

CHAPTER 3 - Understanding the business environment

Contents

CHAPTER 3 - Understanding the business environment 2

3.15 Scenario planning..... 2

CHAPTER 3 - Understanding the business environment

3.15 Scenario planning

Active reading: Note the difference between a forecast and scenario. Also, note the contribution of management accounting to the preparation of forecasts. Think about how management accounting can contribute to the development of various scenarios.

During the past few decades, the business environment has become increasingly more complex and dynamic. This dynamism has led to an increase in the degree of uncertainty about what the future holds. In turn, this puts pressure on senior executives who bear the responsibility for developing and implementing the strategy to deliver the corporate objectives (Oliver and Parrett, 2018). Management accounting can contribute to reducing the uncertainty by helping to produce forecasts and scenarios based on various potential outcomes.

Forecasting, scenario analysis, and strategic planning

Organizations create forecasts to estimate how the current strategy will play out. Management accountants play a crucial role in the use of forecasting, as they can provide insight into the potential impact of observed changes in the environment on the achievement of the organization's objectives. These can be expressed in financial terms and used as the basis for more detailed budgeting of the forthcoming fiscal year. Furthermore, they form the basis for updating rolling budgets, where the plan for a set period, for example, the next 12 months, is updated on a monthly or quarterly basis. The use of the latest estimated forecasts and rolling budgets allow plans to be updated to take account of known changes.

Forecasts typically make use of quantitative models based on past behavior using techniques such as time series analysis to help identify seasonal and cyclical trends, and regression analysis and econometric models to identify possible correlations and relationships between variables. It is, however, not just the relationship between variables that is interesting, but identifying the driving forces for change, and responding to these promptly. For example, leading indicators, such as a change in demographics created by an increase in the number of children, will affect the market for children's clothes, toys, and, more broadly, the number of schools, and so on. The trend can be built into an economic model to forecast the proportion of the population at various age ranges, with the resultant data being useful for many organizations whose products and services are affected by the demographics of the population. Different assumptions could be built into a

forecast and sensitivity analysis undertaken until a realistic forecast is achieved. A similar study can be conducted on any segmentation of the market that forms the basis of a forecast.

Some of the impacts of the changing demographics are relatively easy to estimate based on extrapolating existing trends in the makeup of the population, but the impact of disruptive technology is more complicated. There is a lack of base data on which to predict the effect. It is possible to see the impact that the Internet had on industry sectors such as retailing and banking with the benefit of hindsight, but at the time, the degree to which this would change the industry was difficult to predict. The social and economic impact of the development of the mobile phone would have been difficult to predict. It takes innovative thinking and a strong sense of vision to use developing technologies to disrupt the existing way of working. New technologies also present opportunities for new industries and threats to existing industries. They herald the rise of new organizations and the demise of those that do not adapt.

Forecasts are useful for projecting past data into the future or setting targets for a new venture, for example, a projection of the level of sales expected based on market research. Forecasting does not, however, necessarily prepare organizations to deal with the increasing level of uncertainty caused by the high level of complexity and dynamism in the business environment. Coping with uncertainty is where the role of scenario planning can help.

A scenario is not a forecast, but a narrative of a possible future outcome. Scenarios are not predictions of the future but rather developed to enhance organizational learning about possible actions that can be taken in response to potential events and shocks to the business environment (Wright et al., 2013). They are expressed in qualitative rather than quantitative terms. The timespan used can vary from five, ten, to twenty years from now, but the further away from the horizon, the more speculative the outcome becomes.

The key benefit is that the development of scenarios allows organizations to gain an understanding of how they might respond and to test possible strategies against changes in the business environment. This process enables organizations to be better prepared for changes should they materialize in the future. Also, potential triggers and environmental indicators can be identified and tracked as part of an early warning system that the changes imagined in a scenario might happen (Wilburn and Wilburn, 2011). The more prepared an organization is, the better they can sense, seize, and handle external changes quickly (Teece, 2007). Flexibility, responsiveness, and a willingness to change are undoubtedly vital attributes for success in today's business environment.

Writers such as Hamel and Prahalad (Hamel and Prahalad, 1994; Hamel, 1996) emphasize the importance of looking to the future, and the dangers of becoming trapped in the ritual of strategic planning as a routine annual activity. Organizations need to be prepared to embrace change and avoid the status quo. Taking a broader look at the environment, and creating multiple scenarios of what the future may look like, can aid the understanding of the business environment by providing the opportunity for strategic conversations, in which possible views of the future are debated (Grant, 2003; Bowman et al., 2007). Undertaking scenario analysis enables an organization to stay relevant to the times and to anticipate changes.

Using scenarios can have a positive impact on performance as managers are better prepared to deal with changes in the environment, and challenge the status quo (Visser and Chermack, 2009; Bouhalleb and Smida, 2018). Scenario planning can not only help to identify indicators to monitor, but also identify areas where the organization can attempt to influence the future environment. It should not just be a case of accepting and responding to changes as they develop. Organizations can proactively engage with the environment to change the way the industry looks in the future, for example, by lobbying governments, or developing and applying disruptive technologies and disintermediation strategies. This degree of proactiveness requires organizations to ask the question, what do we want the industry to look like in five or ten years, and what can we do to make sure it does?

3.15.1 Objectives of scenario planning

Wright et al. (2013) suggest that there are three objectives to scenario planning: enhancing understanding; challenging conventional thinking; and improving decision making, although they felt there was little evidence to suggest that the third objective was achieved. In truth, all the objectives have a degree of subjectivity, and there is little empirical research that categorically proves the benefits in quantitative terms. Still, the intangible benefits emerge through contributing to the process of organizational learning and an enhanced sensemaking ability from undertaking the scenario planning activity. This can be illustrated by looking in more detail at the three objectives proposed.

Enhancing understanding

By exploring multiple scenarios incorporating a range of possible events, emerging trends, and environmental shocks, organizations can gain a better understanding of how the environment might change and explore the possible strategic responses available to the organization. Playing through the scenarios using role-play, round table discussions, and business planning activities can aid the understanding of how the organization currently operates, as well as its capabilities for dealing with change. This process may suggest areas where flexibility can be enhanced, not just to be able to deal more effectively with changes in the future but to make improvements to operations within the current environment. This flexibility can have positive benefits in improving current efficiencies, effectiveness, and identifying possible opportunities to gain competitive advantage.

Challenging conventional thinking

Forecasting the future within known parameters is relatively easy, but to move away from the conventional thought processes and to dare to imagine a new future can be rewarding. Thinking “outside of the box”, or opening up the mind so that “there is no box” can be beneficial in

stimulating change. Even if the most radical scenarios might not materialize, the experience of exploring possible strategic responses prepares the organization to deal with events and shocks when they do arise. This process may also generate ideas where the organization can apply disruptive technologies or disintermediation strategies to change the environment to its advantage.

Improve decision-making processes

The experience of playing through potential strategic responses to a range of envisioned environmental changes can enhance the decision-making capabilities of the organization due to the practice of creating and playing through the scenarios. Creating scenarios requires the acquisition of information via research skills, the organizing of the information into a plausible narrative, communicating the story to relevant business units and participants, and analyzing and evaluating various scenarios. The opportunity to do this improves the sharing of ideas, the discussion of potential impacts, and the development of strategic responses. These exercises can provide positive benefits within the effectiveness of the decision-making processes in the organization and highlight areas where improvements can be made. The very act of creating the scenario, and playing through potential outcomes, can have intangible benefits that emerge from organizational learning and staff development, which will manifest themselves in enhancing the skills required for decision making.

3.15.2 Benefits and issues of undertaking scenario planning

There are several reported benefits claimed for scenario planning (see, for example, Wright et al., 2013) which include:

Enhanced perception and better observation of the environment

Scenario planning involves making assumptions about future environmental shocks and helps to identify aspects of the environment that can be monitored as indicators of change. This focus on the environment, and potential views of the future, serves to heighten awareness of the importance of environmental scanning on an on-going basis.

A structure for dealing with uncertainty

The use of scenarios to stimulate debate about the potential views of the future, which are generated from modeling the impact of possible events, emerging trends, and environmental shocks, provides a framework for dealing with uncertainty. The scenario presents a rationale for confronting the difficulties created from the increasingly complex and dynamic environment.

Integration of corporate planning function

Although scenarios are not a prediction, they enhance the skill set within the organization for analyzing and evaluating various strategic options. These can be translated into the activity of corporate planning so that when the indicators of change or events materialize, they can be incorporated into the corporate plan. Scenario planning can be conducted at the business unit level as well as the corporate level, which provides opportunities to explore how different events, and so on, impact on various business units or functions.

Communication tool

Scenarios need to be communicated through the medium of a plausible narrative. The use of scenarios, and the dissemination to business units and managers within the organization, increase the awareness of potential changes in the environment throughout the whole organization, and possible strategic options that could be adopted. The creation and communication of the scenario also enhance the ability of those involved in its preparation to communicate information clearly and succinctly, in a way that facilitates decision making.

Organizational learning

The use of scenarios provides a means of generating debate about how things are, should be and could be, done in the future. They provide opportunities for staff development, improving the current operations, and enhancing the organization's ability to anticipate and deal with uncertainty. If scenarios are updated and used frequently, they form a useful platform for organizational learning and development.

Improving the process of sensemaking within an organization

Van Reedt Dortland et al. (2014) suggest that scenario planning aids the process of sensemaking within an organization. Sensemaking is a social process in which members of the organization interpret the environment through interactions that allow them to comprehend the world around them (Weick and Roberts, 1993). Weick (1995) stresses the importance of *cues* – observable events that are inconsistent with people's expectations and require further attention. Sensemaking involves noting and interpreting these cues into concrete actions.

It is not practical to react to every cue; therefore, several cues taken together can create a *shock* that initiates the sensemaking process. The typical shocks that scenario planning seeks to address are ambiguity and uncertainty. The process of scenario planning can act to challenge existing models of thinking and thereby create shocks to enhance sensemaking (Wright, 2005). Cues make sense to individuals within a certain frame or context. Therefore the process of sensemaking can encourage strategic conversations, as members of the organization bring their knowledge and experience to the interpretation of cues within a given context.

3.15.3 Issues to be aware of in scenario planning

There are, however, some aspects to be aware of when using scenario planning.

Implausibility

If the scenario is not plausible, participants will not buy-in to the scenario, and the usefulness of the exercise will be diminished.

The lack of quantitative data

Most scenarios are qualitative as to apply quantitative data is complicated based on the level of uncertainty being considered. Indeed, a characteristic of uncertainty is that it is difficult to quantify.

High degree of subjectivity

Due to the nature of scenario planning, there is a degree of subjectivity in their creation. The subjectivity can be reduced by using expert opinion and checking the internal consistency; that is, does it make sense? Hence the plausibility of the scenario is enhanced.

Participant bias

It is essential to involve a range of participants to avoid the views of influential individuals dominating the construction of scenarios, outcomes, or strategic responses.

3.15.4 Developing scenarios

Active reading. Note that although there is no one set method of developing scenarios, there is a need for some ordered approach to ensure their credibility and participation of various actors. Think about the practicalities of the process described.

There is no one set method of developing scenarios. The following phases, however, represent a logical sequence of activities that can be compressed, extended, re-ordered, or amended as suits the organizational needs.

1. Define the scope of the scenario – this involves determining the time frame to be used, and the business units, products, markets, and so on, to be included.
2. Identify the major stakeholders that can influence events or the future business environment. This helps to identify information sources and influential people to consult about the potential future scenarios that could emerge. Scenarios are inevitably subjective and are often based on extrapolations of team members' experience, bound by their knowledge of the environment

in which they operate (Keough and Shanahan, 2008; Marcus, 2009). It is often advisable to consult with industry experts outside of the organization, such as academics and consultants, to inject an element of externality, which reduces the potential for scenarios to be unduly influenced by the bias of the participants. The use of the Delphi technique can help to ensure a range of opinions are given due consideration and thus avoid bias or groupthink, which may result in scenarios being produced with which the current management is comfortable. It is better to take the management team outside of their comfort zone.

The Delphi technique is a structured communication and consensus-building method in which experts are interviewed separately, or asked to complete a detailed questionnaire, to elicit their opinions on the future environment. These are then summarized, and the results circulated to the participants who are asked to consider the issues again, taking into account the opinions expressed from the first round. These can be summarized again, and the process repeated until a reasonably consistent view is reached.

3. Identify the major events, trends, changes that could emerge. The use of frameworks such as PESTEL and industry analysis can be used to generate potential ideas. It is crucial, however, not to become trapped by thinking solely about known and short-term factors. O'Brien (2004) noted that there is often a predominance of economic factors highlighted, and there can be a lack of imagination, resulting in future scenarios staying close to the current state.
4. Identify the critical uncertainties. Scenario planning is about learning to deal with uncertainties and therefore reviewing the events, trends, and so on, needs to be examined critically to identify the real uncertainties. Garvin and Levesque (2006) suggested identifying the critical focal issue, driving forces, and significant risks before designing the scenarios to encourage strategic conversations with real relevance to the organization.
5. Identify potential scenarios. There may be a range of ideas generated. These can be merged to create possible scenarios that can be developed into workable scenarios for consideration. There are different suggestions within the literature as to the number of scenarios that should be generated, but keeping it to a manageable number is the consensus view, probably around four or five. Constructing and evaluating scenarios takes time, resources, and effort, not just from those involved in their construction, but also on the part of the participants engaged in the strategic conversations that follow. In practice, therefore, the number of scenarios that can be constructed and considered may be limited, in which case it is vital to deal with scenarios that cover the main uncertainties that have been identified.
6. Conduct research and construct initial scenarios. Once the initial scenarios have been identified, research needs to be conducted to ensure that the constructed future is grounded on a solid observable start point. Scenarios must be plausible; otherwise, managers will not take them seriously. Therefore, undertaking research in their preparation is not just highly

desirable; it is essential. Wilburn and Wilburn (2011) note that there are scenarios available from organizations, such as industry associations, government agencies, and consultants, that engage in future thinking that businesses can use. The use of scenarios prepared by industry experts avoids the time and resources required to research the preparation of original scenarios.

7. Check internal consistency and plausibility. The scenarios need to be plausible; otherwise, those asked to participate in the discussions concerning possible strategies to deal with the outcomes will not buy-in to the exercise. The potential cause and effect relationships also need to be checked for both internal and external consistency to ensure that the scenarios developed are plausible. Checking consistency involves making a judgment about whether the cause and effects included are reasonable and flow logically. The involvement of experts to review the scenarios before dissemination within the organization is a useful and practical method of checking for consistency.
8. The scenarios can be written as a narrative story and disseminated to participants in the activity.

3.15.5 Schools of scenario planning

Huss and Honton (1987) suggest that there are three primary schools of thought in scenario planning. These are intuitive logic, trend-impact analysis, and cross-impact analysis.

Intuitive logic

Intuitive logic is the process of developing plausible qualitative scenarios that generate strategic conversations. This process is the most common form of scenario planning and is the one described above. It is often called constructive logic as the method applies intuition and logical reasoning to construct likely events and outcomes without the need for definitive proof. It is based on identifying cause and effect relationships between variables, events, and trends, and can be used to consider potential strategic responses.

The emphasis of scenario planning is to uncover the causal nature of the unfolding future. The driving forces, which can be independent, can then be identified along with the areas of influence that are associated with each variable. Events, driving forces, and variables can be clustered together to indicate the interplay between the independent elements. Two or three outcomes, some of which may be extreme, are determined for each event or cluster. The scenarios are checked for internal consistency in that the narrative explains the dynamic interplay of the predetermined events and uncertainties, such that the future is arrived at via a logical sequence of consequences.

This check ensures plausibility, as well as injecting an element of reality into the resulting strategic conversation that evaluates the various strategic responses that could be employed.

Trend-impact analysis

Trend-impact analysis is the use of quantitative models and simulations, including econometric models. This method lends itself well to the use of accounting and economic data, but it is not as easy to generate a strategic conversation around the potential outcomes. Instead, there is a tendency to focus discussion on the validity of the assumptions built into the data.

Cross-impact analysis

Cross-impact analysis is associated with the La Perspective Institute and is the use of quantitative and qualitative scenarios to which probabilities can be associated. This method is a process of developing a range of scenarios to which probabilities are assigned. The process enables potential strategies to be developed and can aid the development of the best case, worst case, and most likely outcomes.

Backcasting or backward logic

Gioia et al. (2002) suggest that a process known as backcasting can be used where a future state is envisaged. Then a process of retrospectively looking at the events that would need to happen to reach the future state is undertaken. This process is similar to the backward logic method (Meissner and Wulf, 2015), in which participants try and work out what caused the future state. It uses the benefit of hindsight or prospective hindsight. It is a form of sensemaking that helps decision-makers generate potential explanations for a future event by going forward in time and then looking backwards. This can be used to help establish the degree of plausibility of an envisioned future state, in that, when looking at the changes that would need to take place to make it a reality, the probability, of it actually being achieved can be assessed. A recent trend in television murder mystery programs begin by showing the audience the murder, so the audience knows who did it, and we then spend the next hour watching the detectives work backwards to understand how and why it happened.

3.15.6 Using scenarios

Active reading. Scenario planning is by no means a precise science but seeks to enlighten managers as to possibilities and inform strategic decisions. Given that different outcomes will impact performance, think about how management accounting can assist in the evaluation of strategies proposed to deal with the different outcomes.

The scenario planning activity can take several forms, but fundamentally, they are intended to generate discussion about the future and the organizational response. There are several ways in which scenarios can be used in practice which include:

Roleplay

Scenarios can be used for role-playing exercises in which various stakeholder reactions can be tested. This activity is particularly useful in testing different strategic responses for acceptability to stakeholders, particularly the key players. It can also enhance the participants' understanding of the various stakeholder perspectives on strategic actions that can influence the development of the current strategy.

The use of critical incidents

The use of critical incidents is, as the title suggests, a technique in which scenarios are rigorously tested against critical incidents that could occur, and participants engage in identifying a range of potential strategic responses to the question, what happens if? The possible strategies are evaluated as to plausibility and practicality. This method can help to assess the organization's resources and capabilities to deal with uncertainty in the future.

Best-case and worst-case scenarios

Best-case and worst-case scenarios can be assessed, bearing in mind that they are not predictions but a range of possible scenarios. These can be used to focus on strategies that proactively push the environment towards the best-case scenario, and away from the worst case. This evaluation also enables the organization to consider, and to an extent, increase its ability to deal with the worst-case scenario should it materialize.

Multi-attribute value analysis

Multi-attribute value analysis can be applied in which various strategies, including a range of attributes, are evaluated against the scenarios. The scenarios can be used to assess strategy and outcomes against the achievement of different objectives. These can then be ranked, which helps the organization to enhance its degree of preparedness should events and trends materialize.

Developing antifragility strategies

Derbyshire and Wright (2017) suggest that scenarios can be assessed as to the degree of fragility, that is, the ability of the organization to deal with the event, or change. Scenarios can be

categorized as fragile or antifragile. Strategies can then be developed to make all scenarios antifragile, thus increasing the ability of the organization to deal with uncertain events.

A resource-based view

A resource-based view (Barney, 1991) can be adopted in that scenario planning is used to assess the resources and capabilities required and obtained to deal with various scenario outcomes. It is a useful methodology as resources are obtained from the environment, so environmental changes can impact on resources. Fink et al. (2005) make an important distinction between resources and capabilities. They define resources as assets that an organization possesses, controls, or to which it has access, and capabilities are activities that an organization performs. Capabilities are usually generated by the interaction of resources combined with the knowledge about how to use the resources in combination, and individually. Possession of, or access to, the resources, does not automatically mean that the capability is present. Scenarios can be used to assess where resources and capabilities need to be strengthened to deal with potential events that may occur in the future. This is where anticipating the time impact of events is useful as resources cannot always be increased, or capabilities enhanced, at short notice.

Develop strategies from SWOT

The scenarios can be used in conjunction with SWOT (strengths, weaknesses, opportunities, and threats) analysis to develop strategic responses to potential outcomes. If a degree of quantitative analysis is applied, the identification of potential strategic gaps is possible, enabling strategies to be evaluated as to their ability to close the gap. The use of SWOT and gap analysis is discussed in Chapter 5, section 5.4.

The use of real options

A technique that has been borrowed from financial markets is the concept of options – and is referred to as real options. A real option is the right, but not the obligation, to invest in real assets by, or at the end of, a given period (Dixit and Pindyck, 1994). The basic idea is that significant investments can be broken down into a series of smaller decision points. Following an initial investment, the organization has opportunities to make different decisions as events unfold in the environment. For example, further investments could be made (analogous to a call option) from which future benefits can be derived. The exercise price is the additional investment required to deploy the resources. Alternatively, there may be an opportunity to divest assets or discontinue a project (analogous to a put option), thus limited the potential future losses. The exercise price is the net value realized when exiting a business.

Options may include opportunities to defer, grow, abandon, phase, or select elements. This choice enables organizations to consider a range of scenarios and options within the individual scenarios, and to identify the potential upside and downside of each available option. Scenarios can be updated as the future unfolds so that it enhances the understanding of the environment

(Schoemaker, 1993). For example, certain long-term projects can be the subject of scenario planning and analysis at several points during their lifetime. At the beginning of the project, there is the option ‘not to go ahead’ or ‘abandon’, but once the project is underway, the options to ‘exit’, or ‘make additional investments’, become available. Real options are discussed in more detail in Chapter 8, section 8.6.

Scenario planning was popularized during the 1970s, primarily by Royal Dutch Shell, but the practice waned a little during the 1980s. It has, however, enjoyed a resurgence in recent times with many organizations and senior executives promoting its use and benefits. The primary benefit is that it encourages organizations to think about the future and the organization’s ability to deal with uncertainties. Thinking about how the business environment might change, or could be changed, and the strategic responses or initiatives that can be made ensure that organizations are better prepared to face the uncertainties of the future. At the time of writing this learning resource, the covid-19 pandemic has created interest from commentators and academics, as well as organizations, in thinking about what the world and the business environment will look like post-covid-19.