> Used | Webinar <br> Link <br> Clicked | Registered | Actual <br> Attendees | Enquiries <br> (Online <br> Connect) | Enquiries <br> (Sales <br> Team <br> Connect) | Sales <br> (in <br> Units) | Revenue <br> (₹) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Website | 1,100 | 350 | 90 | 40 | 40 | 20 | 90,000 |
| LinkedIn | 350 | 80 | 25 | 20 | 20 | 8 | 36,000 |
| Facebook | 650 | 120 | 15 | 10 | 35 | 12 | 54,000 |
| Twitter | 410 | 35 | 15 | 5 | 5 | 4 | 18,000 |
| Email | 190 | 15 | 5 | 1 | 4 | 1 | 4,500 |
| Total | 2,700 | 600 | 150 | 76 | 94 | 45 | 202,500 |

- Number of qualified leads generated 600 registered participants and lead to sale conversion rate (across owned media) $=(45 / 600) \times 100=7.5 \%$
- Quality of lead (from the profile of registered participants)
- Contribution of each promotional channel can be compared on various parameters


## EARNED MEDIA

Earned media is about that content of your business which others create and distribute, and you don't pay for it. It is also stated equivalent to publicity. It is also termed as a buzz created about the brand outside that brand. Earned media is neither created nor paid by the company. So earned media is organic and unpaid. It includes all the publicity that is generated through recommendations and word of mouth. It is considered the most credible form of media, as it is user generated. Once positively created, it can do wonders for a company. Value of earned media totally depends upon the quality and attractiveness of the content. Although it is difficult to collect the information about earned media, it is still worth an effort. Examples of earned media include likes, shares, mentions, retweets, referrals, social posts, reviews and news.

## MEASURING EARNED MEDIA

Earned media is measured in terms of earned media value (EMV). Calculating EMV requires using several metrics. Various methods are proposed to calculate EMV, but none of them is considered as accurate. It is the dilemma associated with calculation of EMV that in turn questions whether to actually consider EMV or not. The answer is always yes. Some of the proposed methods are as follows.

## Method 1: Reach and Conversion

EMV $=$ Impression $\times$ CPM $\times$ Conversion factor
Where
Impression $=$ Number of times the ads have been seen by user
CPM $=$ Cost per mille or Cost per thousand impressions is the amount the advertiser must pay for every thousand impressions served
Conversion factor $=\mathrm{A}$ factor depending on the use-case or person doing the conversion to help align the results with the brand needs

## Method 2: Non-paid Impressions Based

EMV $=$ Non-paid impressions $\times$ Default CPM (base of what you usually pay for other media)

Method 3: Organic and Viral Impressions Based

EMV $=$ (Organic and viral impressions over last 30 days $\times$ Average CPM of ads) $\times$

Average customer lifetime value

## Method 4: Customer Touches Based

Direct revenue EMV = (Percentage of customer with at least one touch on social media/Average number of touches) $\times$ Average customer lifetime value

Although often discussed, usage of above methods to calculate EMV is still questionable due to possibilities of manipulation.

Some more metrics are suggested to be considered to come at a more concrete interpretation of EMV. These metrics are as follows.

1. Website referrals: It reports incoming traffic on a website as a result of clicking on a URL on some other site, which is known as a referring site.
2. Mentions: It reports which media outlets and social media users mention your brand and products.
3. Message resonance: Message resonance reports whether your most desirable key messages are included in media coverage.
4. Share of voice: Share of voice tracks, typically in percentage form, how much conversation is happening about one brand versus another.
Suppose Headstart Ltd, a head-hunting company, earns
$₹ 30$ by an ad campaign, and the ad receives 7,500 organic impressions during last 30 days. Calculate the EMV for Headstart Ltd if the given average CLV is ₹900.

For calculating EMV, we first calculate CPM, that is, cost per
$=(30 / 7,500) \times 1,000$
$=$ ₹ 4
Now, EMV
$=($ Organic impressions over last 30 days $\times$ Average CPM of ads) $\times$ Average CLV
$=(7,500 \times 4) \times 900$
$=₹ 2,700,000$

## CHECK YOUR UNDERSTANDING

1. Latest.com is a venture for sharing latest and updated information with the subscribers about current events happening in their city. The digital marketing team of latest.com launched an advertising campaign and reached out to 1,000 people, 150 people signsup for receiving information about latest launches and out of them 5 users buy the subscription. Given CPC is ₹20, calculate cost per lead and cost per acquisition.
2. Hoodspot.com earns $₹ 700$ by an ad campaign, and the total number of impressions that the ad received is 80,000 . Calculate CPM.

## Experience the Real Life

Identify an educational institution in your town that is using digital platforms to promote their educational programmes. Take permission to analyse their POEM strategy. Share your analysis with the institution to confirm the results.

## ADDITIONAL INSIGHTS AT A CLICK

1. Paid Media, Owned Media, Earned Media: Examples and Tips to Succeed with Each
The article highlights the differences between paid, owned and earned media, including the advantages and disadvantages of each type. It also mentions the examples of companies that use paid, owned and earned media channels.
https://referralrock.com/blog/paid-owned-earnedmedia/\#owned

## 2. P.O.E.M. Customer Acquisition Model

This wonderful blog presents a clear understanding of various media available under POEM. It also shares useful tactics for the companies that can be used to get promising results.
http://www.branddigital.net/strategy-leadership/p-o-e-m-customer-acquisition-model/
3. How to Calculate CPM, CPC, CPA, CR, eCPM, eCPC, eCPA, and ROI
It is a must-read article that specifically describes various matrices used under POEM framework. It provides all the basic formulae and related understandings.
https://headerbidding.co/calculate-cpm-срс-сра-ecpm-ecpc-ecpa-roi/

## 26 when click нәрpens!


Manoj graduated in arts in 1986 from a local college in Gwalior, which is a small city in Central India. Manoj was a sharp guy who was hungry for success, but being from a lower-middle-class family, he was not exposed to modern-day education and skills. His father was a tea shop owner and could not afford to send Manoj for postgraduation and asked him to join the family business. Manoj agreed and with his strong interpersonal skills built good relations and grew the tea business and now he runs four tea joints in the city and two in the state capital, Bhopal. Manoj's tea joints are known for experimenting with and launching new flavours of tea. As always, Manoj was seeking more growth and started investing into marketing his tea joints on FM radio and in local newspapers.

Recently, a customer and a friend of Manoj who could sense the potential and hunger in Manoj suggested that be should consider using digital marketing to grow and expand his business further. Manoj was aware of the Internet and what it is about, as he himself was on social media like millions of us in India. However, he never thought of something like marketing his tea business on the Internet. The idea struck Manoj, and he tried to learn about marketing on the Internet but could not understand much because of the technical terms involved. However, he could understand that it has huge potential and the world is shifting to marketing on the Internet.

He approached a friend who was into digital marketing and told him about his interest in marketing on digital platforms. His friend asked him a few questions about his business, what he wanted to achieve with digital marketing and about his marketing budget. He then made a plan and presented it to Manoj which Manoj could not understand properly because of the jargons (again). However, not to show his ignorance, Manoj agreed and gave him the green signal and the money. Digital marketing started!

After a few weeks, Manoj could sense that there were more and different customers who were coming to his tea joints and the sale had picked up! He thought that it was great that digital marketing was working! He mentioned about this to his wife also but was surprised when his wife asked, 'How do you know that it is because of digital marketing, and since your friend is using multiple tools/platforms, how do you know which one is working and which is not? Will you continue to give him money without knowing that?' Manoj did not have an answer but was clear that these questions were apt and relevant!

Within the next few minutes, Manoj was on the way to his friend's office. He posed the same question to his friend as he entered his office. His friend replied, 'There are many things, Manoj, through which you can measure the performance of digital marketing platforms that we are using for your business, like the most popularly used CTR. And then you have...', but Manoj interrupted; this time, he was not shying away. He said, 'No, no, no, not like this! I don't know what abbreviations like CTR are all about! Explain to me properly!'

Manoj's concern is real and not baseless. All those who invest in digital marketing would like to know
whether it is working or not, plus which tool/platform is working and which is not! The decision to continue with the platforms or to drop them is based on this analysis only. Without this measurement, the entire money invested in digital marketing can go down the drain. This chapter introduces you to one of the most popular metrics that assesses the effectiveness of digital marketing-CTR-and how to measure it.

In the present scenario, digital marketing is a necessity, and a marketer has to consider it while creating an overall marketing strategy of the company. To understand the field of digital marketing and how it works, it is pertinent to know about some basic terms and the calculations associated with those. Once such calculations are made, the next step is to interpret the outcomes. This chapter specifically focuses on few of the basic terms, the related calculations and their interpretations. CTR is one such term used whenever you run a digital marketing campaign. Before we enter into the field of calculating CTR, let's first explore the three important concepts for understanding CTR, that is, impressions, clicks and CPM.

1. Impressions: The basic understanding of impression is that whenever an audience is exposed to the marketer's message, we will say that impression has been made. Impressions are not action oriented; on the contrary, these are mere exposure based. So whenever an advertisement or any other type of digital media appears in front of the user screen, an impression is created. For example, a page view of your website is an impression or opening up an email is impression. In case of offline advertisements, accurate quantification of impressions is virtually impossible. How will you calculate the exact number of passers-by who have
seen your hoarding advertisement near a flyover? In case of online advertisements, calculating impressions is relatively easy and accurate. Through impression tracking, it is possible to measure the performance of an online marketing campaign in terms of number of times a meme appears on a social media platform or the number of times a picture is accessed through Shutterstock.

FernsandPetals.com, a gifting company, sends a promotional email to 50,000 email addresses from the database. Due to technical reasons, only 45,000 reached to the respective email addresses. Out of the delivered emails, only 1,100 emails were opened. Calculate the impressions generated by FernsandPetals.com.

Although FernsandPetals.com sent a huge number of emails, but only a fraction of them is actually opened by the potential buyers. So FernsandPetals.com efforts created 1,100 impressions.
2. Clicks: The click got its name from clicking of a mouse. In case of online advertising, a click is counted when a user clicks the advertisement through a mouse pointer. The digital marketers are always interested in generating clicks on their advertisements or any other digital content. This is so because it is the starting point when any user of the Internet turns into a potential user for the promoted product or content. As clicks are traceable, that makes it easier to calculate the effectiveness of a digital campaign. When an Internet user clicks on a digital advertisement:
a. It is tracked by the website where the advertisement is displayed (or the seller of ad space)
b. It is then tracked by the advertiser (or the buyer of ad space)
c. The targeted webpage gets uploaded on user's device or system
d. User's visit to the webpage is registered and tracked further

Note: Few malpractices are prevalent that are related to clicks. These include malpractices such as an advertiser clicking on their own ad to improve results, an ad network clicking on an ad to hit targets and using bots for clicking on advertisement to artificially enhance the results. Using such practices could raise legal issues for the marketer.
3. Cost per mille: CPM is the amount you pay for generating 1,000 impressions. It is one of the preferred methods for finding out the cost of advertisement. As it is observable from the description of CPM, it is based on properly defining an impression. For example, to a digital display advertisement, Google defines an impression as at least half of the advertisement must be visible to the viewer and the viewer must be exposed to the advertisement for at least 1 second. Similarly, for a video advertisement, the minimum exposure must be for 2 seconds. It is important to note that for calculating CPM, only the number of exposures matters and the number of clicks on your advertisement does not matter. So if someone sees your advertisement on a website, you have to pay for it. The formula for calculating CPM is as follows.

$$
\mathrm{CPM}=\text { (Total campaign spend } /
$$

Number of impressions) $\times 1,000$

Mapdekho.com, a navigation app, wished to increase its footprint in the digital world. They paid ₹4,000 to a digital marketing company for generating impressions.

The efforts of the digital marketing company generated 840,000 impressions in a month. What will be the CPM impressions for Mapdekho.com?
The calculation for CPM impressions for Mapdekho.com will be:

$$
\begin{aligned}
& =(4,000 / 840,000) \times 1,000 \\
& =4.76
\end{aligned}
$$

Now let's try to understand the calculation through a different situation.

Example: Rajiu Ranjan, the digital marketing manager of Checkup.com, a health app, posts the promotional content of the company on three social media platforms, namely LinkedIn, Facebook and Instagram. The details regarding the campaign are mentioned in Table 26.1. Rajiu Ranjan wants to know which social media platform is generating most impressions.
The impressions for each of the social media platform are calculated as follows.

$$
\begin{aligned}
\text { Impressions: LinkedIn } & =2,500 / 75 \times 1,000 \\
& =33,333 \\
\text { Impressions: Facebook } & =2,000 / 51 \times 1,000 \\
& =39,216 \\
\text { Impressions: Instagram } & =1,500 / 66 \times 1,000 \\
& =22,727
\end{aligned}
$$

Now it is clear to Rajiv Ranjan that Facebook is generating the maximum impressions for the company Checkup.com.

Table 26.1
Promotional Efforts at Checkup.com

|  | LinkedIn | Facebook | Instagram |
| :--- | :---: | :---: | :---: |
| CPM | 75 | 51 | 66 |
| Cost | 2,500 | 2,000 | 1,500 |

After gaining a basic understanding about the impressions, clicks and CPM, we are ready to explore the field of CTR.

## CLICK-THROUGH RATE

While browsing a website, we come across a several links or display ads. Sometimes we click on those links or ads and go to a different page or view the advertised product. Here, CTR comes into picture. CTR is the ratio of the number of users exposed to a link or ad and the number who clicked on the link or ad to watch the content. CTR is expressed in percentage. So it is the percentage of clicks on a link or ad out of all the times that people saw that link or ad. CTR is primarily used for measuring success of a digital promotional campaign. The formula for calculating CTR is as follows.

> CTR $=($ Total number of clicks/
> Total number of impressions $) \times 100$

Where
Total number of clicks: All the users who have clicked the link
Total number of impressions: All the users who have viewed the link

So higher CTR implicates better performance. As per the industry standards, any promotional platform generating more than 2 per cent CTR is considered good. It indicates how well the target audience is responding to the marketing effort of the company. Here, a word of caution is that a higher CTR does not guarantee higher monetary benefits for the company.

In general, CTR can be defined as click-through divided by impressions. However, what counts as an impression differs depending on the context and is presented in Table 26.2.

Table 26.2
What Counts as an Impression for CTR

| Context |  | Meaning of Impression for CTR Calculation |
| :--- | :--- | :--- |
| Search | Organic search <br> results | When one of your links loads on a search results <br> page |
|  | Search ads | An impression is recorded each time one of your ads loads |
|  | Display ads | An impression is counted any time an ad loads |
|  | Video ads | An impression is recorded each time a video plays |
| Social | Twitter | When a tweet is loaded |
|  | LinkedIn | If a post is at least $50 \%$ onscreen for 300 milliseconds |
|  | Social media ads | An impression is counted any time an ad loads |
| Email | Email | As the mail opened |

CTR is an important metric used for $A / B$ testing. Suppose you are a creative director at an ad company and you get an assignment to create an ad for a soft drink. You create two ads and wish to know which one is better. Here, you can float both the ads and whichever ad is getting more CTR may be considered as a better one. A good CTR also indicates a high level of trust of the users, as they are okay to click on the link, assuming authentic content at the other end.

To promote their newly launched travel website, the company etravel.com created two ads and posted on all social media platforms. The first ad was seen 500 times and was clicked on 15 times, while the second ad was seen 5,000 times and was clicked on 137 times. Help the company in identifying which ad is performing better.
On the face, it looks like the second ad is performing better as the number of clicks is more. But it is also important to see that the first ad got clicked 15 times out of 500 times. So there is need to calculate CTR.

$$
\begin{aligned}
\text { CTR (first ad) } & =(15 / 500) \times 100 \\
& =3 \%
\end{aligned}
$$

$$
\begin{aligned}
\text { CTR }(\text { second ad }) & =(137 / 5,000) \times 100 \\
& =2.74 \%
\end{aligned}
$$

The first ad is performing better for etravel.com as compared to the second.

## CHECK YOUR UNDERSTANDING

1. Lyka is a popular brand providing comfortable clothing solutions. Recently, the company decided to go digital and launched their app with the same name. Gaurav is hired as the digital marketing manager. As a strategy, he posted the promotional content of the company on three popular e-commerce platforms, P1, P2 and P3.

|  | P1 | P2 | P3 |
| :---: | :---: | :---: | :---: |
| CPM | 25 | 30 | 35 |
| Cost | 3,000 | 2,500 | 2,000 |

Help Gaurav to determine the best performing platform in terms of impression generation.
2. DressingSense Ltd is a company manufacturing and marketing formal wear for the corporate world. The company launched a three-week digital campaign to launch its brand Crest. The digital marketing team floated their advertisement on various business newsrelated websites and following results were observed.

| Website | Banner Type | Impressions <br> Booked | Impressions <br> Delivered | Clicks |
| :--- | :--- | ---: | :---: | :---: |
| BT.com | Fixed strip | 89,000 | 96,000 | 22,000 |
| FE.com | Fixed tab | 110,000 | 99,000 | 17,500 |
| Wion.com | Home page | 68,000 | 67,000 | 15,500 |
| Bloomberg.com | Fixed tab | 91,000 | 88,000 | 23,000 |

Analyse the information mentioned above and suggest the digital marketing team of DressingSense Ltd the best performing website from the angle of company's digital promotion campaign.

## Experience the Real Life

Visit a digital marketing training institute nearby your place. Meet the experts and request them to show how actually impressions, CPM and CTR are determined. Then cross-check whether their method supports your understanding about these concepts. Also see how they interpret various figures and their implications for the whole digital marketing campaign.

## ADDITIONAL INSIGHTS AT A CLICK

1. Guide to Calculate Impressions: Definition and Example
In this wonderful article, a step-wise approach is adopted to understand the concept of impressions and its relevance in the field of digital marketing. The content also includes few easy examples that reinforce the understanding of basic concepts related to determining impressions and CPM. https://www.indeed.com/career-advice/career-development/calculate-impressions
2. CTR Calculator (Click through Rate)

It is a crisp article with a straightforward approach to make readers understand about the concept of CTR and its relevance. Formulas for calculating CTR are presented in a creative way that generates the interest of the reader to follow the journey. Few example are also mentioned to make things crystal clear to the readers.
https://theonlineadvertisingguide.com/ad-calculators/ctr-calculator/

## 27 <br> measure the value of clicks


Both Swati and Tarun were fresh graduates and recently started their own joint venture chaiwai.com. The idea was to sell various varieties of tea leaves through their online platform. Being part of new generation, from the beginning they were very clear about using paid media to increase the traffic on their website. They had a logical presumption that more traffic will convert into more actual customers and eventually increase their profitability.

Tarun discussed his intentions with his school-time friend Suhas who had just joined as a trainee with a digital marketing company. Suhas told Tarun to open an account with Google Ads bid for the most appropriate keywords describing their business. With his limited knowledge, Suhas also suggested to set aside a budget for this activity. As per Suhas's suggestion, Swati and Tarun opened an account with Google Ads and set aside ₹ 15,000 . They set up their initial bid of ₹50 for every click on their ad. To their surprise, they straightaway got the bid and Google Ads placed their creative ad on the top of the list. As their ad was highly appealing, soon the traffic started generating and picked up the speed. Both were happy with the effectiveness of their efforts and started dreaming about future expansions.

Within a day, they received a message from Google Ads that they had reached the threshold of
their budget. They checked the delivered clicks and it showed 290, which is a good number for a single day. Now both were confused because they had almost used their budget, still the number of clicks was not substantial to promise a high conversion.

Both started introspecting what was not right. Was the bid amount too high? Could they save cost on bidding? How much should they pay for a click on their advertisement?

The present chapter aims to answer the queries raised by Swati and Tarun.


To promote their products, companies are using digital platforms. Now advertisements are run or displayed on various platforms such as search engines, social media websites, blogs and Google network websites. The main purpose of the marketer is to drive the user traffic to the website of the advertiser. For attracting the traffic, advertisers sometimes use paid methods and CPC is one such paid advertising term. In CPC, the advertiser pays a cost to the publisher, whenever there is a click on the advertisement. In simple terms, CPC price is the amount paid every time a user clicks on an ad. Suppose you are a dress designer, then you can promote your boutique or designs on Facebook. In such a case, you have to pay only when someone clicks on your ad and you owe nothing if only impression is generated. CPCs are paid campaigns with a clear objective to get maximum traffic on the advertiser's website. More traffic is directly proportional to more profitability for the company.

Whenever a CPC campaign is booked for promised clicks, the amount needs to be paid only when a click is delivered to the advertiser. So if the advertiser books 1,200 clicks for ₹ 16 CPC, then they owe $1,200 \times 16=₹ 19,200$ on delivery of clicks.

A CPC campaign ensures a concrete decision-making platform for an advertiser. It is so because there is a certainty of getting a user before the payment.

## MEASURING CPC

To measure CPC, the following simple formula is used.
$\mathrm{CPC}=$ Total cost or total amount spent/
Total number of measured clicks

Racer.com paid ₹ 60,000 for its promotional ad campaign on speed boats to run on Youtube.com. As a result of the campaign, the company received 300 clicks. What will be the CPC for racer.com?
CPC for racer.com is calculated as:

$$
\begin{aligned}
& =60,000 / 300 \\
& =₹ 200
\end{aligned}
$$

Now assume a situation that your ad is highly appealing to the users and, as a result, generating more clicks. In such a situation, you might get the traffic sooner than expected (with higher CTR) and might consume your budget at a faster rate. So it is advisable to be ready for the impact of faster traffic generation.

In certain arrangements, when real-time bidding ad servers such as Google Ads are used, the advertiser has to pay different amount with each passing click. In such a case, an average CPC needs to be calculated. Average CPC is the average an advertiser spends for every ad click. It is calculated as follows.

Average $\mathrm{CPC}=$ Total cost of clicks/
Total number of measured clicks

If you are an advertiser interested in launching a CPC campaign through a search engine or website publisher, then you must understand the two types of popular CPC models, namely flat rate based and bid based. These are explained as follows.

1. Flat rate based: In this model, the publisher of the ad pre-decides the amount to be charged from advertisers for their CPC campaign. This fixed amount depends upon several factors such as rate of similar ads on other platforms or the usage of similar keywords by other advertisers. The formula for determining flat rate is as follows.

$$
\text { Flat rate }=\text { Cost per impression } / \% \text { CTR }
$$

2. Bid-based: Many preferred advertising platforms such as Google adopt a bid-based model. The model is most efficient for a situation when advertisers set the duration for a campaign and the maximum amount they want to spend per click. The amount fixed per click is considered as their bid. Th following formula is used by Google Ads to calculate CPC.

> Actual $\mathrm{CPC}=($ Competitor ad rank/
> Your quality score $)+0.01$

So your price is calculated on the basis of ad rank of the advertiser below you divided upon your quality score and then 0.01 is added to the value. Let's consider the following information to understand it better. Following sections will elaborate the concepts such as bidding, quality score and ad rank, as mentioned in Table 27.1.

Table 27.1
Calculating Actual CPC

| Advertiser | Max Bid <br> $(₹)$ | Quality <br> Score | Ad <br> Rank | Actual CPC <br> $(₹)$ |
| :--- | :---: | :---: | :---: | :---: |
| Alpha | 3 | 10 | 16 | $(14 / 10)+0.01=1.41$ |
| Bravo | 5 | 4 | 14 | $(12 / 4)+0.01=3.01$ |
| Charlie | 7 | 2 | 12 | $(10 / 2)+0.01=5.01$ |
| Tango | 9 | 1 | 10 | Highest CPC |

## KEYWORDS

In digital marketing, keyword is a phrase that determines the time and appearance of your advertisement. Simply, these are the words that are typed in the search engine while making a query. Ideally, a marketer has to use such keywords that match the user's query in the best way. If you are partnering with Google search and its partner sites, the ads are being displayed on the basis of search query. You have to provide a list of keywords to the Google Ads account and set up a CPC you are ready to pay. As much of the onus is on keyword, one has to select it very carefully. Keywords can be of different types such as:

1. Short-tail keywords: Consists of one or two words, broad, generic but ambiguous, high search volume, for example, cricket bat
2. Middle-tail keywords: Consists of three or four words, relatively more specific, lower search volume, for example, cricket bat for professionals
3. Long-tail keywords: Consists of four or more words, more detailed and very specific, lowest search volume, for example, heavy cricket bat of willow for professionals
Although it sounds easy, to appear on priority search result, a website has to surpass complicated algorithms of search engines. These search engines use an array of factors such as
website credibility, how often the site publishes and keywords used on the website itself to filter the relevant search result. That is the reason why the selection of a keyword is a challenging task. As a yardstick, you have to remember that your keyword should be relevant to your brand and something that a user might use to search for your product.

## BIDDING

When you create an ad, you set up a bid. A bid is the cost that an advertiser is willing to pay for the ad. This bid is one of the factors used by Google Ads to decide whether to push your ad or not and how to rank you ad. As per previous discussion, CPC bid is the maximum cost an advertiser is willing to pay for getting a click. The bidding changes on a continuous basis, as it depends on the searches and the bidding price of the competitors. Competitors influence as they are also bidding for the same keywords for which you are bidding. The bidding mechanism could be understood through the following example.

Example: Let's assume that you are the owner of expressions.com, an online gifting company. You set up your initial bid at $₹ 11$. This will be the maximum amount you are willing to pay. Now, if your bid amount places your ad at the top of the list and the next highest bid by the advertiser below you is ₹9, then you will also pay ₹9. Consider another situation. Your initial bid is ₹ 11 , and you end up paying ₹11, then it can be interpreted that the advertiser below your ad is also using high bidding price. Here, one of the strategies could be to lower your bid to suppose ₹7, and it could happen that your next lower bidder is at ₹2. In that case, you can save a lot of money by paying only ₹2 for the bid. Although your ad will be placed at number two, considering cost-benefit analysis, this decision is wise.

## QUALITY SCORE

A quality score is defined as 'Google's rating of the overall user experience that your ads and landing pages provide when users search for your keyword(s)'. It is represented on a scale of $1-10$, with 1 being the lowest and 10 being the highest. A higher quality score increases the success of your campaign. A quality score basically determines the usefulness of your advertisements and landing page for the user. Remember that higher the quality score, lower the CPC.

There are three factors that affect your quality score, including the following.

Factors affecting quality score
Expected CTR: How likely is someone to click on your ad when Google shows your ad for the keyword they search for?

Ad relevance: Is the ad relevant to your keywords? Does it make sense for the ad to appear when someone searches for a particular keyword?

Landing page experience: Does the information on the landing page correspond to what the ad is offering, and vice versa?

A quality score decides when and where your ad will appear, and it also has an impact on the price of an ad. Also, it determines the position of an ad. We know that higher we appear in the search, more we get noticed by the search engine users. Ad ranking is calculated by Google by using the following formula.

Ad rank $=\operatorname{Bid} \times$ Quality score

## CHECK YOUR UNDERSTANDING

1. Following is the information related to three advertisers, namely Ben, Ken and Zen:

| Advertiser | Max Bid (₹) | Quality Score | Ad Rank |
| :--- | :---: | :---: | :---: |
| Ben | 2 | 9 | 14 |
| Ken | 5 | 6 | 6 |
| Zen | 8 | 4 | 11 |

Calculate the actual CPC and discuss the lowest one.
2. Ping.com paid ₹ 175,000 for its promotional ad campaign of instant messaging app to run on Facebook. As a result of the campaign, the company received 1,475 clicks. What will be the CPC for Ping.com?

## Experience the Real Life

Go and meet a digital marketing trainer in your city and see how actual bidding works on Google Ads. Also try to understand the working of Google AdSense. Can you apply your understanding to reduce CPC for a company in your surrounding looking for digital presence?

## ADDITIONAL INSIGHTS AT A CLICK

1. What Is Cost per Click (CPC)? Definition, Calculation, Advantages \& Examples
This article discusses a popular metrics used in digital marketing, that is, CPC. The content in this article will help the reader in understanding the concept of CPC, its calculation and its implementation in a digital marketing campaign. The read also explores the field of quality score and its utility for a business.
https://www.toolbox.com/marketing/programmatic-advertising/articles/what-is-cost-per-click-cpc/
2. Google Quality Score: How Quality Score Works with Google
It is a comprehensive guide to understand the concept of quality score. The article explains how Google is using quality scores to enhance the user experience. It also highlights the implication of good and poor quality score for an advertiser. https://www.digitallogic.co/blog/quality-score/\# How_Is_Google_Quality_Score_Calculated

## MARKETING METRICS

## 28 converting tiaficic into soles


Rashi is a first-generation entrepreneur. After completing her graduation from a renowned fashion designing institute of the country, she decided to start her own business of customized bridal wear and accessories. She opened her retail outlet in Southwest Delhi. She tried all the traditional media options available in her budget to get the customers. Very soon, Rashi realized that there was an urgent need to expand the customer base to meet her ends. She consulted her school-time friend Rohini who suggested that Rashi must create a website at the earliest and run a digital campaign to promote the business. The suggestion looked fine to Rashi, and she immediately hired a website designer who demanded a hefty amount for the quick completion of the assigned task. Within short period of one month, the website www.RCreations.com was ready. She wanted people to visit her website and like the bridal wear designs by clicking on the heart button at the right-hand corner of each image. She was hopeful that the visitors who like the images might turn into future customers.

Now, it was time for Rashi to shed some more money to Digimark Ltd with a task to run the digital ad campaign with an aim to increase the number of visitors at her website. All went well so far, but the moment data-related ad campaign and the site visitors started coming, Rashi got confused about how to interpret it. One thing was clear that she made huge investment out of her budget and wanted to know whether it was invested for a good reason. Was it worth
to take that decision to go digital? Was she getting the required business against the money spent? How many conversions was she getting for each rupee spent? Were conversions equally valuable for her business?

Above questions started haunting Rashi, and she was looking for some logical answers about the worth of her decisions.

The present chapter tries to solve all the questions arising in the mind of Rashi regarding success of www.RCreations.com.

If you are connected with the field of digital marketing, conversion is considered the most sought-after term. Depending upon the goal of the digital marketer, a conversion can have different interpretations. Suppose you have launched a website, then what are your expectations from it. These expectations are considered as desired goals of your site or business. So conversion might interpret into getting online sales for your displayed products, quality leads of potential customers, desired number of potential customers signing up to your email invitation and the expected number of completed forms from the target group.

As defined by Google Ads, we state a conversion as
An action that is counted when somebody interacts with an ad (e.g., when they click a text ad or view a video ad), and then they take an action you have defined as valuable to your business, such as making an online purchase or a phone call to your business from their mobile phone. ${ }^{1}$

To reiterate the understanding of conversion, we must remember that conversion does not always take a monetary form,

[^14]but it is something that is defined by the business. Few more examples include booking an appointment or downloading an image or song. So the scope of conversion is vast, and its understanding varies from business to business. A high conversion rate is a clear indicator of the acceptability of your value offer by the potential customer. Also, it indicates that potential customers are supported by the system to avail the value offer of marketer. High conversion means appropriate marketing strategy as well as web design. Ideally, all the businesses desire to get maximum conversion, but it's a challenging task. It is due to varying criteria of defining a conversion. If a company is getting a low conversion rate, it indicates that

1. The web page designing is faulty, as it is creating a hurdle for successful completion of task.
2. The value offer by you to the target audience is unacceptable.
So it is important to know about conversion-related information, as it tells you about how much you are getting in return of the money spent. It indicates ROI of the digital marketing efforts.

Conversion-related information need to be tracked to measure the correct performance of your campaign. There could be multiple factors affecting the conversion rate and eventually impacting your ROIs. Conversion tracking can provide insight about few important issues such as the following:

1. The number of total conversions
2. The profitability of a conversion
3. The cost per conversion
4. The most prominent source of your web traffic
5. The exit status of your site visitors
6. The relevance of your advertisement

Conversion tracking helps a business in getting all the relevant information about its digital platform's performance and provides a chance to correct the strategy, if required.

Conversion rate optimization (CRO) is one such process used for improvement in the conversion rate. CRO aims at increasing the conversions without increasing the traffic on your website. It works on your existing visitors and increases the conversions through them. $\mathrm{A} / \mathrm{B}$ testing is one of the popular and easiest techniques under CRO. All you have to do is to create two variants of your web page or landing page and see which variant is generating more conversions. So different combinations of images, call to action buttons and headlines could be tested, and the most effective one could be selected to reap out the maximum output. Raising conversion rate means growth to your business.

## CONVERSIONS AND RELATED METRICS

With a basic understanding from the discussion so far, we are ready to explore further. In this section, we try understand various conversion-related metrics and their interpretations for a business for creating a better conversion strategy.

## CONVERSIONS

Conversion is defined by specific business goals. This is the total number of conversions you've received to date on a specific goal, which you have identified as a conversion in your ad campaign. It is a measurable action of the user having an important value for the business.

Jaago.com is a social awareness website. They put posts on their home page about latest social issues, with an aim to make people aware about them. They have created a mechanism on their webpage that whosoever supports their cause has to click on the green button. So for Jaago.com, each time a green button is clicked, a conversion happens.

## CONVERSION RATE

This shows you how many users visited your website or landing page and then converted, compared to the total number of visits to that page in a given time frame. It is represented as a percentage. In simple words, it represents that out of all users, how many users are doing what you want them to do. It is calculated as follows.

> Conversion rate $=($ Total conversions/
> Total number of visitors $) \times 100$

Continuing with the Jaago.com example, assume that during last month, 23,450 users visited the home page of the website Jaago.com and 1,910 clicked on the green button. What will be the conversion rate of Jaago.com?
The conversion rate of Jaago.com is calculated as

$$
=(1,910 / 23,450) \times 100
$$

$$
=8.14 \%
$$

The conversion rate talks about how well your web pages are performing. A poor conversion rate indicates the problem with the web page or the value offered. So till the time you identify the problem, you should hold your spending on ads. The wonderful thing about conversion rate metrics is that it is flexible in nature and fits in to the specific requirement of a marketer. For example, we can calculate conversion rate for a specific web page, marketing channel, individual ad, keyword, etc.

Suppose a visitor of Jaago.com presses the green button multiple times; it will be treated as multiple conversions but in reality the visitor is only one. For this situation, the marketers use a different term, that is, click conversion rate, where the converted visitors are divided by the total visitors and the
whole is multiplied by hundred. In most of the cases, the two percentages are identical to each other. While interpreting conversion rates, the quality of data matters a lot.

Assume that during last week, 150 users visited Jaago. com with the conversion rate of 6 per cent and 9 of them pressed the green button accidently. What can you interpret form this situation?
In the first go, the situation appears to be good, but a deep look into the information will reveal that 6 per cent of 150 is 9 , and 9 are the accidental conversions. So we can interpret that the real conversion is nil. In this case, we have to relook on the web page of Jaago.com. But if we assume that the number of visitors is large such as 20,000 with 6 per cent conversion rate and 9 accidental conversions, then the conversion rate will drop to 5.95 per cent. Although the 5.95 per cent is relatively lower conversion rate than 6 per cent, this information is much more dependable.

Note: Conversion rate provides a handy assessment about our digital campaign success but still does not convey the complete picture. A good conversion rate can be bad for business if it is not converting into sales.

## CONVERSION VALUE

It's important to understand that not all the conversions are of equal value to the company. It is utmost important to determine those conversions which are more valuable or profitable to the company and those which are not. It is just like calculating which conversion is giving more profit to the company.

Assume that you are running a domestic help service through the website maid.com. The home page of the website offers a downloadable brochure, discussing the scrutiny procedure followed before recruiting a maid. Also, the home page
displays a toll free number for handling queries. From analysis, you determine that people who download the brochure of the company are more likely to avail your services. So in this case, you place more conversion value to a brochure download in comparison to a phone call.

## COST PER ACQUISITION

It is the amount you pay to get one conversion. It lets the marketer understand which digital channel, vendor or ad is driving the most cost-efficient performance. It is calculated as follows.

Cost per acquisition $=($ Spend $/$
Total number of customers acquired)

Ludo.com is a gaming company. With a view to increase the number of downloads, the company spent ₹210,000 on advertising, out of which they spent $₹ 140,000$ and ₹ 70,000 on Instagram and Google ads, respectively. The company is able to get 700 downloads each through Instagram and Google ads. Calculate the cost per acquisition for Ludo.com.
The total cost per acquisition is calculated as

$$
\begin{aligned}
& =210,000 /(700+700) \\
& =210,000 / 1,400 \\
& =₹ 150
\end{aligned}
$$

On the other hand, Instagram cost per acquisition $=140,000 / 700=₹ 200$ Google Ads cost per acquisition $=70,000 / 700=₹ 100$

## TRAFFIC SOURCE

Many a time, for promoting our website or app, we invest a lot of money and use Google Ads for getting desired results.

One of the indicators that tells whether you should go for paid digital media options or not is checking your traffic source. If a lot of conversions are coming from organic traffic or referrals, then it is the right time to stop using money on these paid media advertising. On the other hand, if majority of your traffic source is paid media, then you have to start working towards optimizing your advertising ROI to get maximum value for your money.

## BOUNCE RATE

A bounce is when a visitor lands on your page and then leaves immediately without interacting with the page. It is the percentage of single page visits. So technically, if the visitor stays at the web page for less than the minimum prescribed

## MARKETING METRICS

 time, then it is counted under bounce rate, otherwise not. The minimum prescribed time might differ. For example, in the case of a blog, the minimum time for stay could be set as 10 seconds, while for other web pages, it could be 2 seconds. It is calculated as follows.> Bounce rate $=($ Total number of
> bounces $/$ Total visitors $) \times 100$

It is important to keep the bounce rate under control; otherwise, getting conversions will be impossible.

## EXIT PAGE

Exit page is one where the navigation path of the visitor ends, and they leave the web page. It is important to keep a check on the exit page-related information. The exit points indicate the areas where either the information is of no use to visitor or it is difficult to further process. An exit page analysis provides
important insights for continuous improvement in the performance of a website. It is worth mentioning that a visitor exiting your website might open a competitor's website.

## CHECK YOUR UNDERSTANDING

1. Razer Ltd is a popular brand providing men's grooming solutions, with a focus on the northern part of the country. To increase its footprint in pan Indian market, the company forays into digital marketing campaign. Razer Ltd ran three campaigns, namely A, B and C, and invested a lot of money into it. Jay, the marketing manager, receives the following information about each campaign.

| Performance Indicator | Campaign A | Campaign B | Campaign C |
| :--- | :---: | :---: | :---: |
| Total cost $(₹)$ | 196,000 | 285,000 | 480,000 |
| Impressions | 31,210 | 16,580 | 22,400 |
| Clicks | 1,010 | 390 | 605 |
| Leads | 152 | 43 | 42 |

Help Jay in calculating the conversion rate and cost of acquisition for each campaign. Which campaign is most successful for Razer Ltd?
2. Cricko.com is a cricketing website offering updated information about anything related to cricket across the globe. The website has an arrangement that if you click on a cricket bat displayed on the home page, you receive a fan-mail connect. Assume that during the last month, 15,000 users visited Cricko.com, with conversion rate of 11 per cent, and 19 of them pressed the green button accidently. Interpret the conversion situation for Cricko.com?

## Experience the Real Life

Visit a hybrid retail store such as Reliance Trends offering physical and online (Ajio.com) shopping experience. Meet the manager of the store and enquire about how they calculate conversions for both the modes and check the ratio of the conversions. Also, try if you can apply all the conversion calculations on physical retail store.

## ADDITIONAL INSIGHTS AT A CLICK

1. What Is Conversion Rate? How to Calculate and Improve Your Conversion Rate
In this article on conversion rate, a comprehensive approach is used to make the reader understand the concept. In a crisp way, all the nuances related to conversion rate are explained. Beautifully designed examples are also presented to make the reader apply the concept and interpret the results. https://disruptiveadvertising.com/conversion-rate-optimization/conversion-rate/
2. 9 Important Website Metrics You Should Track

The content in this article offers an insight about few important metrics that every website owner should track. The conceptual introduction of these metrics reinforces the present understanding of the reader about the conversion concepts. It also enhances the knowledge of the reader with an introduction of newer metrics.
https://www.hostpapa.in/blog/analytics/9-important-website-metrics-you-should-track/

## 29 interpeting web session



Masha joined as a trainee at a digital marketing company DG Communications Ltd. She had to report to Raghav, who was heading a project for their one of the most valuable clients. Raghav provided a system to Masha where lots of data of their client's website visitors was being shown on the screen. He told Masha to just study the information shown on the screen and prepare notes about her observations and left the cubicle. Having no clue what to do and what this data explained, she took help of another trainee Ravi, sitting in the next cubicle.

Ravi explained to Masha that the data was from Google Analytics account and was about how many users were visiting the client's website, how long each visitor was staying with the website, which pages of the website were viewed, what internal path was followed to reach other pages of website, etc. Masha quickly grabbed all the inputs from Ravi and prepared a small report about her observations.

After five hours, Raghav called Masha to discuss her understanding. She was confident to impress her supervisor. Raghav asked her that in her opinion what should be the minimum time for visitor's stay at the clients' website to count it as a valid session. How are web sessions counted? When can we say that a web session ended and a new one started?

Once again, Masha got clueless and realized that readymade and half-baked information was of no
use. She decided to study the concept of web sessions in detail to get hold of the situation. The present chapter discusses an important issue of understanding web sessions, along with their relevance to a digital market.

As a routine, we access several websites to fulfil our requirements, stay at the website for some time and then exit. Such a simple activity of a visitor of the website has several insights for a marketer. Every marketer dreams about the scenario that more and more visitors access their website and stay at it as long as possible and consume everything that is being offered at the website. A continuous tracking of website visits is required for improving the performance of the website. Apart from information like who is visiting and from where the traffic is coming, some other information also needs to be looked upon, information like for how long a visitor is browsing our website, which web page is most browsed, how many pages are browsed, etc. For gathering such information, a digital marketer must have an understanding about a web session and how it works.

## WEB SESSION

A session is a block of time during which an activity is performed. In the same line, a web session can be described as the total time spent by a visitor at the website. It includes all the time starting from the arrival of visitor at the first page till they exit the site. In other words, a web session is a series of activities done by the visitor of the website in a given time frame. The series of activities could be viewing multiple pages, making social interactions and doing e-commerce transactions. On average, if the visitor stays with the website for two-three minutes, it is considered a good session duration.

It is so because within this time, the visitor can easily scan the content and decide about the utility of the content displayed. So longer is the stay with the website, better would be the visitor engagement. There is possibility that an individual opens multiple sessions and also the sessions can extend up to days, weeks or months. The moment one session ends, it opens up an opportunity window to start a new session. A session can end in one of the two ways:

1. On expiration of time
2. On change in campaign

Both the ways to end the session are elaborated in the following sections.

## TIME-BASED EXPIRATION

Active presence of a user on a site or app for a time period is considered as session duration. By default, a session lasts for 30 minutes if the user is inactive, and after that a new session would be counted, which can further lasts for 30 minutes of inactivity. In case a user leaving a website returns to it within 30 minutes, it would again become the part of the original session.

Although the rule of 30 minutes of inactivity is a default set, there is a scope of adjusting the time limit. It gives a freedom to redefine session duration from few seconds to several hours. In this, Analytics plays an important role. So whenever a user resumes and executes any kind of interaction, Analytics automatically defers the session expiration to next 30 minutes. The interaction could be in the form of filling information, downloading a brochure, sending a message or opening a new page of the website. Let's understand this flexibility through an example.

Venu is a college student. For preparing an assignment on Indian industries, he started accessing the India Brand Equity Foundation website (www.ibef.org). Let's consider the following scenarios:

Scenario 1: During the visit to the website, he had two page views and two events. In this scenario, the session expiry would be as follows.

| Interaction | Type of Interaction | Time of <br> Interaction | Time of Expiry <br> of Session |
| :---: | :--- | :---: | :---: |
| 1 | Arrival and page view 1 | 9.11 | 9.41 |
| 2 | Page view 2 | 9.12 | 9.42 |
| 3 | Event 1 | 9.13 | 9.43 |
| 4 | Event 2 | 9.14 | 9.44 |

Here, it is observable that the moment Venu arrives at the site of ibef.org, the session expiry time is set at 9.41 by default. As Venu keeps on interacting on regular intervals and keeps the session active, with every interaction the default expiry time is also extended by 30 minutes. So at the end of event 2 , the session's expiry time is set to 9.44 .

Scenario 2: During the visit to the website, Venu found an interesting report on banking sector and after adding the report to the buying cart, he completed the purchase formalities and checked out. But after viewing the banking sector report, Venu went for a break of less than half an hour. During the break, he kept the sector report page open. The details of interactions are as follows.

| Interaction | Type of Interaction | Time of <br> Interaction | Time of <br> Expiry of <br> Session | Session <br> Counted |
| :---: | :--- | :---: | :---: | :---: |
| 1 | Page view 1: Arrival and <br> home page | 9.11 | 9.41 | 1 st |
| 2 | Page view 2: Sector <br> report page | 9.12 | 9.42 | 1 st |
| Break of 29 minutes |  |  |  |  |
| 3 | Page view 3: Add to cart | 9.31 | 10.01 | 1 st |
| 4 | Page view 4: Checkout | 9.32 | 10.02 | 1 st |

Here, it is observable that Venu rejoins within the default barrier limit of 30 minutes as he took a break of 29 minutes. So when he resumed his session at 9.31 (from where he left at 9.12), it is treated as the original session, that is, session 1.

Scenario 3: Now, keeping all the things same as in scenario 2, except this time Venu took a break of more than half an hour, the details of interactions are as follows.

| Interaction | Type of Interaction | Time of <br> Interaction | Time of <br> \#xpiry of <br> Session | Session <br> Counted |
| :---: | :--- | :---: | :---: | :---: |
| 1 | Page view 1: Arrival <br> and home page | 9.11 | 9.41 | 1 st |
| 2 | Page view 2: Sector <br> report page | 9.12 | 9.42 | 1 st |
|  | Break of 31 minutes |  |  |  |
| 3 | Page view 3: Add to cart | 9.33 | 10.03 | 2nd |
| 4 | Page view 4: Checkout | 9.34 | 10.04 | 2nd |

Here, it is observable that Venu surpasses the default barrier
 of 30 minutes, as he took a break of 31 minutes. So when he resumed his session at 9.33 (from where he left at 9.12), it is treated as a new session, that is, session 2 .

Scenario 4: Now Venu opens the website ibef.org at 11.45 PM on 24 July 2021 and actively stayed at the website till 12.22 Am on 25 July 2021. In this scenario, from 11.45 PM to 11.59 .59 PM is counted as session 1 and from 12.00 midnight onwards, it is treated as a new session, that is, session 2 . Remember that the end of the day is based upon the time zone setting of Venu.

## CAMPAIGN-BASED EXPIRATION

This type of session expiration happens when the user changes the source of campaign. Every time the source of campaign changes, Analytics opens a new session. It is irrespective of the
situation that the earlier session is still open. So even if the first session is open for 12 minutes, the moment the user changes the source, first session gets closed and a new session is opened. Suppose Venu reaches to ibef.org through the organic keyword 'industry sector', it is considered as session 1. If Venu again reaches the same website ibef.org within 30 minutes with the paid keyword 'banking sector report', then it is considered as a new session or session 2.

## PAGE VIEW

It is considered as an occurrence of loading or reloading of a web page in a browser. The page view metric describes the total number of pages viewed by the visitors. If you click on a link of a website, you land on its home page. The moment the home page appears, it is counted as one page view. Now, if you refresh the page and reload it again, it will be counted as second page view. Also, if you go to another page of the website from home page and come back to the home page again, it will be counted as third page view. Page views are different from unique page views. A unique page view is the number of sessions during which that page was viewed one or more times.

Ashima visited web pages of gokart.com in the following sequence within 20 minutes duration:

$$
\text { Page } 1 \rightarrow \text { Page } 2 \rightarrow \text { Page } 3 \rightarrow \text { Page } 2 \rightarrow \text { Page } 1
$$

In this case, Ashima has 1 session (as it is within 30 minutes), 5 page views in total (Pages $1 \rightarrow 2 \rightarrow 3 \rightarrow 2 \rightarrow 1$ ) and 3 unique page views $(1 \rightarrow 2 \rightarrow 3)$.

## CHECK YOUR UNDERSTANDING

1. How many web sessions would occur?
a. If the time of active website interaction is 35 minutes
b. If 15 minutes of inactivity is registered before resuming the original session
c. If 40 minutes of inactivity is registered before resuming the original session
2. Gaurav visited web pages of startup.com from 7.45 PM to 7.59 PM on 30 May 2021 in the following sequence: Page $1 \rightarrow$ Page $2 \rightarrow$ Page $3 \rightarrow$ Page $2 \rightarrow$ Page $4 \rightarrow$ Page $3 \rightarrow$ Page $2 \rightarrow$ Page 4
Calculate the number of sessions, number of page views and number of unique page views from the visit of Gaurav to startup.com.

## Experience the Real Life

Observe the timing and your web activity in context of a specific website. Then try to identify how many web sessions are counted, how many unique page views happened and how many aggregated page views occurred?

## ADDITIONAL INSIGHTS AT A CLICK

1. Web Sessions: How Do They Work? Google Analytics Guide
It is a comprehensive article on web sessions. It describes the working of a web session, when it expires, why it expires, etc. The information also encompasses the related concepts of page views.

It also explains how information related to web sessions is utilized in Google Analytics.
https://delante.co/web-sessions-how-do-they-work/
2. How Session Work in Web Applications and Why We Need It
This wonderful article upgrades the knowledge of a reader regarding technical application of web sessions. It also highlights why there is a need to track web sessions and keep the data of each web session. Overall, it reinforces the understanding about the concepts of a web session and its working in web application.
https://www.bitspedia.com/2012/05/how-session-works-in-web-applications.html

## 30 quantitining brant's worth


How do you measure something which is intangible? And even if you manage to put a number somehow, how do you know if you have measured that correctly? That is precisely the issue with measuring brand equitymeasuring the intangible! Companies operating in this space such as Brand Finance and Y*R (Young ऊo Rubicam) thus have developed their own way/method to calculate brand equity. That sounds logical as well because brand is an intangible asset of any company, and there is obviously no clear-cut and fixed formula to calculate the value of an intangible asset.

So when Rajat started his marketing research company, he worked very hard and came up with a unique method to calculate brand equity. Rajat was aware that there was some vacant space in the Indian market for companies that could calculate brand equity and perform other marketing research-related tasks for the corporate clients. When Rajat's method was developed and he tested it on some brands, he was ecstatic to see it working! Now he could approach the Indian corporates and ask them for assignments to calculate their brand equity.

Luck was with Rajat and, in little time, he got brand equity assessment assignments from two leading companies in India. Both these companies wanted to sell their brands to another company and that is why they were interested in finding the value of
their brands (read: brand equity). Rajat and his team worked tirelessly for next three months to calculate the brand equity of these clients and, finally, the task was over. Everyone in the team was happy to have worked hard and achieve this number which they would present to the clients!

On the day of presentation, Rajat and his team reached the office of one of the clients and were slightly surprised to see the teams of two of their established competitors (big companies that were into the business of calculating brand equity) there. Later, it was found that the client had given the task of calculating bis brand equity to three companies (Rajat's company and the two big players).

Rajat was convinced about his method, and he and his team presented their work with full confidence to the client. The teams of other two players also did the same. Rajat was shocked to know that the brand equity calculated by his method was the lowest than what the other two big players had calculated. In addition, the brand equity figures presented by the other two players were very close to each other, whereas Rajat's value was far from those numbers. The close proximity of the figures calculated by the two big players were an evidencelvalidation of them being correct, and Rajat's number looked difficult to believe. Moreover, the client felt bad as a new company calculated his brand's value very less.

The client in his one-to-one meeting with all three teams expressed his disappointment to Rajat. The client explicitly told Rajat that he was taking this in a bad taste that according to Rajat's company, his brand's value was too less, whereas the top companies were suggesting that the brand's value was way too high!

To his utter surprise, the story was repeated with the second client as it is! There also, Rajat's calculation of brand equity was way too low in comparison to the top three companies that the client had hired to calculate his brand's equity.

If you would be in Rajat's place, how would you develop a method to calculate brand equity?

This chapter will introduce you to some of the methods. Remember that all methods have their pros and cons! So, ideally, apart from learning to use the methods, you should also find their limitations and try to address/correct them-and eureka! Who knows your method becomes the industry standard of tomorrow!


When a company invests in building a brand, it wants to know how much their brand's worth is in the market or whether the resources invested in the brand have yielded any value or not. This calculation of a brand's value is called measurement of brand equity. Measuring brand's equity is also useful when the company has to sell or buy a brand and needs to know how much is the brand's worth so that it can demand/offer that price.

There are several organizations which measure/calculate brand equity. Many of them have developed their propriety methods to calculate the same. Some such organizations are Millward Brown, Young \& Rubicam and Interbrand.

Here, we will use Moran's methodology to calculate brand equity. This is a very simple and straightforward method which considers three elements for the calculation of brand equity, namely

1. Effective market share
2. Relative price
3. Brand's loyal customers who would repeat the brand in the next year

> Brand equity $=$ Effective market share $(\%) \times$ Relative price $(\mathrm{I}) \times$ Customers who would repeat the brand in the next year $(\%)$

The three elements used in the formula are explained further.

1. Effective market share: It refers to the share of brand's sales in a particular market segment, weighted by that segment's percentage of brand sales. The higher the market share, the stronger the brand is assumed to be.
2. Relative price: It refers to the brand's ability to charge a price premium in the market. It is the price of a product, divided by the average price in the market. If the result of this calculation is more than 1 , then it means that the brand is charging a premium price in the market and this is considered an indicator of brand's strength. If the result is less than 1 , it means that the brand is charging a below average price in the market and is assumed to be a weak brand.
3. Brand's customers who would repeat the brand in the next year: If all the customers are likely to repeat the brand in the coming year, then this score is taken as 1 and this number would be 0.5 if 50 per cent of the customers will repurchase and so on. Needless to say, 1 indicates that the brand has strong loyal customers.

A cola company named U-Cola sells soft drinks. It sells four soft drink variants in two countries named Angola and Botswana. In Angola, the brand has 30 per cent market share, and Angola represents 60 per cent of U-Cola's total sales. Also, in Botswana, U-Cola has a 50 per cent market share, and it represents 40 per cent of its sales. In the coming year, half of U-Cola's existing customers are likely to repeat buy its product.

The average price of other cola brands in Indian currency is ₹20, but U-Cola's price is ₹25. Calculate the brand equity of $U$-Cola.

For calculating brand equity of U-Cola, we can use Moran's method. As mentioned above, we need to calculate three things-effective market share, relative price and repeat pur-chasers-for the coming year as follows:

Effective market share $=$ Shares of the market segments, weighted by the percentages of brand sales:

| Country Angola | $=30 \% \times 60 \%$ |
| ---: | :--- |
|  | $=0.18$ |
| Country Botswana | $=50 \% \times 40 \%$ |
|  | $=0.20$ |
| Effective market share | $=0.18+0.20$ |
|  | $=0.38$ |

Relative price $=$ U-Cola's price/Average price in the market

$$
=25 / 20
$$

$$
=₹ 1.25
$$

Repeat purchasers for the coming year $=$ Since 50 per cent of existing U-Cola customers are likely to buy its cola again in the coming year $=0.5$

$$
\begin{aligned}
\text { Brand equity }= & \text { Effective market share } \times \text { Relative price } \times \\
& \text { Repeat purchasers } \\
= & 0.38 \times 1.25 \times 0.5 \\
= & 0.2375
\end{aligned}
$$

Now to understand whether this brand equity is high or low, one needs to compare it with the brand equity of competitor(s).

Note: There are certain brands that deliberately sell at a lower price. That is their strength or value proposition, for example, discount retailers and low-price airlines. In such
cases, calculating relative price which is an indicator of brand's ability to charge a price premium will not be a particularly useful indicator of brand equity.

## CHECK YOUR UNDERSTANDING

There are two sneaker companies competing with each other in India. Both have two brands whose details are as follows: Company: Walk

- Brand: Walker-Walker has a market share of 20 per cent and represents 45 per cent of sales of Walk. Walker sells at a price of $₹ 3,500$ per pair. In the coming year, 30 per cent of existing customers of Walker are likely to buy Walker again.
- Brand: Walking-Walking has a market share of 30 per cent and represents 55 per cent of sales of Walk. Walking sells at a price of ₹4,500 per pair. In the coming year, 45 per cent of existing customers of Walking are likely to buy Walking again.


## Company: Run

- Brand: Runner—Runner has a market share of 10 per cent and represents 25 per cent of sales of Run. Runner sells at a price of $₹ 7,500$ per pair. In the coming year, 60 per cent of existing customers of Runner are likely to buy Runner again.
- Brand: Running-Running has a market share of 40 per cent and represents 75 per cent of sales of Run. Running sells at a price of ₹ 1500 per pair. In the coming year, 25 per cent of existing customers of Running are likely to buy Running again.
Make logical assumptions and calculate the brand equity of each of the four brands using Moran's method. Tell which brand has the strongest brand equity.

> Experience the Real Life
> Visit the website of Millward Brown, Young \& Rubicam and Interbrand and make a note of how their methods compare with each other. Which one did you like and why? What is missing in these methods?

## ADDITIONAL INSIGHTS AT A CLICK

1. 7 Proven Ways to Measure Brand Equity

It is a relevant article with a quick look on various ways of measuring brand equity. It discusses two types of data for measuring brand equity, namely economic data and emotional data. Few of the ways which are discussed include brand strength, brand awareness and brand evaluation.
https://www.qualtrics.com/blog/brand-equitymeasure/
2. A Pragmatic Guide to Brand Value

It is a short article providing an understanding about value of a brand and various ways through which value of a brand can be determined. One of the important ways include measuring brand equity. https://www.forbes.com/sites/forrester/2019/08/06/a-pragmatic-guide-to-brand-value/?sh=6794f821436c

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> POWER, SEXUALITY GENDER DYNAMICS at Work




[^0]:    ${ }^{1}$ https://time.com/3950205/new-coke-history-americal

[^1]:    

[^2]:    ${ }^{2}$ https://www.marketing91.com/coca-cola-brand-failure/

[^3]:    ,.nal $\mid$

[^4]:    ${ }^{1}$ http://www.businessfondue.com/2019/02/27/these-large-companies-are-leaving-the-uk-because-of-brexit/
    ${ }^{2}$ https://www.livemint.com/companies/news/gm-harley-davidson-and-now-ford-why-big-us-automakers-are-leaving-india-11631256273800.html

[^5]:    ${ }^{3} \mathrm{https}$ ://timesofindia.indiatimes.com/business/india-business/why-ford-and-
    4-other-auto-giants-exited-india/articleshow/86190149.cms
    ${ }^{4}$ https://marketfeed.news/airtel-is-thriving-away-from-home-in-africal

[^6]:    ${ }^{1}$ Company names have been kept anonymous on request.

[^7]:    Weighted performance
    $=$ Percentage of target achieved $\times$ Weighting factor

[^8]:    ${ }^{1}$ https://www.theguardian.com/business/1999/sep/22/unilever

[^9]:    ${ }^{2}$ https://economictimes.indiatimes.com/industry/cons-products/fmcg/ hindustan-unilever-wants-to-be-agile-with-spirit-of-small-company-harishmanwani/articleshow/34527602.cms

[^10]:    

[^11]:    

[^12]:    ${ }^{1}$ https://timesofindia.indiatimes.com/business/india-business/inorbit-mall-empties-out-amazon-likely-to-move-in/articleshow/55253922.cms

[^13]:    ,., , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , l

[^14]:    ${ }^{1} \mathrm{https}: / /$ support.google.com/google-ads/answer/6365?hl=en\#:~:text=An\%20 action \% 20that's \% 20counted \% 20when, business \% 20from \% 20a \% 20 mobile\%20phone

