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Trainer Manual & Assessment

Interpret Market Trends and Developments

BSBMKG507

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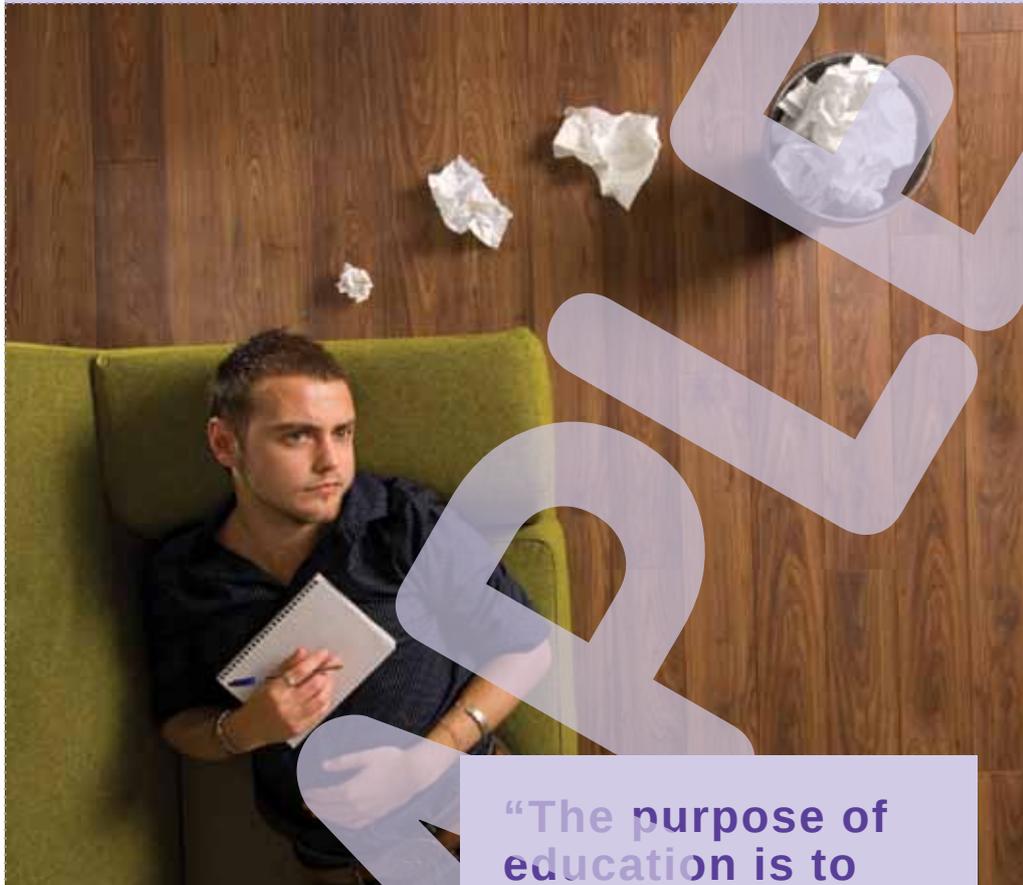
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About BSB Business Services Training Package

"The purpose of education is to replace an empty mind with an open one." Malcolm Forbes

About the Business Services Industry

The BSB Business Services Training Package covers a diverse range of industries and occupations. Business Services covers a range of cross-industry functions and services supporting the commercial activities of all industries.

Defining Qualifications

When units of competency are grouped into combinations that meet workplace roles, they are called qualifications. These qualifications are aligned to the Australian Qualifications Framework (AQF). Each qualification will have 'packaging rules' which establish the number of core units, number and source of elective units and overall requirements for delivering the qualification.

Delivery and Assessment of Qualifications

RTOs must have the qualifications (or specific units of competency) on their scope to deliver nationally recognised training and assessment. RTOs are governed by and must comply with the requirements established by applicable national frameworks and standards. RTOs must ensure that training and assessment complies with the relevant standards.

Qualification Training Pathways

A pathway is the route or course of action taken to get to a destination. A training pathway is the learning required to attain the competencies to achieve career goals. Everyone has different needs and goals, and therefore requires a personalised and individual training pathway.

Foundation Skills

Foundation Skills are the non-technical skills that support the individual's participation in the workplace, in the community and in education and training.

Australian Core Skills Framework (ACSF)

This Assessment meets the five ACSF core skills as described in the Foundation Skills mapping.

Introduction
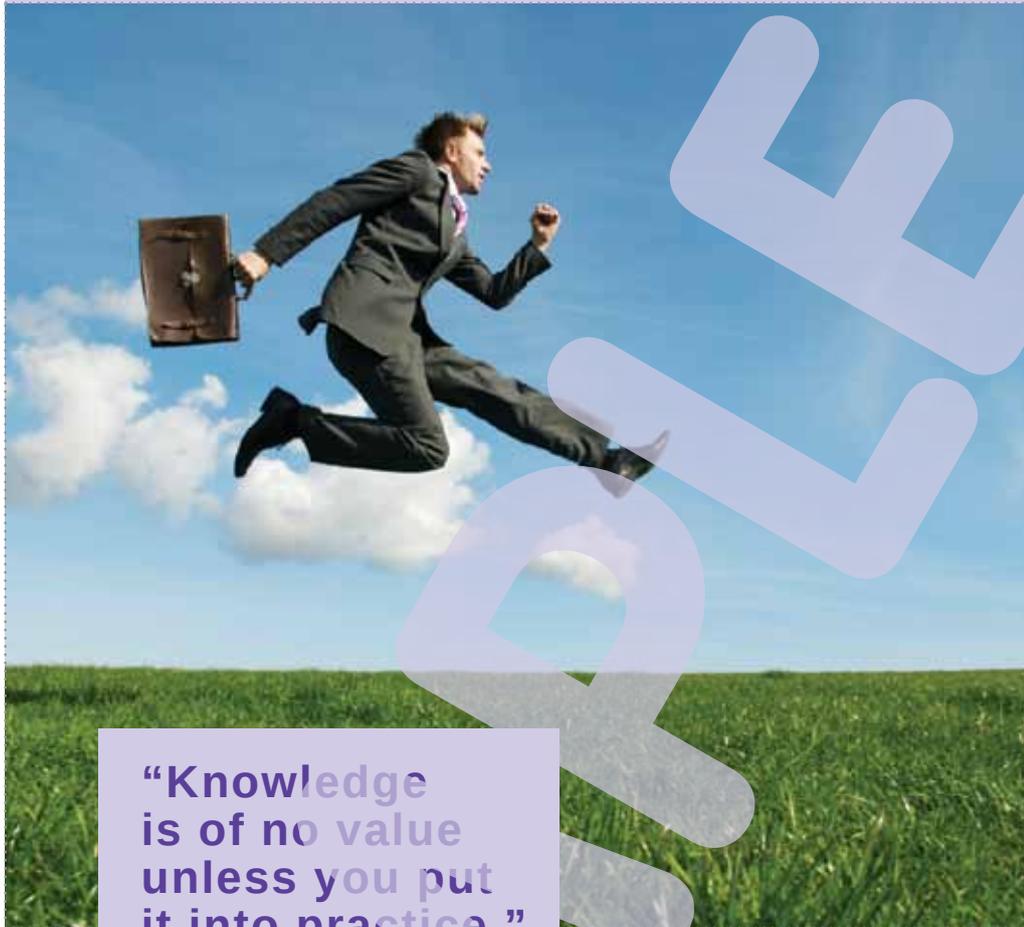
> **"Knowledge is of no value unless you put it into practice."**
>
> Anton Chekhov

This unit of competency is about being able to use the skills and knowledge required to interpret market trends and developments. This will assist you in gaining the Unit of Competency BSBMKG507 Interpret Market Trends and Developments.

This manual is broken up into three Elements. They are:

1. **Interpret Trends and Market Developments**
2. **Analyse Qualitative Results**
3. **Report on Market Data.**

At the conclusion of this training you will be asked to complete an Assessment Pack for this unit of competency. The information contained in this resource will assist you to complete this task.

On competent completion of the assessment you will have demonstrated your ability to coordinate and review the promotion of an organisation's products and services.

ELEMENT 1:
Interpret Trends and Market Developments

Performance Criteria Element 1

1.1 Use statistical analysis of market data to interpret market trends and developments

1.2 Analyse market trends and developments for their potential impact on the business

1.3 Use measures of central tendency or dispersion and correlations between sets of data for quantitative interpretation of comparative market data

1.4 Perform qualitative analysis of comparative market information as a basis for reviewing business performance

1.5 Analyse the market performance of existing and potential competitors and their products or services to identify potential opportunities or threats.

Interpret Trends and Market Developments

Use Statistical Analysis of Market Data to Interpret Market Trends and Developments

Use Measures of Central Tendency or Dispersion and Correlations between Sets of Data for Quantitative Interpretation of Comparative Market Data

In this unit, we will be examining the processes involved in the interpretation of market data in order to gain competitive advantage. Let's begin with an examination of statistical methods that can be used to analyse market data for trends and overall market developments.

Data

Marketers need data if they are to predict and read trends. Data can come from many sources.

The level of the data you obtain may vary from competitor to competitor depending on just how active they are in the market and how large the competition organisations actually are. So, what sorts of data can you actually obtain to assist you in creating an effective competitive analysis? There are generally two main sources of information that any organisation can obtain about its competitors: Primary and Secondary data.

- **Primary Data**

    Primary data is data that you obtain 'first hand'. That is, it is data that you have actually gathered yourself. This type of data may include an analysis of your competitor's pricing structure, anecdotes supplied by staff, having discussions or conducting research with your suppliers and customers. It is essentially making data yourself, rather then using data that has already been created. Of course, as you can imagine, this is the most expensive and time consuming form of data gathering, as you are actually going through the entire process yourself.

- **Secondary Data**

    Secondary data is sometimes also referred to as recorded data. It is data and information that is already available in your organisation, or through external sources. Because of this, you do not actually need to create the data yourself; rather you have the data ready for analysis. Information such as industry market reports, annual reports and organisational brochures are all good sources of external secondary data. Internally previous market analysis and previous market research reports may provide the basis for projections in to the future and thus can be considered as internal secondary data sources.

There are a range of information sources that are available to you for conducting your competitive analysis:

- Primary Data
    - Market Research commissioned by the organisation
    - Anecdotal discussions
    - Analysis conducted by the organisation into price, promotion and distribution strategies of the competitors.
- Secondary Data
    - Annual Reports
    - Price lists
    - Advertising
    - Press releases
    - Tender documents
    - Patent applications
    - Government reports
    - Industry board reports
    - Market analysis.

In the main, primary data is the freshest and most useful; however, it is also the most expensive and difficult to produce. It also takes time to create, so cannot be used for on-the-fly analysis. In many ways, a competitive analysis is like a recipe. Each individual piece of information that you have is not particularly useful. A price list, in isolation, does not tell you much about an organisation's overall marketing strategy - much like baking powder on its own is not a useful thing to have in the kitchen. However, combine the pricelist with advertising, anecdotes and primary research into reactions to pricing, and you can gauge much better exactly what it is the competitor is doing (similarly baking powder, flour, sugar, baking soda, eggs and milk are a good start to a delicious cake batter).

The analysis of your competition is generally more qualitative in nature than an analysis of your organisation as a whole. This is because much of the information that you want to obtain about the competition is best obtained in this manner. Once you have gathered all the information you need to conduct a competitive analysis, it is important that you spend time summarising the data. This will help to obtain a complete picture of what is happening in the market and where you can find opportunities for your organisation to thrive and threats which may impact your business' ability to survive.

Statistical Analysis

One of the more difficult aspects of market analysis is the statistical analysis of data that you have obtained about the market. We will begin by looking at the various statistical measures that you can use in your work, before we move on to look at specific examples applying these tools to market data.

Basically there are three comparisons that marketers make:

1. **Comparison of Data**

   Here the highs and lows of data are identified. An example would be to compare who is the best salesperson.

2. **Transition of Data**

   This is applied to time-based data to understand the trend of change. An example would be to understand whether the website traffic has been going up or down in the last 30 days.

3. **Composition of Data**

   These are used to understand how a data value breaks down into its constituents. An example could be to break down the website traffic into search, direct, referrals and campaigns.

Market Trends and Developments

Identifying the market trends that will impact on your organisation enables you to gain a competitive advantage by determining future opportunities before your competitors, protect your business against possible threats and identify how you can better meet the needs of your customers now and in the future.

A trend is any significant change to your market, both positive and negative, that your organisation needs to respond to. For example, a trend in the food market may be a move to low Glycaemic Index (GI) products due to an increase in health consciousness amongst consumers. A trend in the accountancy market may be a move to clients wanting additional services such as management consultancy.

The impact of specific trends will vary considerably by market or industry, so it is important to only identify the trends, which will have an impact on your future business performance.

The most commonly used sets of data include:

- Geodemographic segmentations available from proprietary suppliers such as:
  - Acorn – UK based firm (http://www.acorn.caci.co.uk/)
  - Mosaic – Australian based firm (http://www.experian.com.au/)
  - Prizm – Operated by Nielsen in Australia (http://www.nielsen.com/au/en.html)

- Segmentation by customer lists such as:

  ○ Average order value by units or dollars

  ○ Geography

  ○ Lifetime value by units, dollars and transactions

  ○ Recency and frequency or response/purchase.

- Segmentation of the prospect list by:

  ○ Demographic match with customers

  ○ Geographic match with customers

  ○ Psychographic match with customers.

Analysis may be made of:

- **Conversion Rates of Leads to Sales**

  This measure is perhaps one of the most simple to define. You are looking at the percentage of sales leads that your organisation is able to convert into sales. How many people who walk into your store actually buy something? How many people that visit your website buy a product? How many people that see your ad buy something? It is more generally defined as being the number of people who visit (your website or store, or telephone number etc.) who actually do a predefined marketing action (such as purchase, request information etc.)

  Let's assume that you have 100,000 visitors to your website and you have 4,563 sales during that same month. The conversion rate of leads to sales can then be calculated as:

  No. who take action / No. of people who visit * 100/1 = Conversion rate of leads to sales

  4,593 / 100,000 * 100/1 = 4.59%

  Conversion rate is quite a difficult thing to interpret. However, by tracking the conversion rate over time, you can obtain a good view of what your average conversion rate is and use this as the basis of a comparison to your competitors or for looking at how effective your marketing efforts are. Conversion rates for websites are quite low, and a good conversion rate may be as low as 2%.

- **Measures of Central Tendency**

  In statistics, a central tendency (or, more commonly, a measure of central tendency) is a central or typical value for a probability distribution. It may also be called a centre or location of the distribution. Colloquially, measures of central tendency are often called averages.

  A probability distribution assigns a probability to each measurable subset of the possible outcomes of a random experiment, survey or procedure of statistical inference. Examples are found in experiments whose sample space is non-numerical, where the distribution would be a categorical distribution; experiments whose sample space is encoded by discrete random variables, where the

distribution can be specified by a probability mass function; and experiments with sample spaces encoded by continuous random variables, where the distribution can be specified by a probability density function.

They include the mean, mode and median. They can be easily calculated and are readily interpretable.

○ *Average Order Value*

Average Order Value (AOV) is the average dollar amount spent per order over a certain period of time. This high-level metric is calculated by dividing the total revenue generated by the number of orders taken. Note that the same customer could have multiple transactions, and that AOV is determined using sales per order, not sales per customer.

AOV does not tell you how much profit you are making or your profit margin, but it can be a useful way to determine what revenue can be expected from a certain number of visits. And because many transaction expenses (such as administration costs and site hosting) remain the same whether a customer spends $3 or $300, raising your AOV can raise your profitability.

Because AOV is a key performance indicator, it's generally monitored closely. Any dip in your online store's AOV should spark action. Likewise, when AOV rises, it can be worth investigating what prompted the increase-whether it is a recent promotion or new product line. Trying to replicate those efforts could be helpful in boosting revenue.

Your AOV can also help you figure out how customers with high-value orders are finding your site. Start by calculating your site's overall AOV, which establishes a baseline. You can then calculate the AOV of customers who came to your website through email promotions, keyword searches and advertising campaigns. If the AOV of a campaign is higher than your baseline AOV, it may be worth investing additional dollars. On the flip side, if the AOV of a particular tactic is low, it might signal it's time to move your marketing dollars elsewhere.

Let's look at a simple example of data from a supermarket, being ten sales obtained during a short period of time:

$12.65, $134.53, $27.54, $54.90, $3.87, $55.50, $98.99, $108.78, $44.89, $65.00

To obtain the Average Order Value here, you need to add up all the data and then divide it by 10 (the number in the sample):

Total / Number in Sample = Average Order Value

606.65 / 10 = $60.65

In this case, we have an Average Order Value of $60.65. In this particular case, you can see that, on average, customers spent $60.65 per sale during this period. Because of the huge range of figures obtained (ranging from $3.87 to $134.53) it is important that you use large sample sizes, to ensure that the figures obtained are actually representative of average sale value.

○ *Average Response Rate*

Average Response Rate (ARR) is calculated in a very similar way to Average Order Value - in that it measures the central tendency of the data. In this case, it is attempting to calculate the average response rate to your campaigns - how many people respond to the advertising by buying, visiting a website, calling your organisation. In this case, you are calculating the average of your conversion rates over time. By calculating this, you have an excellent measure against which to compare future values of the conversion rate.

So, let's look at an example, where six previous advertising campaigns have been run and the conversion rates calculated as follows:

4.5%, 7.3%, 3.3%, 5.4%, 6.1%, 5.5%

To obtain the Average Response Rate, you need to add up all the data and then divide it by 6 (the number in the sample):

Total / Number in Sample = Average Response Rate

32.1 / 6 = 5.35%

So, in doing this, we can compare how well future campaigns compare to the average. Let's assume the example used above (in the section on conversion rate) is used as a comparison. In this example, we can see that campaign had a lower response rate (4.59%) than the average of the past six campaigns. We can also add this into the average now, since it is a new campaign:

Total / Number in Sample = Average Response Rate

36.7 / 7 = 5.24%

So, even when the new campaign is accounted for in the average, it is still less effective at gaining a response than the average.

- **Measures of Dispersion**

As noted previously, there are problems with measures of central tendency. Without knowledge of dispersion (how spread the data is) they can become extremely misleading. Take for example the wide range in our supermarket example; this is likely to skew the data to be lower than it normally would be. This is why measures of dispersion are so useful. The best way to measure dispersion is through the use of the Standard Deviation (SD). We will use this method to measure dispersion in the data listed above.

You begin by obtaining the mean of the data that you have obtained - in this case we have already calculated the mean of the data in our Average Order Value as $60.65. We now need to subtract the average from each item in the list in order to obtain a list of deviations:

$12.65, $134.53, $27.54, $54.90, $3.87, $55.50, $98.99, $108.78, $44.89, $65.00

Subtract 60.65 from each of these values:

-$48.00, $73.88, -$33.11, -$5.75, -$56.78, -$5.15, 38.34, $48.13, -$15.76, $4.35

Now, because some of these figures are negative, we need to square each of these numbers:

2304.0000, 5458.2544, 1096.2721, 33.0625, 3223.9684, 26.5225, 1469.9556, 2316.4969, 248.3776, 18.9225

Next, we sum all of the figures obtained and divide the sum by 1 less than the number of items in the list:

Sum = 16195.8325 / 9 = 1799.536944

Now, to obtain the Standard Deviation, we simply find the square root of this number:

SD = SQRT 1799.536944

SD = 42.42

We have now calculated the Standard Deviation of this data to be 42.42. We know that this is a measure of dispersion, but what does it actually mean? Generally speaking, the higher the standard deviation is, the more dispersed the data will be. We can say, in the majority of cases that 68% of all values will fall within plus or minus standard deviation of the mean.

- **Nature and Degree of Relationship Between Variables**

  It is very important to understand relationship between variables to draw the right conclusion from a statistical analysis. The relationship between variables determines how the right conclusions are reached. Without an understanding of this, you can fall into many pitfalls that accompany statistical analysis and infer wrong results from your data.

  There are several different kinds of relationships between variables. Before drawing a conclusion, you should first understand how one variable changes with the other. This means you need to establish how the variables are related - is the relationship linear or quadratic or inverse or logarithmic or something else?

  Correlation can tell you something about the relationship between variables. It is used to understand:

  1. Whether the relationship is positive or negative
  2. The strength of relationship.

  Correlation is a powerful tool that provides these vital pieces of information.

  In the case of family income and family expenditure, it is easy to see that they both rise or fall together in the same direction. This is called positive correlation.

  In case of price and demand, change occurs in the opposite direction so that increase in one is accompanied by decrease in the other. This is called negative correlation.

  Statistical correlation is measured by what is called coefficient of correlation (r). Its numerical value ranges from +1.0 to -1.0. It gives us an indication of the strength of relationship.

  Unfortunately, the calculation of Correlation by hand is quite complicated, so we will examine how it is calculated using Excel.

Let's assume we have the following data:

Sales (Millions)	Advertising Spend	($000) Year
$4.60	$611	1999
$5.10	$367	2000
$3.40	$321	2001
$6.80	$656	2002
$6.10	$672	2003
$5.90	$423	2004
$5.60	$450	2005

Here, we are going to calculate the correlation between the amount spent on advertising and the amount of sales in the year. We would expect to find a positive relationship - the higher the advertising spend, the higher we would + expect sales to be.

To calculate correlation we use the Excel formula:\

=CORREL(ARRAY1,ARRAY2)

Array 1 and 2 are defined as the two separate data sets. In this case one is sales and the other advertising spend. We end up with the formula:

=CORREL(B3:B9,D3:D9)

and a correlation between the variables of 0.622

When analysing correlation, anything between 0 and 1 is a positive relation and anything between 0 and -1 is a negative relationship. The closer a correlation is to 1, the stronger the relationship. In this case we have a moderately strong positive relation, so it can be concluded that increased advertising spend, in the case of this data, has resulted in increased sales.

Correlation is only appropriate for examining the relationship between meaningful quantifiable data (e.g. air pressure, temperature) rather than categorical data such as gender, favourite colour etc.

- **Net Response Rate**

Response curves are a useful means of tracking the response to a given marketing campaign over time. On one axis, you should put weeks or months or days of the campaign running. On the other could be cumulative sales. You then plot, on a day-by-day basis the actual cumulative sales for the period the campaign is running. To further enhance this tool, you can add cumulated forecasted sales. By comparing these two factors, you can compare actual sales for the campaign against the forecast sales. Also useful is the examination of the shape of the plot. Where are sales rising most quickly, where do cumulative sales begin to drop off? How well do the shapes of the two curves (forecast and actual) compare to each other?

- **Normal Distribution Probability Curve**

  The graph of the normal distribution depends on two factors - the mean and the standard deviation. The mean of the distribution determines the location of the centre of the graph, and the standard deviation determines the height and width of the graph. When the standard deviation is large, the curve is short and wide; when the standard deviation is small, the curve is tall and narrow. All normal distributions look like a symmetric, bell-shaped curve, as shown below.

  The curve on the left is shorter and wider than the curve on the right, because the curve on the left has a bigger standard deviation.

  The normal distribution is a continuous probability distribution. This has several implications for probability:

  ○ The total area under the normal curve is equal to 1.

  ○ The probability that a normal random variable X equals any particular value is 0.

  ○ The probability that X is greater than a equals the area under the normal curve bounded by a and plus infinity (as indicated by the *non-shaded* area in the figure below).

  ○ The probability that X is less than a equals the area under the normal curve bounded by a and minus infinity (as indicated by the *shaded* area in the figure below).
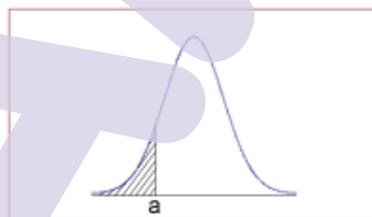
  Additionally, every normal curve (regardless of its mean or standard deviation) conforms to the following 'rule.'

  ○ About 68% of the area under the curve falls within 1 standard deviation of the mean.

  ○ About 95% of the area under the curve falls within 2 standard deviations of the mean.

  ○ About 99.7% of the area under the curve falls within 3 standard deviations of the mean.

Collectively, these points are known as the *empirical rule* or the *68-95-99.7 rule*. Clearly, given a normal distribution, most outcomes will be within 3 standard deviations of the mean.

- **Sampling**

  A key to any form of statistical analysis is how that data was obtained, and more importantly from whom. Sampling refers to the methods used to choose where data came from. It is most important to use in the creation of research data, where you need to ensure that you eliminate any potential for bias in the data obtained. The sample you use to gather market data should be random, in order to ensure that you have a representative sample of data from your customers.

- **Time Series Analysis such as:**

  ○ *Response Curves*

  Response curves are a useful means of tracking the response to a given marketing campaign over time. On one axis, you should put weeks or months or days of the campaign running. On the other are cumulative sales. You then plot, on a day-by-day basis the actual cumulative sales for the period the campaign is running. To further enhance this tool, you can add cumulated forecasted sales. By comparing these two factors, you can compare actual sales for the campaign against the forecast sales. Also useful is the examination of the shape of the plot. Where are sales rising most quickly, where do cumulative sales begin to drop off? How well do the shapes of the two curves (forecast and actual) compare to each other?

  ○ *Recency or Frequency Grids (RFM)*

  A Recency / Frequency grid attempts to tell you the way in which your customers are behaving. It attempts to divide an organisation's customers into groups according to the purchasing behaviours - each item on the grid represents a different group of consumers who have their own distinctive behaviours that they display. There are three major attributes that are used to divide up customers using this technique:

  Recency (R): This is a measure of how long it has been since a customer last did business with an organisation.

  Frequency (F): This is a measure of how often a consumer will visit a business (either in person, on the phone or via a website).

  Monetary (M): As you might imagine, this measures how much money they may spend.

  Each of these attributes is then divided into 3-5 distinct sections. For example:

  Recency - of last purchase: Last day (1), Last week (2), Last Month (3), Last Year (4), Less than once a year (5)

  Frequency during last year 0-2 (1), 3-5 (2), 5-10(3), 10-20 (4), 20+ (5)

  Monetary spend per purchase $0-$25 (1), $25-$75 (2), $75-$125 (3), $125-$250 (4), $250+ (5)

Now, we are able to divide customers into various grid groupings. For example (using the order RFM):

425 - Customer spends more than $250 during each purchase, does business 3-5 times per year and last purchased during the last year.

413 - Customers who spend $125-$250 in a single purchase, only visit 1-2 times during a year, and last did business during the previous month.

Monetary spend per purchase $0-$25 (1), $25-$75 (2), $75-$125 (3), $125-$250 (4), $250+ (5)

Now, we are able to divide customers into various grid groupings. For example (using the order RFM):

425 - Customer spends more than $250 during each purchase, does business 3-5 times per year and last purchased during the last year.

413 - Customers who spend $125-$250 in a single purchase, only visit 1-2 times during a year, and last did business during the previous month.

As you can see, you are building up quite a strong picture of consumers. There are in fact 125 different customer groupings using this grid. This technique is very useful when you are able to obtain solid data that outlines exactly how many of your customers fit into each grid block.

Once you know the size of each grid, you can, in fact, tailor marketing efforts to those largest grid blocks. Also, from a trend point of view, looking at this data can help you gain an overview of exactly how your customers shop with you, and where the trend seems to be changing.

○ *Lifetime Value of Customers (LVC)*

Calculating how much a customer is worth to your organisation can be quite a difficult task, but it is one that is quite important to work out. The lifetime value of a customer is quite easy to actually calculate, however gathering the right evidence and information and data can be the difficult part.

Put simply, the calculation for Lifetime Value of a Customer is found by multiplying:

Average Sale * Average number of times a customer reorders.

As you can see a very simple process. We have already established the way in which to calculate average sales, and you should be able to ascertain an average number of times a customer reorders during a year using data from other analysis (such as your RFM grid).

Another alternative method for working out the average times a customer reorders is to divide the number of sales you have had by the number of customers you have had.

The number of sales you have had should be easy enough to calculate; however the number of customers may be more problematic to calculate.

So, let's work out the Lifetime Value of a Customer for an organisation that has 3,411 customers, has made 15,650 sales at an average of $219.

Using this data:

Number of times a customer reorders = 15,650 / 3,411 = 4.6

Lifetime Value of Customer = 4.6 * 219 = $1005

We now know that right now, the lifetime value of your customer is, on average, $1005 In this case, you could say that if your cost to gain a new customer is less than $1005 you have a profitable relationship with that customer. If it costs you more than this value, that customer is, in fact, not profitable to your organisation.

○ *Net Present Value of Customers (NPV)*

NPV is not only a standard financial metric used for appraising long-term projects, but it is also a key metric in determining Return on Marketing Investment (ROMI). It is important for marketers to have an understanding of NPV and be able to calculate it in order to justify a new campaign to organisational executives and the finance department. Calculating NPV is also a good standard practice for marketing departments to evaluate whether or not each campaign is a good investment.

Net Present Value is the present value of a campaign or initiative minus the costs. NPV compares the present value of money today to the value of money in the future. The consideration of the time value of money is what makes NPV different from traditional ROI. Cash in the future is worth less than cash today, because cash today can be invested to produce more value in the future. Future cash values must be discounted to determine their present rate. 'r' represents the rate of return.

Today   **Future**

$\dfrac{\$1}{1 + r} = \$1$

The Present Value (PV) of money is the sum of future cash benefits discounted to today. The net present value subtracts all costs associated with the campaign, both fixed and variable.

$$NPV = (\text{start-up marketing cost}) + \frac{\text{profit in time period 1}}{1 + r} + \frac{\text{profit in time period 2}}{(1 + r)^2} + \frac{\text{profit in time period 3}}{(1 + r)^3}$$

In this formula, the present value of the profit is computed for each time period involved in the campaign. Years or months are most commonly used. "r" represents the rate of return. It is determined by industry and usually ranges from 8% – 15%.

NPV is used to determine whether or not a campaign or initiative is beneficial to the organisation. A general rule of thumb is that if NPV > 0 the campaign is worthy of investment because the average benefits outweigh the costs. When NPV < 0, however, the costs outweigh the average benefits and the campaign needs to be redesigned.

NPV allows marketers to compare ROMI of campaigns with different budgets and time periods. It can also be used to calculate the anticipated change in share price for an organisation based on an individual campaign.

Market trends and development can include:

- **Changes in Technology**

Perhaps even more important than keeping up to date with current marketing trends is keeping up with the future of digital marketing. If you and your organisation can forecast the future now, you'll have an easier time assimilating when it happens. For example, when wearable technology was first introduced, it didn't seem like they would be successful. Now, however, it seems that they are one of the most important commodities to watch in digital marketing.

As the technology continues to progress, it's extremely important for digital marketers to be prepared to market towards wearable technology, which will require even more optimisation and quick thinking than the shift to mobile devices.

Because technology will soon reach around the globe, it's integral for you to have a solid understanding of different cultures. This goes beyond learning to speak the language. It encompasses a need to understand, maybe even live among a variety of cultures and learn their customs, religions, social views, economics, and more.

Once you understand the culture, you'll be able to craft a marketing plan for each audience. Don't wait to start learning about this one. Global reach will happen, and the time to act is now if you want to be ahead of the game when it comes to marketing.

- **Changes in Supplier Prices**

Supply and demand for products, currencies and other investments creates a push-pull dynamic in prices. Prices and rates change as supply or demand changes. If something is in demand and supply begins to shrink, prices will rise. If supply increases beyond current demand, prices will fall. If supply is relatively stable, prices can fluctuate higher and lower as demand increases or decreases.

With these factors causing both short and long-term fluctuations in the market, it is important to understand how all these elements come together to create trends. While these major factors are categorically different, they are closely linked to one another. Government mandates impact international transactions, which play a role in speculation, and supply and demand plays a role in each of these other factors.

- **Demographic Trends**

While demographic change occurs slowly, marketers can begin to see indicators of potential change by identifying small trends that may suggest a larger shift over time. By paying close attention to these trends organisations can prepare their long-term marketing strategy to be ready when the shift becomes more apparent.

To illustrate how a marketer may respond, let's consider the demographic characteristic birth rate. In some countries the overall birth rate is declining while the average age of the population is growing (i.e., people living longer). For an organisation targeting the youth market with sporting products this trend may suggest that in coming years they will see shrinkage in demand for their products within the youth market as the population of this market declines. On the other hand demographic data may signal to the organisation that another market (i.e., older market), which they may not have previously targeted, may hold potential for new products. If it is predicted that the shift will occur over several years the marketer can slowly move into the new market by offering products geared toward older adults.

- **Ecological and Environmental Trends**

Trends in the market can be identified by understanding the pattern of growth or decline in sales resulting from changes in environmental factors such as; seasonality, population, social, technology, economic cycles and political climate.

The environmental sector is highly complex, being comprised of a diverse set of activities. These activities range from high-growth segments such as carbon emissions reductions markets, to regulated growth markets such as waste management, to declining employment markets in the natural resource industries.

Emerging areas of the environmental sector, namely carbon & climate change mitigation and investments in energy efficiency and renewable energy resources will drive the greatest future growth for the environmental sector and should be incorporated into future definitions and models of the environmental sector.

Over the last decade there has been a gradual trend toward pollution prevention activities as a replacement for pollution abatement and control activities. This trend has, for instance, resulted in a difference in the type of capital expenditures firms made for environmental protection. As this trend continues to evolve, it is blurring the distinction between the environmental sector and traditional industries.

- **Economic Trends (Local, Regional, National, International)**

In order for an economic indicator to have predictive value for investors, it must be current, it must be forward-looking and it must discount current values according to future expectations. Meaningful statistics about the direction of the economy start with the major market indexes and the information they provide about:

- ○ Stock and stock futures markets

- ○ Bond and mortgage interest rates, and the yield curve

- ○ Foreign exchange rates

- ○ Commodity prices, especially gold, grains, oil and metals.

Although these measures are crucial to investors, they aren't generally regarded as economic indicators per se. This is because they don't look very far into the future - a few weeks or months at most.

In Australia, the Australian Bureau of Statistics (ABS) refers to:

○ National Accounts

○ International Accounts

○ Consumption and Investment

○ Production

○ Prices

○ Labour Force and Demography

○ Incomes

○ Housing Finance.

You can access the Key Economic Indicators at http://www.abs.gov.au/

- **Government Activities e.g. Interest Rates, Deregulation**

Global business is more complex and problematic than those which are only domestic in their focus. The main methods for business to expand globally include exporting, relocating production, joint ventures and foreign direct investment.

Any global venture will have Specific Financial Influences:

1. **Currency Fluctuations**

   Foreign exchange dealers (often associated with a bank) facilitate foreign currency dealings – usually involving $US. Often the spot rate (when the transaction actually occurs) may be different from the rate when the contract was made.

2. **Economic Outlook**

   Australian business is affected by global markets. The overall global economic outlook affects the level of economic activity, government policy, interest rates etc. This will impact on all domestic business although some more than others. The Global Financial Crisis (GFC) for example had a profound effect on business activity and opportunity throughout Australia.

3. **Interest Rates**

   Affect costs of borrowing overseas (OS) funds / affect foreign investment.

4. **Availability of Funds**

   Australian financial institutions borrow overseas and large corporations can directly source funds from global markets. A tightening of the availability of funds will impact on domestic business directly or indirectly.

- **Industrial Trends**

Industry trends are patterns or trends that occur within a specific industry. These trends may relate to price, cost, consumer purchasing, marketing, manufacturing, sales methodology or any number of other areas. Trends occur within every industry and can provide organisations with important data to help them remain competitive in the marketplace.

Analysis of industry trends can be very valuable to manufacturers and retailers. Understanding how consumers purchase products can help organisations make decisions regarding allocation of funds and labour.

Watching industry trends can also help businesses stay competitive. For example, several years ago, video rental stores began phasing out VCR tapes in favour of DVDs. The industry trend was toward the newer media. Stores in this industry had to make a decision: They could either follow the trend or continue to compete for the business of consumers who wanted to rent DVDs or they could fight the trend and position themselves as one of the few locations where consumers could continue to access VCR tapes. Of course digital downloading of television shows and movies has not largely replaced the video stores.

Industry trends can be influenced by a number of factors. A trend toward increased safety standards in automobiles might be tied to government legislation, for example. Likewise, a trend toward shorter hemlines in women's fashion may be the result of the popularity of a celebrity who is known to wear short skirts. Also, a trend toward use of sustainable materials in a manufacturing sector may be the result of both public demand and a decrease in the availability or affordability of non-sustainable materials.

- **Penetration of New Technologies**

Forecasting market penetration is an essential step in the development, assessment, and commercialisation of new technologies. Among the many forecasting approaches available are the economic cost model and the diffusion model. Separately, each of these approaches has been used in many applications of market penetration forecasting. This wide variety of forecasting methods gives analysts several options from which to choose the best fit for their needs and resources. In some instances, the best prediction tool is a combination of methods.

- **Social And Cultural Factors**

Cultural Factors are some of the strongest influences of consumer buyer behaviour. Cultural Factors are the set of basic values, perceptions, wants and behaviours that are 'learned' by a consumer from their families and other important social institutions. 'Culture' is the most basic source of a consumer's wants and behaviour. It lives at the foundation of a consumer's world view.

Culture is mostly a learned behaviour, being constructed by the society a consumer grows up in. That society 'teaches' the consumer basic values, perceptions, wants and behaviours. What a consumer is 'taught' can vary greatly in different parts of the world. For example, in Australia a child will learn such values as democracy, freedom, working hard, making your own success, and family values. Children in many Asian countries will learn such values as social harmony, concern with social and economic well-being instead of civil and human rights, loyalty towards authority and the well-being of the family over the well-being of self.

Marketers need to always try to notice cultural shifts in order to discover new products that might be desired by consumers in other cultures and subcultures. Recent trends that have developed over the past decade are the growth of health

and fitness over junk and processed food products, and the personal entertainment market which has grown as group and family entertainment in the living room has decreased (think tablets and Netflix). It is the marketers' responsibility to keep an eye on your customer segments, their cultures, subcultures and any new trends that affect them or may bring new groups of customers to your products.

When identifying your market trends, it is helpful to also look at overseas information and see which trends are occurring in an equivalent market to yours. Trends may occur a year or so ahead in an overseas country and knowing about them now enables you to plan for the future. If you don't have access to overseas information, the internet is a great place to start. The internet also enables you to set up web alerts so that when something relating to your market occurs you will receive up to the minute information.

Profiling your customer and looking at what their needs and wants are now and how they are likely to change can also identify market trends. Conducting a survey with your existing customers that specifically covers these issues will enable you to start identifying movement in your market.

Analyse Market Trends and Developments for their Potential Impact on the Business

Every business plan should include market analysis. This is one of the first and most important reasons to do a business plan. And you should renew your market analysis at least every year. Markets change and a business needs to watch for changes in its market.

The market you need to look at is your potential market, not the actual market served, the one that's limited to your existing customers. Your target market is much wider than just the people you already reach. It's the people you might someday reach, or people you could reach, that you need to be concerned about.

For example, the market of a local movie theatre or restaurant includes not just the people who regularly go there but everybody who lives within driving distance. The market for a landscaping business includes all the homes and commercial properties within a logical reach. The market for downloadable e-books over the internet includes everyone connected to the web. The market for personal computers includes homes, schools, businesses and government organisations.

- **Getting the Information**

    The information sources that will help you conduct a market analysis are different for every business plan. For example, you might need local information you can get from your local chamber of commerce. Or you might be able to find your market information at http://www.business.gov.au, which is a good source for information. You might also need to find other government statistics, or other commercial statistics, so you may be conducting some internet searches to track down the information.

Not all the information you need is going to be publicly available, and you may have to settle for educated estimates. Sometimes you'll have to extrapolate information from different sources to get the information you're seeking. Good market research can come from telephone directories, catalogues, industry association statistical compilations, real estate information and density maps.

- **Segmentation**

Always try to divide your target market into useful slices or segments. Dividing the market into smaller segments helps the organisation address the more specific market needs, media, pricing patterns and decision criteria in each of their different market segments.

Segmentation helps you target specific people with specific messages and helps you focus on user needs. Families might need quick, consistent service while students might need late-night service. Families read the newspaper; students read posters on bookstore walls. Knowing your market segments will help you make smart decisions when it comes to providing the products and services that will work best for them and for communicating with them.

- **Market Size and Growth**

You need to be able to measure and quantify your market. For example, if local homeowners are part of your target market, then you should be able to count them. You need to know whether you have 500 people in your market, or 200,000, or 2 billion. Be able to show what the total market is for your business.

When it comes to market growth, you need to think about percentage change as a market forecast. Is the number of homeowners in your target market increasing or decreasing and by how much per year? How many older workers retire every year, and how is this changing? How many people eat in restaurants in your market area, and how is this behaviour changing? Market forecasts start with the total numbers of possible purchasers in each market segment, then project percentage change over the next three to five years.

- **Market Trends**

You need to understand what's going on with your market. What marketing trends and fashions do you see having an influence on your market segments? If you're selling cars, for example, is there a trend that shows people responding to higher gasoline prices or more environmental concerns? In computers, is there a trend toward more power and lower prices? How does the increase in TV recorder equipment affect your market? The questions that affect target markets will be different for every business, and these are just examples. What's important is that as you create your business plan, you become aware of the market trends that affect your specific market.

Perform Qualitative Analysis of Comparative Market Information as a Basis for Reviewing Business Performance

Qualitative analysis uses subjective judgment based on unquantifiable information, such as management expertise, industry cycles, strength of research and development, and labour relations. Qualitative analysis contrasts with quantitative analysis, which focuses on numbers that can be found on reports such as balance sheets. The two techniques, however, will often be used together in order to examine an organisation's operations.

Qualitative analysis deals with intangible, inexact concerns that belong to the social and experiential realm rather than the mathematical one. This approach depends on the kind of intelligence that machines (currently) lack, since things like positive associations with a brand, management trustworthiness, customer satisfaction, competitive advantage and cultural shifts are difficult, arguably impossible, to capture with numerical inputs.

Comparative market analysis is an examination of the prices at which similar items in the same area recently sold. Real estate agents perform a comparative market analysis for their clients to help them determine a price to list when selling a home or a price to offer when buying a home. Since no two properties are identical, agents make adjustments for the differences between the sold properties and the one that is about to be purchased or listed to determine a fair offer or sale price. Essentially, a comparative market analysis is a less-sophisticated version of a formal, professional appraisal.

Comparative market information may include:

- Best practice information
- Books and articles, including:
  - Academic
  - Business
  - General
  - Industry.
- Brochures
- Direct mail packages
- Documentaries and interviews on broadcast media
- Inter-firm comparison data
- International benchmarking
- Internet
- Public or proprietary research
- Speeches.

Analyse the Market Performance of Existing and Potential Competitors and their Products or Services to Identify Potential Opportunities or Threats

Businesses do not exist in isolation. They work within a framework of competitors, who all have a significant influence on how you run your business. So, when establishing your market position, an analysis of your competitors is crucial.

But why do you actually need to look at what your competition is doing?

When conducting your marketing planning and strategic development, there are a number of roles that competitive analysis can play. These include:

- Providing strategies for achieving competitive advantage for your business

- Understanding what your competitors are doing well and where they aren't doing so well

- Looking at what the competitors did in the past, what they are doing now and what they will do in the future

- Examining what your returns on your investment in marketing may be (based on what the competition is doing).

The strategic importance of analysing and understanding your competition can not be underestimated. They provide an excellent snapshot of your market and what you can do to exploit their weaknesses.

When attempting to examine your competition, it is important that you have a solid understanding of exactly who your competition are, as well as information such as:

- Are they a major threat to our business?

- What are their strengths and weaknesses?

- What marketing activities do they undertake and are these successful?

- What is their profile in the market?

- What are their objectives?

- Is their cost structure similar to ours?

- What are the market shares of our main competitors?

- How are they structured?

- What is their distribution system?

- What is their advertising strategy and position profile?

- How satisfied are their customers?

- What new products do they have planned?

- How effective are their marketing and promotion?

Information such as these can be gained both qualitatively and quantitatively. The level of the data you obtain may vary from competitor to competitor depending on just how active they are in the market and how large the competition organisations actually are.

A multitude of software programs designed for use with quantitative data is available today. Quantitative research, predominantly statistical analysis, is still common in the social sciences and such software is frequently used among social science researchers.

A useful statistical software tool can generate tabulated reports, charts, and plots of distributions and trends, as well as generate descriptive statistics and more complex statistical analyses. Lastly, a user interface that makes it very easy and intuitive for all levels of users is a must.

There are many software programs available for quantitative and qualitative analysis. It is important to realise that the software programs are mostly just sorting mechanisms - they do not analyse. You still need to engage with your data.

Some of these programs are free and others must be purchased. ATLASti, NVIVO, MAXQDA, NUDist, ANTHTOPAC are some of the software.

Competitive Analysis

The competitive analysis is a statement of the business strategy and how it relates to the competition. The purpose of the competitive analysis is to determine the strengths and weaknesses of the competitors within your market, strategies that will provide you with a distinct advantage, the barriers that can be developed in order to prevent competition from entering your market and any weaknesses that can be exploited within the product development cycle.

The first step in a competitor analysis is to identify the current and potential competition. There are essentially two ways you can identify competitors. The first is to look at the market from the customer's viewpoint and group all your competitors by the degree to which they contend for the buyer's dollar. The second method is to group competitors according to their various competitive strategies so you understand what motivates them.

Performance of existing and potential competitors may include comparisons about:

- Corporate share price
- Market share
- Number of customers
- Profitability
- Sales in units or dollars.

Once you have grouped your competitors, you can start to analyse their strategies and identify the areas where they are most vulnerable. This can be done through an examination of your competitors' weaknesses and strengths. A competitor's strengths and weaknesses are usually based on the presence and absence of key assets and skills needed to compete in the market.

To determine just what constitutes a key asset or skill within an industry concentrate your efforts in four areas:

1. The reasons behind successful as well as unsuccessful firms
2. Prime customer motivators
3. Major component costs
4. Industry mobility barriers.

The performance of an organisation within a market is directly related to the possession of key assets and skills. Therefore, an analysis of strong performers should reveal the causes behind such a successful track record. This analysis, in conjunction with an examination of unsuccessful organisations and the reasons behind their failure, should provide a good idea of just what key assets and skills are needed to be successful within a given industry and market segment.

For instance, in the personal-computer operating-system software market, Microsoft reigns supreme with DOS and Windows. It has been able to establish its dominance in this industry because of superior marketing and research as well strategic partnerships with a large majority of the hardware vendors that produce personal computers. This has allowed DOS and Windows to become the operating environment, maybe not of choice, but of necessity for the majority of personal computers on the market.

Microsoft's primary competitors, Apple and IBM, both have competing operating systems with a great deal of marketing to accompany them; however, both suffer from weaknesses that Microsoft has been able to exploit. Apple's operating system for its Macintosh line of computers, while superior in many ways to DOS and Windows, is limited to the Macintosh personal computers; therefore, it doesn't run many of the popular business applications that are readily available to DOS and Windows. To an extent, IBM's OS/2 operating system suffers from the same problem. While it will run on all of the personal computers DOS and Windows can run on and even handle Windows applications, the number of programs produced for OS/2 in its native environment is very small. This is the type of detailed analysis you need in analysing an industry.

Through your competitor analysis you will also have to create a marketing strategy that will generate an asset or skill competitors do not have, which will provide you with a distinct and enduring competitive advantage. Since competitive advantages are developed from key assets and skills, you should sit down and put together a competitive strength grid. This is a scale that lists all your major competitors or strategic groups based upon their applicable assets and skills and how your own organisation fits on this scale.

To put together a competitive strength grid, list all the key assets and skills down the left margin of a piece of paper. Along the top, write down two column headers: 'weakness' and 'strength.' In each asset or skill category, place all the competitors that have weaknesses in that particular category under the weakness column, and all those that have strengths in that specific category in the strength column. After you've finished, you'll be able to determine just where you stand in relation to the other firms competing in your industry.

Once you've established the key assets and skills necessary to succeed in this business and have defined your distinct competitive advantage, you need to communicate them in a strategic form that will attract market share as well as defend it. Competitive strategies usually fall into these five areas:

- Product
- Distribution
- Pricing
- Promotion
- Advertising.

Strategies primarily revolve around establishing the point of entry in the product lifecycle and an endurable competitive advantage. This involves defining the elements that will set your product or service apart from your competitors or strategic groups. You need to establish this competitive advantage clearly so it is understood not only how you will accomplish your goals, but why your strategy will work.

Opportunities

Your analysis may produce opportunities or threats as a result. The opportunities may include:

- **Alliances**

  Coming together of two or more firms to create a unique organisational entity (such as a joint venture), in which each firm retains its individual identity and internal control. The purpose of an alliance is to:

  1. Achieve joint strategic goals

  2. Reduce risk while increasing rewards

  3. Leverage resources.

  Since an alliance in neither an acquisition nor a merger, it requires new control methods and new management skills.

- **Cooperative Ventures**

  When two or more grantors combined participate in a grant project, it is a cooperative venture. This participation can be in the form of sharing financial or technical resources.

- **Exports**

  To send goods or services across national borders for the purpose of selling and realising foreign exchange.

- **Extending, expanding or otherwise changing an existing business through:**

  - Increasing customer numbers

  - Increasing average order value

  - Increasing lifetime value of the customer

  - Reducing costs of marketing

  - Improving current products/services

  - Developing new distribution channels.

- **Franchising**

  Franchising is a business relationship in which the franchisor (the owner of the business providing the product or service) assigns to independent people (the franchisees) the right to market and distribute the franchisor's goods or service, and to use the business name for a fixed period of time.

- **Joint Venture (JV)**

  A business arrangement in which two or more parties agree to pool their resources for the purpose of accomplishing a specific task. This task can be a new project or any other business activity. In a Joint Venture (JV), each of the participants is responsible for profits, losses and costs associated with it. However, the venture is its own entity, separate and apart from the participants' other business interests.

- **Strategic Alliances**

  An arrangement between two organisations that have decided to share resources to undertake a specific, mutually beneficial project. A strategic alliance is less involved and less permanent than a joint venture, in which two organisations typically pool resources to create a separate business entity. In a Strategic Alliance, each organisation maintains its autonomy while gaining a new opportunity. A Strategic Alliance could help an organisation develop a more effective process, expand into a new market or develop an advantage over a competitor, among other possibilities.

- **New Products or Services for Existing and New Markets**

  New market opportunities spring from a range of possible sources and vary in their size, importance and risk. The list of places to look includes the following:

  - Different uses for an established imaging or document technology

  - Alternate or improved imaging or document technology

  - Alternate offerings of service models, supplies, and other annuities

  - New geographic regions

  - New demographic or vertical industry segments.

- **Potential for Greater Penetration of Existing Markets with Existing Products or Services.**

  Market penetration occurs when an organisation enters/penetrates a market with current products. The best way to achieve this is by gaining competitors' customers (part of their market share). Other ways include attracting non-users of your product or convincing current clients to use more of your product/service, with advertising or other promotions. Market penetration is the least risky way for an organisation to grow.

Threats

Threats may include:

- **New Competitor Entering the Market**

  When new firms enter markets in search of economic profits, existing firms are forced to compete by lowering their prices and making do with fewer customers. This eats into the economic profits of all firms in the market AOV.

It's only after these profits have been almost completely devoured that the process of entry stops.

- **New Products or Services Being Launched by Existing Competitors**

As the product's popularity grows, sales will increase and your unit costs will go down. But competitors will emerge to grab a share of the profits to be made. Your marketing objective will now be to maintain and increase your market share - for example, by improving your offer and making it more widely available.

- **Increased Number of Inactive Customers Resulting in Reduced Average Lifetime**

There's little point in dedicating massive resources to generating new customers when 25-60% of your dormant customers will be receptive to your attempts to regenerate their business if you approach them the right way, with the right offer. Reactivating customers who already know you and your product is one of the easiest, quickest ways to increase your revenues. Re-contacting and reminding them of your existence, finding out why they're no longer buying, overcoming their objections and demonstrating that you still value and respect them will usually result in a tremendous bounty of sales and drastically increased revenues in a matter of days... and will lead to some of your best and most loyal customers.

- **Reduced Average Order Value Resulting in Reduced Average Lifetime Value**

If there's a drop in Revenue per Visitor (RPV,) it could be due to:

- ○ A sudden increase in visitors without any buying intent (drop in conversion rate): Check if there has been any recent marketing activity that brought a lot of unqualified visitors with low buying intent. Use segmentation to understand what channels are bringing the right traffic.

- ○ Customers are buying less of high-value goods and more of low-value goods (drop in AOV): Consider using a recommendation engine.

Activity One

1a You have decided to investigate which brand of products that your customers prefer. There are six brands available for sale. The data you obtained by surveying 300 people is presented below. Can you be confident that Brand D is the most preferred brand in the market?

Brand	Preference by Customers
A	40
B	51
C	49
D	55
E	52
F	53
Total	**300**

You will need to access the Normal Distribution Calculator for the next two questions. You will find one at http://stattrek.com/online-calculator/normal.aspx

1b An average light bulb manufactured by the Acme Corporation lasts 300 days with a standard deviation of 50 days. Assuming that bulb life is normally distributed, what is the probability that an Acme light bulb will last at most 365 days.

1c Suppose scores on an IQ test are normally distributed. If the test has a mean of 100 and a standard deviation of 10, what is the probability that a person who takes the test will score between 90 and 110?

Trainer's Notes for Activity One

1a An RFM number that is appropriate here would be 415

Brand	Observed	Expected	(O-E)^2	O-E)^2/E
A	40	50	100	2
B	51	50	1	0.02
C	49	50	1	0.02
D	55	50	25	0.5
E	52	50	4	0.08
F	53	50	9	0.18
Totals	300	**300**		**2.8**

Degrees of Freedom = 5, therefore Critical Chi value is 11.07. Because calculated is 2.8 at the 0.05 probability interval, there is enough evidence to say these results do not differ from chance and the null hypothesis that all brands are favoured equally is true.

Trainer's Notes for Activity One (continued)

1b Given a mean score of 300 days and a standard deviation of 50 days, we want to find the cumulative probability that bulb life is less than or equal to 365 days. Thus, we know the following:

- The value of the normal random variable is 365 days

- The mean is equal to 300 days

- The standard deviation is equal to 50 days.

We enter these values into the Normal Distribution Calculator and compute the cumulative probability. The answer is: $P(X < 365) = 0.90$. Hence, there is a 90% chance that a light bulb will burn out within 365 days.

1c Here, we want to know the probability that the test score falls between 90 and 110. The 'trick' to solving this problem is to realise the following:

$P(90 < X < 110) = P(X < 110) - P(X < 90)$

We use the Normal Distribution Calculator to compute both probabilities on the right side of the above equation.

- To compute $P(X < 110)$, we enter the following inputs into the calculator: The value of the normal random variable is 110, the mean is 100, and the standard deviation is 10. We find that $P(X < 110)$ is 0.84.

- To compute $P(X < 90)$, we enter the following inputs into the calculator: The value of the normal random variable is 90, the mean is 100, and the standard deviation is 10. We find that $P(X < 90)$ is 0.16.

We use these findings to compute our final answer as follows:

$P(90 < X < 110) = P(X < 110) - P(X < 90)$

$P(90 < X < 110) = 0.84 - 0.16$

$P(90 < X < 110) = 0.68$

Thus, about 68% of the test scores will fall between 90 and 110.

Key Points Element 1

- **Statistical methods can be used to analyse market data in order to find market trends and developments which may impact on a business**

- **Once market trends have been identified, you must assess each to determine how much of an impact they are likely to have on a business**

- **Measures of central tendency, dispersion and correlation can be used to compare different sets of market data**

- **Qualitative analysis is appropriate for comparing competing businesses as a basis for reviewing business performance**

- **Opportunities and threats posed by your competition are an important consideration in any market analysis.**

Element 1 – 'True' or 'False' Quiz

		True	False
Q	A measure of central tendency is the Mean.	✓	
Q	Correlation attempts to determine statistical significance.		✓
	This is Chi-Square analysis.		
Q	The lifetime value of a customer can not be estimated easily.		✓
	Estimates are relatively easy to make based on existing data.		
Q	An RFM grid attempts to measure response rates.		✓
	It groups together similar consumers.		
Q	Standard Deviation is a measure of dispersion.	✓	
Q	RFM analysis attempts to group customers with similar purchase habits.	✓	
Q	PRIZM is a statistical method for analysing correlation.		✓
	It is a proprietary market segmentation tool.		
Q	Technology continually changes.	✓	
Q	The exchange rate is a business trend that importers need to carefully monitor.	✓	
Q	All businesses face the same market trends.		✓
	Specific businesses may be impacted more by specific trends than others.		