# Determining Organisational Readiness for the Future-Fit for Business Benchmark

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#### **Abstract:**

Our conception of the economy is a significant barrier to fulfilling a transition to sustainability. This economic paradigm centres on growth, but continuous growth on a finite planet is not viable, and Business as Usual organisations promulgating this approach increasingly recognise a need to transition to sustainability.

A lack of clarity is apparent in how sustainability is being implemented in organisations. The Future-Fit for Business Benchmark has been designed to support a strategic sustainability process in business. But the value of the tool can only be harnessed if a company has a distinctive structure in place, therefore, how can it be determined whether an organisation is ready to use the tool?

A case study on an aviation company formed the basis of our research. An exploratory approach was adopted, and a survey and interviews were administered. We found an analysis of a company's rationale, namely *why* they have adopted a sustainable approach was crucial in an assessment. The rationale trickles down into the strategy being driven, and the actions and tools that feed off this strategy.

A proposed Readiness Factor allowed us to compare this assessment against criteria, which stress the importance of recognising the sustainability challenge as the rationale driving sustainability. Recognition of the sustainability challenge as the raison d'être is indicative of whether a company is ready to use the tool in an optimum manner.

**Keywords**: Strategic Sustainability, Required Performance Tools, Transition Management, Benchmarking for Sustainability, Business Organisations

# **Statement of Contribution**

When we began undertaking our research we knew that harnessing the unique competencies of each team member was an essential component of the success of our project.

At the beginning of our journey Aesop's fable, 'The Belly and the Members' was shared with the group, and this provided a powerful illustration of teamwork:

One fine day it occurred to the Members of the Body that they were doing all the work and the Belly was having all the food. So they held a meeting, and after a long discussion, decided to strike work till the Belly consented to take its proper share of the work. So for a day or two, the Hands refused to take the food, the Mouth refused to receive it, and the Teeth had no work to do. But after a day or two, the Members began to find that they themselves were not in a very active condition: the Hands could hardly move, and the Mouth was all parched and dry while the Legs were unable to support the rest. So thus they found that even the Belly in its dull quiet way was doing necessary work for the Body, and that all must work together or the Body will go to pieces.

Using the metaphor of this fable as inspiration, the unique skills and experience that each member brought to the team resulted in us producing a thesis that was richer than the sum of its parts. The team members had diverse educational, cultural and professional backgrounds, and we were able to harness the individual skills of the group members to allow each member to demonstrate their competencies and highlight the best parts of their skill set.

Responsibilities for carrying out tasks such as the development of our goals, the overall development of questions and our methods were formed together. Each group member played a role in administering interviews and our data analysis was a collaborative endeavour.

Harnessing the unique skills of the various parts of our body, each member of the group was distributed tasks, allowing them to utilise their strengths in the undertaking of the report:

Paul Abela: Paul undertook written report duties such as the planning, outlining and writing of the report. He led research, undertaking a literature review and designed the interviews for our methods while taking the lead in interviews during our data collection phase. Communication with the Future-Fit Foundation was undertaken by Paul, who set up an interview with Bob Willard during our preliminary interviews.

Omar Roquet: Omar designed all presentation material, including presentation slides, report figures, tables and appendices. He was responsible for the design of the survey, liaising with the partner organisation to ensure a high response rate while leading the analysis of the survey and constructing the survey design. He led project management duties, setting the agenda for meetings, and communicating with our thesis adviser.

Ali Armand Zeaiter: Ali was responsible for leading communication with the partner organisation during our understanding phase, attending a regional meeting on behalf of the group. Ali translated all documents from the partner organisation and was

responsible for leading the transcription of interviews while taking the lead in the analysis of interviews.

Each group member contributed to the best of their abilities, without each contribution the report would not be a piece of work that we are all very proud of, so we are all grateful for the contributions made by the other team members, without which our belly may have become very hungry!

Paul Abela, Omar Roquet and Ali Armand Zeaiter

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'The smallest act of kindness is worth more than the grandest intention' Oscar Wilde

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A big thank you to our peers who offered us advise and feedback which strengthened our research.

Last but not least a massive thank you to our friends and family, whose support drove us on and helped to keep us motivated throughout the project.

The last acknowledgement must be made to a beautiful baby girl who joined the world during the undertaking of our thesis. This reminded us of our purpose for having decided to do a thesis in the first place and helped to remind us that this thesis is contributing to making the world a better place so that future generations can continue to enjoy and appreciate the beauty of planet Earth. So thank you, Lola!

We hope our thesis can contribute to making this world a better place, so with that ambition in mind, for everyone that was involved in the project, a warm thank you for your time and patience. Without you, this wouldn't have been possible so we are eternally grateful for your generosity and engagement with our project.

Thank you!

Ali, Omar & Paul

# **Executive Summary**

## Introduction

The advent of the industrial revolution has led to human influence on planet Earth increasing to such an extent that we have induced a new geological epoch, the Anthropocene (Zalasiewicz et al. 2011). We are influencing the biophysical processes of the Earth system, and our current economic paradigm that considers growth as the solution to societal problems accentuates this issue (Daly 1996).

Business as Usual (BAU) organisations promulgate this approach and carry out business as if there were an unlimited amount of resources on Earth (Meadows et al. 1972). A BAU approach centres around a linear take-make-waste ethos, where resources are taken from the Earth and made into usable products (requiring further resources through energy inputs), these usable products are returned as waste, which the Earth absorbs as pollution (Willard 2012). Our economic system is working to threaten the healthy functioning of the system we are reliant upon, the socio-ecological system (Robèrt et al. 2001).

The socio-ecological system is coming under increased pressure from this linear take-make-waste ethos (Meadows et al. 2005). The sustainability challenge can be conceived as a funnel. The constricting walls of the funnel represent environmental resources systematically decreasing on one side while the human population is rapidly increasing on the other (Robèrt et al. 1997). As the human population increases, more resources are needed to satisfy this growing population, constricting the walls of the funnel over time (Johnston et al. 2007). For business the narrowing walls represent higher costs, and the sustainability challenge alludes to the urgency of adapting from a BAU approach, if companies want to be prepared for future market conditions (Holmberg and Robèrt 2000).

In recognition of the urgency the sustainability challenge necessitates, the Framework for Strategic Sustainable Development (FSSD) has been devised to enable a transition towards sustainability (Robèrt et al. 1997; Robèrt 2000). The framework has been designed out of respect for the complexity inherent within the socio-ecological system, allowing businesses to devise strategic sustainability plans through the conception of principles for sustainability, and backcasting from these principles (Holmberg and Robèrt 2000).

The sustainability principles act as boundaries which we must *not* cross if we are to sustain the socio-ecological system, and they are as follows;

In a sustainable society, nature is not subject to systematically increasing...

- 1. ...Concentrations of substances extracted from the Earth's crust.
- 2. ...Concentrations of substances produced by society.
- 3. ...Degradation by physical means (Robèrt et al. 2001, 198).

In a socially sustainable society, people are not subject to structural obstacles to...

- 4. ...Health.
- 5. ...Influence.
- 6. ...Competence.
- 7. ...Impartiality.
- 8. ... Meaning-making (Missimer 2015, 44).

Backcasting is a planning methodology where a future desired state is envisioned followed by the question 'what shall we do to get there?' (Ny 2006). The principles for sustainability constrain this vision of success, and once a business's current reality has been assessed, actions are designed to bridge the gap between today and this envisioned future (Holmberg and Robèrt 2000).

Explicit guidelines determine whether an action brings a company towards the envisioned future, these guidelines are as follows: actions proceed in the right direction regarding the sustainability principles, they provide flexible platforms for future improvements, and they ensure a return on investment that catalyses the process (Holmberg and Robèrt 2000). Actions are prioritised using these criteria, enabling companies to plan using a strategic approach, providing clarity and consensus in organisations which has not necessarily been apparent in business.

Managers perceptions and interpretations of the external environment drive strategy in business. How sustainability is perceived is crucial to how it is driven (Moan et al. 2008). Increased awareness and commitment towards sustainability is apparent, but the difficulty is how to implement sustainable strategies (Epstein and Roy 2001).

The dominant strategy in business is an eco-efficiency approach, where companies produce products with fewer resources (WBCSD 2000). This approach is insufficient as a sole concept, inducing incremental changes with no direction or coherence (Dyllick and Hockerts 2002). Moreover, as many companies have not devised a definition of sustainability, there is no clarity regarding what this term means. A specific agenda does not guide actions; they are sporadic with no overall objective in mind (Berns et al. 2009). A focus on the *effects* of non-sustainable activities rather than the *cause* induces the need to 'fix' short-term problems, meaning unsustainable behaviour persists (Robèrt et al. 2001).

As a commitment to sustainability increases, a company's business model evolves. Bob Willard's 'Five-Stage Sustainability Journey' presents the stages a company goes through in its journey to sustainability (Willard 2012). As sustainability initiatives have increased in popularity, they have resulted in a BAU approach shifting. Company's progressing through the stages of the sustainability journey differentiated themselves, enjoying a competitive advantage. Being 'less bad' than your competitors sufficed (Kendall and Willard 2015), but other companies have followed suit to address this competitive advantage.

The prevalence of sustainability initiatives in companies today means that to maintain a competitive advantage companies need to evolve to become 'truly sustainable,' rather than be 'less bad' than competitors. A truly sustainable company places sustainable principles at the core of its DNA, deploying business strategies that respect the environment, the community and the ongoing business health of the organisation (Willard 2012). This transition requires a substantial effort, and the Future-Fit for Business Benchmark (F2B2) is a tool designed to support companies in a transformation to true sustainability.

The F2B2 have translated the sustainability principles into Future-Fit Principles directly relating to business (Kendall and Willard 2015). The tool has adopted a systems perspective, and 20 Future-Fit Business Goals are aligned with the principles. They argue once these goals are addressed a company will have transitioned successfully to sustainability (Kendall

and Willard 2015). The F2B2 includes business case benefits, stating there are 17 'upside opportunities' if the goals are met, and 22 'downside risks' if a company fails to meet the goals. One of the biggest obstacles to the success of sustainability initiatives is the difficulty in conceiving a Business Case for Sustainability (BCS) (Berns et al. 2009). Therefore, the F2B2's opportunities and risks can help in addressing this issue.

The F2B2 has been designed to support a strategic process, but companies are at different stages of their sustainability journey, meaning companies that have a distinctive structure in place can use the tool more effectively than organisations at other stages of their journey. Our purpose is to establish what aspects indicate whether a company is ready to harness the benefits of the F2B2, and use the tool in an optimum manner. This purpose led to the following research question:

# Research Question: How can an organisation's readiness to use the Future-Fit for Business Benchmark be determined?

By ready we refer to the ability of an organisation to use the tool in an 'optimum manner', and we are seeking to ascertain how to determine whether an organisation has the necessary structure in place to harness the full potential of the tool.

### Methods

Our research explored the F2B2 with a case study on an airline company<sup>1</sup>. We adopted an exploratory research approach as the F2B2 is a newly developed tool, meaning no studies have been undertaken on the tool in an organisation.

Maxwell's Interactive Model of Research Design was used to construct the design of our research, aiding alignment between the parts of our research (Maxwell 2012). The research was undertaken in two phases, a literature review and preliminary interviews were undertaken to gain an *understanding* of the partner organisation and the F2B2.

The hypothesis constructed from this stage was that an organisation's rationale for adopting sustainability was the determining factor of whether they were ready to use the F2B2 in an optimum manner. The *hypothesis ascertainment* stage involved testing this hypothesis on the partner organisation and included an online survey and interviews.

The survey and interviews are centred around two focus areas, the *Value of Implementing a Sustainable Approach* and an organisation's *Sustainability Strategy*, allowing us to design the approaches around specific themes. Upon analysing the results, we were able to deduce six common themes between the data sets. We believe these are aspects allowing for an assessment of whether an organisation is ready to use the F2B2 in an optimum manner.

#### **Results and Discussion**

The rationale plays a vital role in how a sustainability strategy is conceived in an organisation. The rationale refers to *why* the organisation has identified sustainability as adding value to their business. The partner organisations rationale was twofold: to increase

<sup>&</sup>lt;sup>1</sup> The partner organisation wished to remain anonymous, and in respect of their wishes we have ommitted any mention of the company.

their customer share, increasing revenue, and mitigating against legislation in the form of an increased tax. This motivation acts as the raison d'être, trickling down into every facet of how sustainability initiatives are driven through the organisation.

A lack of resources was a major obstacle to achieving sustainability in the partner organisation. How sustainability could add value to the business may not be recognised, suggesting there was a lack of a strategic approach to planning for sustainability.

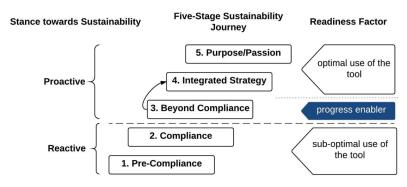
The sustainability strategy alluded to *what* was being implemented, and *how* the strategy was being driven through the organisation. While the partner organisation had a long-term commitment to sustainability what is being driven through the business was reflective of the company's rationale for embracing sustainability. There was no concrete strategy in place, and the company had no specific definition of sustainability, rather, they focus their strategy on an agenda: to enhance the image of the brand, increasing their customer share, and providing a positive impression to legislators that they are kerbing their impacts.

Sustainability is not a central component of the overall strategy, which was reflected in the sustainability department being nested in communications, while the management team had no responsibility for driving the strategy through the business. Concrete actions placed a focus on addressing external threats, they react to the effects of non-sustainable activities, and when problems are identified an attempt is made to fix them.

Our research has not been designed to demonstrate explicitly how it can be determined whether a company is ready to use the F2B2, rather, our study provides an assessment of an organisation which can be used to make inferences. The results are descriptive in that they help to clarify if the approach taken provides the necessary details regarding specific aspects of sustainability in a company.

We propose the use of the 'Readiness Factor', which has been adapted from Bob Willard's 'Five-Stage Sustainability Journey', as criteria to make an assessment of how ready a company is to use the F2B2 in an optimum manner. Our results can be weighed against the criterion to determine a companies readiness factor.

Each stage of the sustainability journey has specific characteristics alluding to the context a company finds itself in. We argue stage 4 and 5 companies of the Five-Stage Sustainability Journey have the necessary infrastructure in place to harness optimal use of the tool. Stage 1 and 2 companies can only use the tool in a suboptimum manner as the structure these companies have in place is not conducive to distilling the benefits of the tool.



The Readiness Factor

Our assessment of the partner organisation places them at stage 3 of the sustainability journey. While still adopting a BAU approach, they show a commitment to sustainability, considering it vital for their long-term success. To become truly sustainable it is necessary for the partner organisation to become a stage 4 company. However, this transformation requires a significant effort. Although stage 3 companies are not ready to use the tool in an optimum manner, we argue the F2B2 can work to be a progress enabler in supporting a transition to a stage 4 company.

Stage 4 companies recognise the sustainability challenge as their raison d'être for pursuing sustainability initiatives. Their underlying purpose may not be recognition of the sustainability challenge, but they recognise the sustainability challenge and seek to use that awareness to make their business successful within sustainability constraints.

Our results suggest an awareness of the sustainability challenge will trickle down into every aspect of sustainability, and the metaphor of upstream thinking alludes to the central nature that the cause for embracing sustainability has on the sustainability agenda. What is being driven through the organisation, and how it is being driven, will be aligned to the rationale. Our research could provide indicators to enable companies to assess the stage they are in on the Readiness Factor, acting as a catalyst for conversations regarding sustainability in an organisation, and potentially leading to organisations questioning their motives for undertaking a sustainability journey.

Our research highlights the crucial nature of adopting a Strategic Sustainable Development (SSD) approach in becoming a truly sustainable company. Without a specific strategy in place, a company cannot hope to transition successfully. A backcasting approach bounded by principles for sustainability provides a planning methodology to enable a successful transition to sustainability (Holmberg and Robèrt 2000). Rather than making incremental changes with no overall direction, a backcasting approach bounded by principles for sustainability, ensures each action that is undertaken brings a company closer in line to an envisioned future.

The value of an SSD approach will only be recognised through awareness of the sustainability challenge. The Readiness Factor has the potential to heighten this awareness in companies at stage 3 of their sustainability journey, and the F2B2 can be an enabler in supporting a company in their transition to a stage 4 company and true sustainability.

### Conclusion

Our results suggest identifying the rationale that is driving an organisation's sustainability strategy, is vital in determining whether an organisation is ready to use the F2B2 in an optimum manner. We envisage the ultimate value of the tool could be as a progress enabler, allowing companies to gain an awareness of the rationale to embrace sustainability from a systems perspective, and supporting them in their transition to stage 4, potentially galvanising companies to transform their approach to sustainability to become truly sustainable. If the F2B2 can set in motion a transformation of business, placing them on a sustainable path, it will significantly contribute to a transition away from BAU, and rather then developing at the behest of the Earth system, human society can flourish in tandem with the Earth system.

# Glossary

**Anthropocene:** A proposed geological epoch induced by the impacts of humans since the advent of the Industrial Revolution.

**Backcasting:** Backcasting is a methodology for planning under uncertain circumstances. In the context of sustainable development, it means to start planning from a description of the requirements that have to be met when society has successfully become sustainable, then the planning process proceeds by linking today with tomorrow in a strategic way: what shall we do today to get there? What are the economically most effective investments to make the society ecologically and socially attractive (Holmberg and Robèrt 2000, 293)?

**Business as Usual (BAU):** Refers to a linear take-make-waste business approach. Despite undesired consequences of business-as-usual becoming increasingly apparent, this business approach persists.

**Business Case for Sustainability:** Provides an outline for how to mitigate risks and quantify the opportunities that taking a sustainable approach entails, and gets to the heart of how companies decide where they will - and will not - allocate resources and efforts (Berns et al. 2009).

**Business Model:** The plan implemented by a company to generate revenue and make a profit from operations.

**Culture Shaping System:** The measurement, management, rewards and recognition systems that a company have in place which induces a certain culture in a company.

**Complex System:** A complex system is one that has a large number of parts that interact in complex ways to produce behaviour that is sometimes counterintuitive and unpredictable (Robèrt et al. 2015).

**Ecosphere:** Makes up the part of the Earth where all life exists and occupies the full space above the lithosphere (Earth's crust) to the outer limits of the atmosphere (Robèrt et al. 2001, 198).

**Eco-efficiency:** A management philosophy that encourages business to search for environmental improvements that yield parallel economic benefits and involves the increase of productive output while using fewer resources (WBCSD 2000).

**Eco-effective:** A philosophy that encourages business to design regenerative, rather than depletive products, and to work within cradle-to-cradle life cycles.

**Environmental Management System:** Allow companies to identify, measure and appropriately manage their environmental obligations and risks, making up a part of a company's sustainability agenda (Epstein and Roy 2001, 593).

**Externalities:** Refer to problems that influence the economy but have their origin outside of the economic system, such as social problems and degraded ecological resources (Daly et al. 1994).

Framework for Strategic Sustainable Development: Is a strategic planning model that businesses can use to move successfully towards sustainability. It does so by systhesising complexity within the socio-ecological system, by providing clarification of the system that is to be sustained, and allows businesses to devise strategic sustainability plans through two key concepts, the sustainability principles and backcasting in planning for sustainability (Robèrt 2000).

**Five-Stage Sustainability Journey:** Companies are at various stages of a sustainability journey, as companies progress to become more sustainable they can be said to go through distinctive stages and have certain characteristics that can help to identify them within five stages of sustainability (Willard 2012).

**Funnel Paradigm:** Recognises that current unsustainability problems stem from systematic errors in societal design. We are entering deeper into a funnel of limited resources in which the room to manoeuvre becomes increasingly restricted as we move further through time. The narrowing walls of the funnel represent the declining capacity of the ecosphere to support our economy, and ultimately society itself (Robèrt 2000).

**Future-Fit Business Benchmark (F2B2):** A tool designed to help a strategic sustainability process in businesses, which has been designed 'to help business measure and manage the gap between what they are doing today and what science tells us they will need to do tomorrow' (Kendall and Willard 2015, 3).

**Future-Fit Principles:** Based upon the eight sustainability principles within the FSSD. These conditions have been translated into business principles, providing organisations with a robust and concrete definition of sustainability that is relevant in a business context (Kendall and Willard 2015).

**Future-Fit Business Goals:** The 20 Future-Fit Business Goals align with the Future-Fit Principles and provide an outline of what a Future-Fit Business will look like. By adopting the Future-Fit Goals, a company can transition to a sustainable path (Kendall and Willard 2015).

**Indicators:** Tools that help to assess and communicate results of a monitoring process (Robèrt et al. 2015).

**Key Performance Indicators:** A measurable value that demonstrates how effective a company/individual is achieving key business objectives.

**Less Bad:** In the context of sustainability being less bad refers to companies undertaking sustainability agendas that suffice in providing companies with a competitive advantage over other businesses, but do not allow them to transition to true sustainability.

**Metric:** An assessment used in organisations to measure, compare or track performance or production.

**Optimum Manner:** From here on in 'optimum manner' refers to whether a company has the necessary structure to be ready to use the F2B2 so that it can harness the full potential of the tool.

**Organisational Structure:** from here on in organisational structure refers to the decision-making process in the organisation which determines how roles and responsibilities are assigned, controlled, and coordinated, and how communication flows within an organisation.

**Rationale for Sustainability:** The underlying reasons that are driving an organisation to adopt a sustainable approach.

**Socio-Ecological System:** Includes the social system and the ecological system (ecosphere). These systems interact in complex ways to form a combined system, the socio-ecological system (Holmberg et al. 1999).

**Strategy:** Plan of action designed to achieve a well-defined outcome (Holmberg and Robèrt 2000)

**Sustainability:** A state where the eight sustainability principles are not violated (Robèrt et al. 2001; Missimer 2015)

**Sustainable Development:** Development which meets the needs of the present generation without compromising the ability of future generations to meet their needs (WCED 1987), involving the active transition from the current, globally unsustainable society towards a sustainable society (Robèrt et al. 2015)

**Sustainability Challenge:** The systematic errors of societal design that are driving humanities unsustainable effects on the socio-ecological system, the serious obstacles to fixing those errors, and the opportunities if those obstacles are overcome (Robèrt et al. 2015, 9).

**Sustainability Principles:** Determine what humans must *not* do to transition towards a sustainable path. These principles are built upon a scientifically rigorous, consensus-based, systems perspective and define the minimum conditions that must be met for a sustainable society; the principles are as follows;

In a sustainable society, nature is not subject to systematically increasing...

- 1. ...Concentrations of substances extracted from the Earth's crust.
- 2. ...Concentrations of substances produced by society.
- 3. ...Degradation by physical means (Robèrt et al. 2001, 198).

In a socially sustainable society, people are not subject to structural obstacles to...

- 4. ...Health.
- 5. ...Influence.
- 6. ...Competence.
- 7. ...Impartiality.
- 8. ... Meaning-making (Missimer 2015, 44).

**Systems Thinking/Perspective:** Involves recognising the interconnections among the various parts of a system and then systhesising them into a cohesive view of the whole (Moan et al. 2008, 415).

**Tools:** From here on in tools refer to something that has been designed to measure the impacts of sustainability actions.

**True Sustainability:** A company that is truly sustainable places sustainable principles at the core of its DNA and deploys business strategies that respect the environment, the community and the ongoing business health of the organisation (Willard 2012).

**Upstream Thinking:** Identifying problems at their source and taking measures to remove underlying sources of problems rather than 'fixing' problems once they have occurred (Robèrt 2000, 244).

## **Abbreviations**

**BAU** Business as Usual

**BCS** Business Case for Sustainability

**DfT** Department for Transport

**DSS** Driver of the Sustainability Strategy/Agenda

**EMS** Environmental Management Systems

**FSSD** Framework for Strategic Sustainable Development

**F2B2** Future-Fit for Business Benchmark

**GDP** Gross Domestic Product

**GHG** Greenhouse Gases

**ISO 14001** International Standard for Environmental Management Systems

ICAO International Civil Aviation Organization

**KPI** Key Performance Indicators

**OEF** Oxford Economic Forecast

**SSD** Strategic Sustainable Development

**UNEP** United Nations Environment Programme

**WBCSD** World Business Council for Sustainable Development

WCED World Commission for Environment and Development

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# 1. Introduction

Humankind, our own species, has become so large and active that it now rivals some of the great forces of nature in its impact on the functioning of the Earth system (Steffen et al. 2011, 843).

# 1.1. The Anthropocene

It is widely acknowledged that human influence on the Earth system has induced a new geological epoch, the Anthropocene (Zalasiewicz et al. 2011). Defined by the actions of humans, this epoch had its origins in the Industrial Revolution. The advent of the Industrial Revolution is considered a decisive transformation in the history of humankind (Steffen et al. 2007). In 1750 visible effects of the revolution were minimal, but by 1850, it had transformed England and spread across Europe (Steffen et al. 2011). The Industrial Revolution led to a rapid expansion in the use of fossil fuels (Steffen et al. 2007), resulting in severe ramifications on the Earth system (IPCC 2014).

The Planetary Boundaries concept illustrates the potential consequences of our current trajectory (Rockstrom et al. 2009; Steffen et al. 2015). This concept defines the boundaries humans must not cross to ensure we do not cause environmental changes on a global scale (Rockstrom et al. 2009). The exponential growth and increasing impact of human activities on the Earth system are increasing the likelihood that these planetary boundaries will be breached, potentially destabilising critical biophysical systems, and triggering abrupt or irreversible environmental change (Rockstrom et al. 2009). The need to adapt human society onto a different path has therefore become critical.

#### 1.2. Growth on a Finite Planet

The Limits to Growth (Meadows et al. 1972) questioned the validity of our economic growth paradigm. This was momentous as growth in our economy is synonymous with progress and development, and lies at the heart of solutions to societal problems, such as poverty alleviation (Daly 1996). Meadows suggestion that there are physical limitations impeding growth questioned the very fabric our current economic system is built on.

Businesses<sup>2</sup> entrenched in this approach are referred to as Business as Usual (BAU) (Daly 1996). A BAU approach perceives the economy as the overarching system everything else depends on (Daly 1996; Elkington 1997). Environmental resources are imported into the economic system, and converted into products, while wastes are exported back to the environment, all at little or no cost to the disposer (Daly et al. 1994). The negative impacts of business practices, such as wastes or emissions, become societal or environmental issues outside of the jurisdiction of the organisation's operations (Berns et al. 2009). These liabilities are dismissed as externalities, and the logic influencing this behaviour is that the benefits of the modern economic system outweigh these negative consequences of doing business (Daly et al. 1994).

<sup>&</sup>lt;sup>2</sup> From here on business, organisation and company are used interchangeably but refer to the same entity.

## 1.3. The Socio-Ecological System

Externalities do not account for the environmental and societal ramifications of business practices (Willard 2012), reflecting our economy's conception of itself as the central system on Earth. In reality, the economic system is a subsystem of the ecosphere (Holmberg et al. 1999). The ecosphere 'occupies the full space above the lithosphere (Earth's crust) to the outer limits of the atmosphere' (Robèrt et al. 2001, 198) and is the part of the Earth where life exists (Holmberg et al. 1999). Our current economic paradigm threatens the healthy functioning of the social and ecological systems, these systems interact in complex ways to form a combined system, the socio-ecological system (Holmberg et al. 1999).

#### 1.3.1. The Sustainability Challenge

The take-make-waste approach is resulting in an encroachment on the ecosphere's physical limits. The ability of environmental resources to feed the growth of our economy through inputs of materials and energy is being undermined (Meadows et al. 2005). Moreover, the expectation that planetary sinks can absorb pollution and wastes places further stress on the ecosphere (Meadows et al. 2005). The flows that are generated by the take-make-waste ethos cannot be maintained at current rates for much longer (Meadows et al. 2005). This issue is perpetuated by the vast increase in human population, which is placing pressure on croplands, forests and groundwater, inducing a further reliance on environmental resources, as more things need to be produced to satisfy a growing population (Robèrt 1997). In short, the environmental resources our economy is dependent upon are systematically decreasing, while the Earth's population is rapidly increasing (UNEP 2012).

The sustainability challenge can be conceived as an object (human society) entering deeper and deeper into a funnel (Robèrt et al. 1997). The narrowing walls of the funnel represent the declining capacity of the ecosphere to support our economy, and ultimately society itself (Robèrt 2000). As we progress through time, our current unsustainable behaviour will result in the walls of the funnel becoming constricted, making a transition to sustainability increasingly difficult (Johnston et al. 2007). From the perspective of businesses contributing to unsustainability, the constricting walls represent higher costs in the form of waste management, taxes, insurance and a loss of credibility in the market to businesses planning ahead, and moving towards the opening of the funnel (Robèrt 2000). Ensuring human society remains clear of both the upper and lower walls of the funnel, while moving towards the opening, will result in conditions for sustainability being maintained (Johnston et al. 2007).

# 1.4. The Framework for Strategic Sustainable Development

The sustainability challenge illustrates the growing urgency required in an adaptation of the socio-ecological system. Business plays a central role in moving towards sustainability. However, a problem with this transition is that sustainability issues are too complex and interconnected to be solved in isolation (Loorbach et al. 2010). The level of complexity in the socio-ecological system requires a systems perspective (Senge 1990; Capra 1985), which focuses on 'recognising the interconnections among the various parts of a system and then systhesising them into a cohesive view of the whole' (Moan et al. 2008, 415). The Framework for Strategic Sustainable Development (FSSD) provides a strategic planning

model based on a systems perspective that businesses can use to move successfully towards sustainability (Robèrt et al. 1997; Robèrt 2000; Holmberg and Robèrt 2000). The FSSD synthesises complexity within the socio-ecological system, by providing clarification of the system (society within the ecosphere) that is to be sustained, and allows businesses to devise strategic sustainability plans through two key concepts, the sustainability principles and backcasting in planning for sustainability.

#### 1.4.1. The Sustainability Principles

A high level of complexity in the ecosphere makes it impossible to predict the effects of human activities. While time delays between a specific activity and its environmental consequences make it difficult to discern when our unsustainable activities cause undesired effects (Azar et al. 1996). These features of the Earth system means that a clear definition of the conditions that constitute sustainability is necessary to transition to a sustainable path, ensuring we operate within the Earth's constraints.

Selecting relevant measures to deal with complexity in the socio-ecological system requires a focus on the upstream<sup>3</sup> causes of unsustainable behaviour (Robèrt 2000). It is upstream where complexity in the cause-effect chain is relatively low (Robèrt 2000), meaning it is possible to identify the basic system conditions that must be respected if we are to transition onto a sustainable path, and avoid the walls of the funnel (Robèrt et al. 1997).

The construction of principles for sustainability is necessary to prevent unsustainable activities continuing, while ensuring relevant aspects of sustainability are not missed (Robèrt 2000). Non-overlapping principles assure we do not solve today's problems by creating new problems (Robèrt 2000). In essence the sustainability principles act as restrictions determining what humans must *not* do to transition to a sustainable path (Robèrt et al. 1997). The 'not' is included to direct focus to the basic errors of societal design (Ny et al. 2006), as a result eight systems conditions that a sustainable society must meet are as follows:

In a sustainable society, <u>nature</u> is not subject to systematically increasing...

- 1. ...Concentrations of substances extracted from the Earth's crust.
- 2. ...Concentrations of substances produced by society.
- 3. ...Degradation by physical means (Robèrt et al. 2001, 198).

In a socially sustainable society, <u>people</u> are not subject to structural obstacles to...

- 4. ...Health.
- 5. ...Influence.
- 6. ...Competence.
- 7. ...Impartiality.
- 8. ... Meaning-making (Missimer 2015, 44).

This scientifically robust definition of sustainability can support the transition to a sustainable society (Robèrt et al. 1997). The essence of the sustainability principles is that 'the future cannot be foreseen, but its principles can' (Holmberg and Robèrt 2000, 297). By

<sup>&</sup>lt;sup>3</sup> Upstream thinking refers to identifying problems at their source and 'taking measures to remove underlying sources of problems rather than 'fixing' problems once they have occurred' (Robert 2000, 244).

understanding the means by which we are systematically degrading the socio-ecological system, strategies can be created with this understanding in mind.

### 1.4.2. Backcasting from Sustainability Principles

Backcasting is a methodology for planning where future desired conditions are envisioned, and steps are then defined to attain those conditions (Dreborg 1996; Holmberg and Robèrt 2000). For a business moving towards sustainability, a future vision of success is conceived, followed by the question 'what shall we do to get there?' (Ny 2006). This allows organisations to visualise a future reality not encumbered by present day thinking. The vision of success is constrained by the sustainability principles, which act as boundary conditions, providing direction for actions (Holmberg and Robèrt 2000). Organisations can compare their present situation to this envisioned future, producing a creative tension, which stimulates ideas to bridge the gap between a companies current situation and this vision of success (Holmberg and Robèrt 2000).

Explicit strategic guidelines ensure that actions are directed towards the envisioned future, and a strategic approach is determined when three criteria are met; actions proceed in the right direction with respect to the sustainability principles, actions provide flexible platforms for future improvements and actions provide a sufficient return on investment in order to catalyse the process (Holmberg and Robèrt 2000).

These guidelines are useful to avoid blind alleys, where short-term investments lead to dead ends that do not allow for continued progress (Missimer et al. 2010). The starting point of the planning process is an envisioned successful future outcome of planning, ensuring that if the strategic guidelines are followed, each investment brings business practices closer in line with the overall objective of compliance with the sustainability principles (Robèrt et al. 2001). This planning methodology is essential when dealing with complexity in the socioecological system, and when current trends are the issue that is being solved (Robèrt et al. 2001).

To be strategic is to have a conception of a well-defined outcome, and the essence of backcasting is that what is considered realistic today should only be allowed to influence the *pace* and *initial scale* of the transition, not its *direction* (Robèrt 2000). A definition of sustainability ensures that this direction is consistent amongst all stakeholders in their transition to a sustainable society, providing clarity and consensus that has not necessarily been apparent in transitioning to sustainability.

## 1.5. Management in Organisations

Organisational decisions are the result of managers' interpretations of signals sent by the external environment (Moan et al. 2008). Insightful interpretations of the environment can lead to the success of an organisation (Moan et al. 2008). Sustainability initiatives are maintained, nurtured, and advanced by the people who manage them (Moan et al. 2008). Acknowledging the role that manager's perceptions and interpretations have when designing strategic agendas, particularly concerning upper management, is necessary for assessing organisational strategy regarding sustainability (Moan et al. 2008).

Upper management is responsible for exerting the central influence on an organisation's sustainability strategy (Moan et al. 2008), meaning the success of a sustainability strategy depends on how upper management perceive sustainability initiatives as either helping to fulfil strategic objectives, or in undermining them (Moan et al. 2008). Thus, 'managers perceive the elements of a situation that relates more specifically to the activities and goals of their own department' (Moan et al. 2008, 419). Implying that if management perceive or interpret sustainability initiatives as being a threat to the overall strategic objectives of their department, then sustainability initiatives will not be met with enthusiasm (Moan et al. 2008).

The term 'sustainable development' was initially met with scepticism in business (Johnston et al. 2007). However, management in organisations are becoming increasingly aware of the current sustainability challenge, and how this will affect the competitiveness of their organisations (Berns et al. 2009; Eccles et al. 2012; Lubin and Esty 2010; Dyllick and Hockerts 2002; Figge and Hahn 2012; Ghosh et al. 2014). Managers interpretations have been influenced by a definition of 'sustainable development', which has come to be defined as 'development which meets the needs of the present generation without compromising the ability of future generations to meet their needs' (WCED 1987). This definition is open to interpretation and does not provide guidance on how to operationalise the concept at the organisational level (Epstein and Roy 2001; McWilliams et al. 2006).

The Boston Consulting Group's survey (Berns et al. 2009) of over 1500 business executives helps to elaborate on this issue. The study found companies define sustainability in a variety of ways, meaning they do not share a common language or definition for discussing sustainability (Berns et al. 2009). This is compounded within organisations who often have no definition for sustainability, which reflects organisations lack of understanding of what sustainability means in a company's specific context (Berns et al. 2009). Companies increasingly recognise that sustainability will be a major force to be reckoned with (Berns et al. 2009), but they are not clear *why* it will play such a crucial determining factor in their business (Berns et al. 2009). The problem is compounded as companies do not know how to implement sustainable strategies (Epstein and Roy 2001; Lubin and Esty 2010).

#### 1.5.1. Eco-Efficiency

Businesses have increasingly adopted a perspective referred to as Eco-efficiency (Korhonen and Seager 2008; Dyllick and Hockerts 2002; Figge and Hahn 2012). This perspective has become the driving force of sustainable development within organisations (WBCSD 2000), and can be defined as increasing productive output while using fewer resources (Korhonen and Seager 2008). Eco-efficiency is accepted as being beneficial to both the economy and the environment, as well as being supportive of sustainable development (Korhonen and Seager 2008). Eco-efficiency has advantages from a strategic business perspective, as it 'lends itself to measurable objectives that are consistent with a continuous improvement or quality-focused management culture' (Korhonen and Seager 2008, 412).

Eco-efficiency can be a valuable part of a business strategy, but as a sole concept, it is insufficient in an organisation's transition to sustainability (Dyllick and Hockerts 2002). An eco-efficiency approach only encourages incremental improvements (Dyllick and Hockerts 2002), and from a systems perspective adopting eco-efficiency may have adverse consequences on sustainability (Korhonen and Seager 2008). For example, efficiencies in production cycles may reduce the environmental burden of a product, which can result in

price reductions, encouraging increased consumption (Korhonen and Seager 2008). This creates a 'rebound effect' where efficiencies *increase* the environmental burden of a product, meaning the initial action is counter-intuitive as it compounds the problem trying to be alleviated (Korhonen and Seager 2008). From an eco-efficiency perspective measures that appear to create inefficiencies, are supportive of sustainability when viewed from a long-term systems perspective (Korhonen and Seager 2008).

#### 1.5.2. Environmental Management Systems (EMS)

An effective sustainability strategy is vital to the transformation of an organisation (Epstein and Roy 2001), providing a sense of direction to the planning procedure (Robèrt 2000). Without an effective strategy for dealing with the high complexity inherent within the socioecological system, organisations find themselves swimming against a tide. Compounding this issue, initiating a sustainable strategy, and putting it into action within a complex organisation is a substantial challenge (Epstein and Roy 2001).

The ISO 14001 Environmental Management System (EMS) has emerged as a leading management tool to address environmental degradation in organisations (MacDonald 2005). An EMS is necessary to enable companies to 'systematically identify, measure, and appropriately manage their environmental obligations and risks' (Epstein and Roy 2001, 593). While the implementation of an EMS is a good start, concrete actions within organisations often place a focus on the *effects* of non-sustainable activities, rather than the underlying *causes* of these activities (MacDonald 2005).

Actions within organisations comprise of disconnected initiatives representing incremental changes to the business (Berns et al. 2009). This results from being guided by vague principles of continual improvement, without the identification of objectives that comply with principles for sustainability (MacDonald 2005). A focus on specific impacts induces the need to 'fix' short-term problems, resulting in organisations losing sight of long-term solutions, and unsustainable behaviour persists (Robèrt et al. 2001).

# 1.6. Measuring Sustainability Performance in Organisations

Tools to measure impacts of sustainability actions are vital in enabling organisations to transition towards sustainability. The function measuring provides is alluded to as follows:

'You get what you measure underlines the technical and psychological rationale of tracking progress in order to make progress happen. Therefore to make sustainability happen we need tools to monitor progress (Holmberg et al. 1999, 17-18).

Current tools measuring sustainability are useful when placing a focus on specific environmental or social effects, but they do not consider sustainability in its entirety (Ghosh et al. 2014). An overarching tool is required to determine the effectiveness of sustainability strategies and actions from an overall perspective (Bose 2004), to enhance the ability of management within organisations to implement sustainability strategies.

The current organisational approach to sustainability predominantly features an ecoefficiency approach with an EMS being implemented to measure impacts. Without a systems perspective, transitioning to sustainability is difficult, and currently companies implement strategies that 'fix' adverse effects of their current business model. This will not suffice in transitioning to sustainability, and while organisations may be genuinely committed to change, in many cases they do not have the means to do so (Berns et al. 2009).

The current conception of sustainability induces companies to transition from a BAU model to a change-as-usual business model (Kendall and Willard 2015). Being 'less bad' than your competitors used to suffice as many companies were averse to adopting sustainability initiatives (Johnston et al. 2007). This created a competitive advantage for those businesses that did embrace sustainability, but as sustainability has grown in importance, organisations have increasingly recognised the value of sustainability. The prevalence of sustainability initiatives today requires companies to aim for being 'truly sustainable', as opposed to being 'less bad' than competitors. A truly sustainable company places sustainable principles at the core of its DNA and deploys business strategies that respect the environment, the community and the ongoing business health of the organisation (Willard 2012).

#### 1.6.1. The Five-Stage Sustainability Journey

As businesses adopt sustainability strategies, they can be said to go through stages of sustainability. Different companies are at various stages of their sustainability journey; there is no one size fits all in this journey, but as companies progress to become more sustainable they can be said to go through distinctive stages, and have certain characteristics which help to identify them within a stage of sustainability (Willard 2012). Bob Willard's 'Five-Stage Sustainability Journey' alludes to the stages that a company goes through in its journey to sustainability.

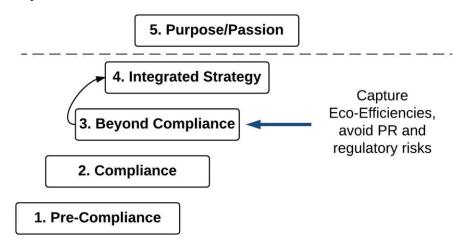


Figure 1.1: Five-Stage Sustainability Journey (Willard 2012).

The sustainability journey illustrates the context in which a company finds itself. As highlighted in Figure 1.1, there are five distinctive stages in the sustainability journey. As a commitment to sustainability increases a company's business framework evolves as a result (Willard 2012). Each stage of the sustainability journey has distinctive characteristics (Appendix A), and given that companies are increasingly recognising the need to adapt to sustainability a BAU approach has shifted. A BAU approach used to be at stage 1, but those

businesses that evolved to stage 2 differentiated themselves, compelling other companies to transition to stage 2 to address this competitive advantage. This resulted in a BAU approach changing to stage 2 of the sustainability journey, inducing a similar pattern.

The increasing prevalence of stage 3 companies means that to regain a competitive advantage companies must transition to stage 4 of the sustainability journey. The issue is that the transition to a stage 4 company and 'true sustainability' requires a significant transformation. The four intermediate stepping stones between stage 3 and 4 are recognition of the effort this transition requires (Appendix A). Accounting for this challenge, a tool encouraging or supporting this transformation to a stage 4 company could act as a leverage point (Meadows 1999), by creating a shift in business practices, producing a significant change in transitioning business organisations onto a sustainable path.

#### 1.6.2. The Future-Fit for Business Benchmark (F2B2)

Many organisations have now implemented a form of sustainability, but there is often no understanding of how to measure progress towards sustainability (Berns et al. 2009). Organisations require new models of gathering, sharing and analysing information if they are to become 'truly sustainable' (Ghosh et al. 2014). The Future-Fit for Business Benchmark (F2B2) has been devised in recognition of this need, and can be used by businesses to assess 'how, and how much they must change the way they do business' (Kendall and Willard 2015, 5).

The F2B2 has been designed 'to help business measure and manage the gap between what they are doing today and what science tells us they will need to do tomorrow' (Kendall and Willard 2015, 3). The F2B2 hopes to enable business organisations to make better-informed decisions, by supporting a strategic process and eliciting an understanding of the required level of performance to address the sustainability dilemma.

'Metrics focusing on the upstream solutions of the underlying causes of symptoms have a higher strategic value than metrics on the downstream effects - the symptoms' (Robèrt 2000, 248). The F2B2 Overview provides a landscape of how the F2B2 has been designed to work (Appendix B). The F2B2 is rooted in the notion of upstream thinking, and is built upon the eight system conditions within the FSSD. These conditions have been translated into business principles, providing organisations with a robust and concrete definition of sustainability that is relevant in a business context. This ensures clarity of the term sustainability (which has been severely lacking), and provides management and decision makers with a thorough understanding of where an organization needs to be, as opposed to where they are now (Kendall and Willard 2015). The F2B2's conception of what a Future-Fit business organisation will look like is as follows;

A Future-Fit Business creates value while doing nothing to undermine the possibility that humans and other life will flourish on Earth forever.' (Kendall and Willard 2015, 14)

To garner an understanding of how a business might violate the Future-Fit principles, the F2B2 cross-referenced these principles against the key relationships within an organisation's value chain, including its societal stakeholders and the environment (F2B2 2016). This cross reference is indicative of the systems' perspective adopted within the tool, and resulted in

twenty Future-Fit Business Goals, with each goal complementing a particular principle. The goals provide an outline of what a Future-Fit Business would look like, and they argue that implementing these goals will address sixteen global risks while allowing an organisation to transition successfully to a sustainable path.

# 1.7. Business Case for Sustainability

The Business Case for Sustainability (BCS) has been discussed and presented in a variety of ways (Daly 1996; Elkington 1997; Willard 2009, 2012; Stern 2007, 2009). There are benefits to embracing a sustainable business model, including higher revenue streams and a reduction in costs by addressing environmental and social issues to name but a few (Willard 2012).

A BCS can be considered pivotal to accelerate decisive action within organisations, as 'it gets to the heart of how companies decide where they will - and will not - allocate resources and efforts' (Berns et al. 2009, 25). Companies have not focused on quantifying the link between sustainability actions, sustainability performance and financial gain (Epstein and Roy 2001), and in many organisations, the omission of a convincing business case is the primary barrier to pursuing sustainability initiatives (Berns et al. 2009). Without an analysis of the risks and benefits of adopting sustainable strategies, companies cannot view the real value that adopting sustainable strategies entails (Epstein and Roy 2001).

The issue is that the BCS is not a generic argument; rather, the BCS must be 'honed to the specific circumstances of individual companies operating in unique positions within distinct industries' (Salzman et al. 2005, 27). In this sense, organisations require support in devising the means to assess the BCS within the context of their organisation.

#### 1.7.1. Business Case Benefits

The F2B2 provides 39 potential 'Business Case Benefits' of meeting the Future-Fit Business Goals (Appendix C), which help an organisation conceive a business case. They include 17 'Upside Opportunities' if the Goals are met and 22 'Downside Risks' if a company fails to meet the goals. These benefits present a rationale for why companies should implement sustainable strategies if they are to survive and flourish in future market conditions. The benefits allow companies to assess the underlying reasons for *why* embracing sustainable strategies will allow the company to maintain their competitive advantage. So rather than adopting sustainable strategies because it is 'the right thing to do' (Epstein and Roy 2001), companies can allocate resources and efforts to actions that will directly lead to benefits while addressing the risks of not adopting the goal in question.

The organisation can directly link the pursuit of this goal to the benefits that it provides. Every goal must be satisfied to become Future-Fit but to initiate this transition a company agrees to sign up to certain goals (Willard 2016). These goals act as vision statements, working to catalyse actions to pursue the goals and reap the benefits outlined. Providing relevant goals to companies can ultimately work to:

'Energise people to come at' sustainability 'very differently. As opposed to continuous improvement...they will redesign processes, they will recreate supply

chains, they'll make quantum leaps in their thinking, once they have that system perspective' (Willard 2016)

There are an array of benefits to adopting sustainability, but quantifying a BCS is challenging (Epstein and Roy 2001). In the context of an organisation if resources are limited it could be considered a risk to direct resources away from initiatives towards sustainability initiatives. These business case benefits only have the potential to create a return on investment. There is no guarantee that focusing on sustainability will result in benefits in the context of the organisation. In this respect, accounting for an organisation's context is important in deducing whether they will be enthusiastic to use the F2B2.

A thorough understanding of *why* a transition to sustainability is so crucial for the business at hand is necessary to reap the benefits of the F2B2 (Willard 2016). The tool has only been designed to support a process, therefore, if a company does not have the necessary understanding, it will not be able to use the tool in the optimum manner (Willard 2016). The F2B2 is 'not a magic wand, it's a tool, and the challenge with tools is to introduce them at the appropriate time in the conversation, when they're ready' (Willard 2016).

# 1.8. A Regional Airline<sup>4</sup>

This thesis will explore the F2B2 with a case study on a regional airline. The regional airline carries out operations related to air travel with a focus on domestic flights and is one of the largest aviation operators in the country in which it operates.

The partner organisation states they seek to act based on an approach leading to long-term sustainable development, and are certified according to ISO 14001. They have made active and preventative environmental work a natural part of their business and state this work results in higher profitability and greater competitiveness. Regarding communication within the organisation, all employees are well informed about the partner organisation's vision, goals and values, implying the employees play an active role in ensuring the fulfilment of the company's sustainability goals.

The partner organisation's sustainability strategy centres around six overarching strategic goals, segmented into 14 specific goals, with progress for each goal being weighed against Key Performance Indicators (KPI's). A sustainability plan is being implemented, but as has been outlined effective sustainability plans are difficult to implement, and this issue is compounded by the unique challenge faced by the aviation industry.

#### 1.8.1. The Real World Wide Web

The partner organisation is part of an industry that has developed rapidly over the last century. Aviation has created strong global interconnections, resulting in the sector being referred to as the 'Real World Wide Web' (OEF 2008). The aviation industry has become an integral part of the global economy (ATAG 2005, 2008; Boon and Wit 2005; OEF 2008, 2011), accounting for approximately nine per cent of global gross domestic product (GDP)

<sup>&</sup>lt;sup>4</sup> At the request of the organisation we were working with, the company will remain anonymous and will be referred to as either the 'partner organisation' or as a 'regional airline' from here on in.

(Macintosh and Wallace 2009), and in 2014 the number of passengers that used air transport rose to 3.3 billion (ICAO 2014). This expansion is forecast to continue, providing increased economic benefits (OEF 2011).

A feature of the industry is that it faces a multitude of challenges. The industry is marked by small profit margins (IATA 2011, 2013), and managing costs is a major problem (IATA 2013). Aviation creates environmental impacts, particularly from noise pollution (Bröer 2007) and greenhouse gas emissions (IPCC 1999; Chapman 2007; Gössling and Peeters 2007; Lee et al. 2010). These externalities are being increasingly legislated against in the form of tax, placing an added burden on the industry (IATA 2013).

Technological advancements in fuel efficiency have contributed to reducing greenhouse gas emissions, helping to limit environmental impacts (Macintosh and Wallace 2009), but while air travel is now more fuel efficient, there are more flights. The absolute level of CO2 emissions continues to rise and contributes to the industry's climate impacts (Gössling and Peeters 2007).

The general public has become increasingly aware of the environmental implications of the industry (Walker 2009). Given that the airline industry is service orientated, customers are critical to the success of the sector (IATA 2011), and aviation companies have increasingly adopted sustainability measures to limit impacts (Akerman and Hojer 2006; DfT 2006; ICAO 2001; Macintosh and Wallace 2009; Walker and Cook 2009). There has been a focus on the balance between encouraging the freedom of travel that aviation has created, and managing the increasing negative environmental impacts that an increase in demand creates (DfT 2006).

Herein lies the industry's unique sustainability challenge: encouraging growth within the industry while limiting environmental impacts (e.g. from emissions). The aviation sector is currently pushing alternative fuels such as biofuel as a means to limit environmental impacts, and advancements in biofuels are making this an increasing possibility (Kousoulidou and Lonza 2016). However, the challenge of introducing sustainability initiatives is compounded by low profitability in the industry, meaning resources are stretched, which makes it difficult to direct investment towards sustainability (IATA 2013).

The aviation sector's challenge helps to provide the context of the industry overall. The partner organisation have shown enthusiasm about using the F2B2, but it is crucial to recognise that it is just a tool to support a process. Identifying a means by which a company can assess how ready they are to use the tool could be useful in ensuring the tool is used effectively.

### 1.9. Purpose and Research Questions

The need for business to adapt is imperative for society to progress to a sustainable path. Business is increasingly recognising the need to transition, but the means with which companies are transitioning differs widely. How sustainability is conceived, and the means to which business drives sustainability is reflective of the company's context.

The F2B2 is a tool designed to support a strategic process in organisations. Given that businesses are at various stages of sustainability, companies that have a distinctive structure in place will be able to use the tool in a more efficient way than companies at other stages.

Our purpose is to identify the mechanisms that a company should have in place if they are to use the F2B2 in an optimum manner. What are the requisites a company should have in place to be able to use the tool to harness its true potential? In effect, what indicators suggest whether a company is in a situation that will enable them to utilise the benefits of the F2B2? Taking our purpose into account our research question is as follows:

# Research Question: How can an organisation's readiness to use the Future-Fit for Business Benchmark be determined?

By devising a means to determine how ready a company is to use the F2B2, our aim is to provide organisations with an assessment of their current conception of sustainability. If the company is deemed not to be ready to use the tool, we believe this will catalyse conversations regarding sustainability within an organisation, and enable them to identify aspects of the strategy that can be improved.

By readiness, we refer to a company's ability to use the F2B2 in an 'optimum manner'. Any business is free to use the tool, but as it is a tool designed to support a strategic process, this poses the question of whether they have the necessary structure in place to harness its full potential. We are seeking to assess how it can be determined whether a company is ready to use the tool in an optimum manner.

Our aim is to construct a means that will support businesses in their sustainability journey, allowing them to conceive the means with which this journey can be enhanced so that they become truly sustainable. Our research seeks to support business in a transition to a sustainable path, and given the crucial nature business plays in this development, this has the potential to contribute to the realisation of a sustainable society.

# 1.10. Scope and Delimitations

Our research is being assessed through a case study of a single organisation, that we intend to draw generalisations from, to suggest factors that affect organisations at a broader level. Our scope is organisations, specifically businesses that are currently engaging in a transition to sustainability. Decision makers that drive strategy, including executives and managers, are the intended audience.

As no prior research has been undertaken on the F2B2, our research is limited as tentative and exploratory. We are not seeking to investigate the F2B2 on an organisation per se; rather we are trying to examine whether an organisation is ready to utilise the F2B2 and use it within their current structure. This scope can be beneficial from the perspective of the developers of the F2B2 in providing insights into the factors we perceive to be necessary to use the tool effectively. From an academic viewpoint, it can help to elaborate on the specific obstacles impacting organisations ability to transition effectively, and the factors that are necessary to have in place to ensure a transition to a sustainable business.

### 2. Methods

# 2.1. Research Design

A case study was identified as being the most congruent approach for our research, and we adopted a pragmatic research approach as this approach 'draws upon the most sensible and practical methods available to answer a given research question' (Savin-Baden and Major 2013, 171). Our research was split into two distinctive stages, an *understanding* phase, involving a literature review and preliminary interviews on the partner organisation, and the F2B2, and a *hypothesis ascertainment* stage, where we tested the hypothesis devised in the understanding stage on the partner organisation.

We adopted an exploratory approach in undertaking our research as the F2B2 has just been released, this approach is useful when little is known about an issue (Bickman and Rog 2009).

Maxwell's Interactive Model of Research Design was used to construct the design of our research (Maxwell 2012). The design map is useful as 'the different parts of the design form an integrated and interacting whole, with each component closely tied into several others rather than being linked to a linear cyclic sequence' (Maxwell 2012, 4). The design map supported our research in placing the importance of iteration at its heart. Figure 2.1 illustrates the design map constructed in our project. The design map acted as a system where a change or adaptation of one part had consequences in other parts, allowing us to conceive our research project as a system rather than a linear cause and effect chain.

# 2.2. Case Study

A case study was deemed to be the most appropriate choice for our research as it allowed us to investigate the context in which a business organisation is shifting its practices towards sustainability (Savin-Baden and Major 2013). A relationship was forged with a regional airline through the 'Driver of the Sustainability Strategy' (DSS). As the driver of the sustainability agenda at the regional airline, they wanted to gain an insight into how the company could make better-informed decisions regarding sustainability. This agenda ignited our conversations with the DSS and underlined the reasoning behind undertaking a case study of the partner organisation. A case study was perceived to be in our best interest as researchers in investigating the F2B2 on an organisation, and also to the DSS, who was looking to gain an insight into how better-informed decisions regarding sustainability could be made.

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<sup>&</sup>lt;sup>5</sup> From here on the 'Driver of the Sustainability Strategy' will be referred to as the DSS.

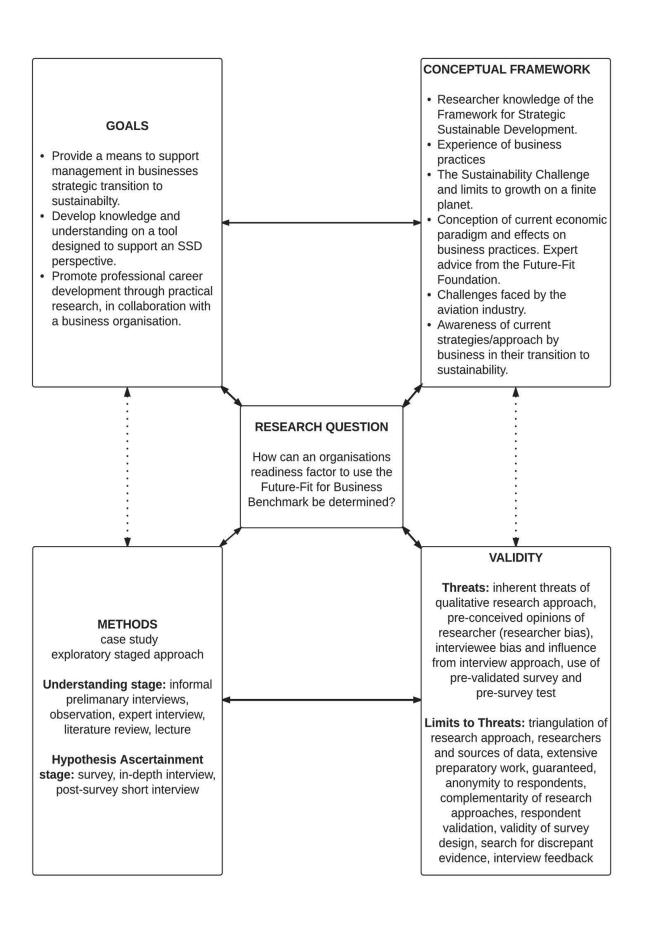


Figure 2.1 Design Map (Adapted from Maxwell 2012).

#### 2.3. Data Collection

Data collection occurred in two stages. As highlighted in Figure 2.2, the first stage involved gaining an *understanding* of two elements, the organisation we were carrying out our research on, and the F2B2. This helped to form our research question and create a working hypothesis. The second stage involved *hypothesis ascertainment* on the partner organisation, to test our hypothesis and answer the research question. Each phase will be explained to give a clear synopsis of the steps that were taken to devise our research.

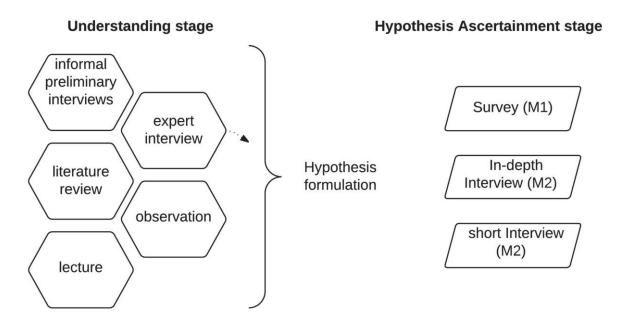


Figure 2.2: Data Collection Approaches Deployed.

#### 2.3.1. Understand

Literature Review. A literature review was initially undertaken on the F2B2 material, which argues that there is a void within business strategies to transition to sustainability. They claim that organisations do not have the means to implement sustainable strategies cohesively, which is reflected in the incremental changes that dominate. These changes do not bring organisations any closer to transitioning to sustainability.

To substantiate this claim, we adopted a triangulation approach where three focus areas were identified, including *Strategic Management*, *Business Organisations in a Sustainable Society*, and the *Aviation Industry*. Once these focus areas were identified, 'scopus<sup>6</sup>' was used to search for journal articles. These focus areas acted as keywords and were our initial search criteria. Synonyms were determined for each keyword, ensuring a large number of articles related to the focus area were in our search domain. The search went from general keywords to more specific words, for example 'strategic management' was the general term, and produced a lot of search results, a keyword directly relating to our research returned fewer search responses, e.g. 'strategic sustainability'. Once search results were filtered down, we searched between results. For example, if 'strategic management' was *Search 1* and 'Strategic

<sup>&</sup>lt;sup>6</sup> Scopus was identified as it is the largest database of peer-reviewed literature, and is particularly strong regarding management and sustainability references.

sustainability' was *Search 2*, we carried out a search between the searches to identify the articles most relevant to our research. The number of citations an article had, was a reference point to how authoritative the article was perceived in the field.

Once this search was undertaken on each focus area, we found it useful to identify articles from the references cited by these searches. If the referenced article was perceived to be related to our research, we located the article and scanned over the introduction, allowing us to identify whether the article was congruent to our research. This approach had a snowball effect, leading to an array of articles, providing insights that deepened our knowledge.

The literature review helped us to substantiate the claim presented by the F2B2 that current business strategies are not sufficient to transition to sustainability.

#### 2.3.2. Preliminary Interviews

A Regional Airline. We initially carried out a secondary data analysis of the existing external documents the partner organisation has published, giving us a general insight into the company.

The DSS acted as our gatekeeper, providing access to the business, and we were aware the DSS played an essential role in the success of our research. Therefore, we undertook some informal interviews with the DSS to build rapport (Savin-Baden and Major 2013). These conversations were important in creating a relationship of trust (Neuman 1997), and also to gain an understanding of the company's current business/sustainability practices.

We also had an informal interview with a senior manager actively involved in the company's sustainability agenda. The purpose of this meeting was to get a perspective from a senior manager, who influenced the organisation's sustainability practices, while providing an understanding of the partner organisation from the field. This meeting was useful in giving us an opportunity to garner information on how sustainability endeavours were being realised.

This meeting resulted in an invitation to a monthly meeting held within each region, allowing us to observe employees and study their behaviour as it occurred within a natural environment (Frankfort-Nachmias and Nachmias 1996). As the employees were in a natural setting, we could gain a perception of the culture within the regional airline. This was a further means to substantiate the view presented by the DSS and was useful in gaining first-hand experience of the workings of the organisation.

This part of our research allowed us to conceive a hypothesis on the organisation. Without this initial insight, we would have relied on generic organisational information based on literature. By taking the time to understand the organisation, we could develop a hypothesis based on their current context which was invaluable for the next stages of our research.

The Future-Fit for Business Benchmark. The only material available to elicit an understanding of the F2B2 is internal, no studies have been undertaken on the F2B2. This necessitated an exploratory approach in developing a hypothesis on how the F2B2 could be investigated in an organisation. We liaised with the developers of the tool, Bob Willard and Geoff Kendall, who provided internal spreadsheets, documents, and a lecture, that gave us a general theoretical insight into the workings of the tool.

We undertook an informal interview with Bob Willard, to gain an understanding of how the tool could be adopted in practice. Our preliminary work on the partner organisation allowed us to present some context on the company we were investigating, and this meeting proved integral in helping to conceive a working hypothesis that our study is based on.

#### 2.3.3. Hypothesis Ascertainment

The purpose driving our research was to determine how to assess whether the partner organisation are ready to use the F2B2, and our working hypothesis was that the identification of the rationale driving the companies sustainability agenda is integral in assessing whether an organisation is ready to use the F2B2. We anticipated there were barriers to the fulfilment of the company's sustainability strategy, and aimed to identify these obstacles. This purpose gave us a clear direction (Calder 1998).

The aim of our research was to investigate how an organisation's sustainability strategy is currently being implemented through research on the drivers of strategy in an organisation. We concluded the best way to undertake our research was to gain an insight into the opinions and attitudes of those working within the company.

## 2.3.4. Approaches

To ensure we made the most use of our time with the partner organisation, it was necessary to design research that was robust enough to deal with the constraints of the project. We wanted to gain a thorough understanding of the organisation while limiting the time individuals had to dedicate to our research. Therefore, we devised our case study using two approaches, an online survey and interviews.

It was useful to look at the complementary strengths and nonoverlapping weaknesses of these different research approaches (Johnson and Onwuegbuzie 2004). By gaining an understanding of the strengths and weaknesses of surveys and interviews, we realised these approaches could be combined in a complementary manner (Johnson and Onwuegbuzie 2004). The intention was that our approach would decrease validity and reliability problems (Abowitz and Toole 2010), providing a more in-depth insight into our case study, and therefore stronger results to answer our research question (Johnson and Onwuegbuzie 2004).

A number of constraints <sup>7</sup> were taken into account when undertaking our research. Our sampling design took a nested approach where 'sample members selected for one phase of the study represent a subset of participants chosen for the other facet of the investigation' (Collins et al. 2006, 70). Our research design was constructed in the form of a survey (M1), an in-depth interview (M2) and short interviews (M3), allowing us to balance the strengths and weaknesses of each approach (Abowitz and Toole 2010). Each part worked to complement and validate other sections of the research (Johnson and Onwuegbuzie 2004).

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<sup>&</sup>lt;sup>7</sup> The constraints in our research project are elaborated upon in Chapter 4 (Discussion).

#### 2.3.5. Preparatory Work

Extensive preparatory work was undertaken before carrying out our data collection. This ensured the data collected directly answered our research question (Cresswell 2009), and that each approach deployed had relevant information that could be compared and contrasted (Cresswell 2009). Focus areas were established to ensure synergy between the approaches.

These focus areas were derived from our literature review and included the *Value of Implementing a Sustainable Approach*, this is the rationale for *why* an organisation is implementing sustainability, and an organisation's *Sustainability Strategy*, which is driven by the rationale, and includes *what* is being implemented and *how* this is being implemented. These two focus areas acted as guides to pinpoint questions we believed were significant to determine a company's readiness factor to use the F2B2. This resulted in cohesion between the phases of our research.

Our approaches were designed concurrently, and an outline of how each phase was designed will follow this process.

#### **2.3.6.** Survey

A survey was chosen as a research approach as we wanted to get a general insight into attitudes regarding sustainability. The purpose of the survey was to get an overview of whether management were creating obstacles to driving the sustainability strategy. Our goals for the survey were to identify the attitudes shaping the partner organisations approach to sustainability. The survey also provided an opportunity to present the opportunities/risks from the business case presented by the F2B2, allowing us to glean aspects they found most relevant to their context. Our hypothesis was that management in the partner organisation did not see the true value of implementing sustainability, and were perhaps unintentionally creating barriers to the sustainability agendas successful implementation.

Online Survey (M1). Taking our constraints into consideration, we created a one-off self-administered survey through an online questionnaire (Calder 1998). The interviews would then provide an opportunity to validate the results provided in the survey (Cresswell 2009). There were some advantages to the survey design we selected, including a reduction in biassing error. An online survey would ensure that respondents could complete the survey without outside influences, by for example interviewees (Frankfort-Nachmias and Nachmias 1996). This approach also provided greater anonymity for the respondents, increasing the likelihood that the respondents would provide answers that reflected their true position (Frankfort-Nachmias and Nachmias 1996).

Our target population were the decision makers within an organisation (Calder 1998). As we were seeking to describe managers attitudes to sustainability, management made up our sampling frame (Fowler 2009). Accounting for our constraints, we undertook a convenience sample of the management group (Abowitz and Toole 2010).

Surveys are useful in collecting information about a large group of people, to make generalisations about the wider population (Abowitz and Toole 2010), but our intention was not to gain an insight into the broader population but to get an overview specifically of the management group in the organisation.

The DSS provided us access to the 'leadership group' at the partner organisation, comprising the executives and anyone within the organisation with a management function. The survey was administered to the leadership team (N=88), which would provide us with a detailed insight into the management population and how they perceived sustainability (Fowler 2009).

We identified the MIT Sloan Management review survey on managers and executives (Kiron et al. 2012) as ideal in providing a template for our survey. This survey was adapted to meet the purpose of M1. Our survey design (Appendix D) ensured each question provided relevant data to answer our research question, and questions were clustered into five overarching themes. This allowed us to lay out the rationale for each question regarding its particular contribution to the research question (Schaeffer and Presser 2003).

The survey places a focus on closed-ended questions regarding opinions and attitudes. Close ended questions are ideal for self-administered questionnaires (Holyk 2008), their drawback, however, is that they may introduce bias by forcing respondents to choose from given alternatives, or by offering alternatives that may not have come to mind to the respondent (Calder 1998). These drawbacks had to be accounted for when designing our questions and we used various techniques to address this issue (Knapp and Mujtaba 2010). These included ratings (useful in asking respondents to make a judgement regarding ordered categories) and rankings (helpful in obtaining information relating to the degree of importance or priorities that respondents give to a list of attitudes) (Frankfort-Nachmias and Nachmias 1996).

Google Forms was used as an instrument to create our survey (Cresswell 2009), allowing us to create a professional survey that could be e-mailed to respondents in a smooth process. This was beneficial to us as researchers but also for the respondents, who could gain access to the form and fill it out at their leisure (Cresswell 2009). A cover letter outlining the context of the study and the purpose of the information that would be provided was included to overcome any resistance to completing the survey (Frankfort-Nachmias and Nachmias 1996), and anonymity was assured, which can increase the response rate (Frankfort-Nachmias and Nachmias 1996)

Clear instructions were provided to avoid any misunderstanding on how to answer questions (Frankfort-Nachmias and Nachmias 1996). The survey ended by thanking respondents for their time and effort as surveys that do so are rated as more enjoyable by those surveyed (Holyk 2008).

The survey was pretested to increase its validity, and ensure any problems were detected before it was administered (Holyk 2008). The survey was pretested using a small number of respondents, to make sure that any teething problems were identified before conducting the survey on our target audience.

#### 2.3.7. Interviews

The purpose of our interviews was to gain an insight into the partner organisation's organisational structure, and how their sustainability strategy is being implemented. The goal was to assess whether obstacles were affecting the fulfilment of the sustainability strategy. Two interviewing approaches were adopted, an in-depth interview with the sustainability manager (M2), complemented by short interviews (M3) with a select group of survey respondents. The intention was that each interview format would corroborate the other.

Moreover, the interviewees were a subset of the survey respondents, providing an opportunity to compare results against the survey, increasing the validity of each method, as the information provided could be compared against the other methods utilised (Cresswell 2009).

The interviewing approach allowed us to gain in-depth information from participants (Savin-Baden and Major 2013). However, an issue with interviews is that they are fraught with possibilities of bias due to the nature of the interaction between the interviewers and respondents (Frankfort-Nachmias and Nachmais 1996). Therefore, the strengths of our two approaches worked to complement the weaknesses of the other, increasing the validity of the approaches being used in tandem (Abowitz and Toole 2010).

We were invited to a monthly executive meeting at the partner organisation's headquarters, allowing us to have one-to-one communication with respondents (Savin-Baden and Major 2013). We had already undertaken some pre-interviews with the DSS, so the interviews were ideal in gaining insights into areas we wished respondents to elaborate on (Savin-Baden and Major 2013).

Semi-structured interviews were selected as we had only one opportunity to interview respondents (Savin-Baden and Major 2013), giving us an opportunity to keep the interaction with the respondents focused on their particular department (Savin-Baden and Major 2013). The open-ended question format provided interviewees with an opportunity to express their perspectives on certain issues, while collecting data that could be compared across respondents (Savin-Baden and Major 2013).

*In-depth Interview (M2)*. The intention of M2 with the driver of the Sustainability Agenda was to gain an insight into the organisational structure within the partner organisation, specifically how decisions are made, and what specific aspects of the organisation are contributing to hampering the fulfilment of goals from the perspective of the DSS.

Accounting for the focus areas selected in our preparatory work, we designed questions around four themes, the intention being that each theme would be allotted a 15-minute slot of an interview lasting for an hour. An interview design (Appendix E) was constructed, where a rationale for each question was justified against the research question, ensuring each question directly related to our overall research question. As the interview was semi-structured, we could not anticipate how much time to allot to each question, as the open-ended question format would necessitate further questions from a given response (Savin-Baden and Major 2013). To control this unknown factor we prioritised questions within each theme to ensure that the most pressing questions would be asked.

Short Interviews (M3). M3 served two purposes. These interviews would allow us to assess whether the perspectives of the DSS were shared and provide an opportunity to delve deeper into survey respondents views on sustainability. These interviews were mini in-depth interviews, and a similar design to M2 was used to construct M3.

We had five interviews lasting half an hour each. Therefore, we created an interview design using three themes rather than four (Appendix F). The format of the interview was similar to M2 and questions were prioritised in a similar fashion.

M2 and M3 took place at the partner organisation's headquarters. As the respondents were in a familiar environment, it worked to put them at ease and give them confidence to answer

questions freely (Savin-Baden and Major 2013). Having three interviewers was advantageous and we had distinctive responsibilities during the interviews. An interviewer was designated as the person asking questions; it was necessary to listen intently within this role to encourage the interviewee to elaborate on points while responding with questions related to the response (Savin-Baden and Major 2013). Another interviewer was responsible for observing participants and taking notes, and a third was in charge of recording interviews and supporting the primary interviewer in asking questions.

Once the interviews were undertaken, we transcribed the data verbatim using the recordings from transcriptions. These transcriptions were quality checked to ensure individual bias was addressed (Savin-Baden and Major 2013).

# 2.4. Data Analysis

The data sets were analysed separately and an outline of each stage will be provided below.

Short interviews (M3). We were seeking to identify patterns within the data set, providing information on the potential obstacles impinging the fulfilment of the sustainability strategy. A thematic analytical approach was adopted as this is a method of identifying and reporting patterns in the data (Savin-Baden and Major 2013).

The interview design ensured consistency between the interviews. Each question and answer in the transcript was coded based on general themes, for example, any information related to the business case for sustainability was designated with a general code for this theme, this was an inductive process, and each code was quality checked by the other two researchers (Savin-Baden and Major 2013).

The data was cut into meaningful segments after pre-coding. Cuts perceived to be providing the most relevant information to answer our research question were identified, this was an inductive process, and each researcher undertook this stage to avoid personal bias.

These cuts were presented using a virtual whiteboard<sup>8</sup>, allowing us to assess the data set using a birds eye view. The whiteboard enabled us to perceive the interconnections between the cuts. Rather than viewing results linearly (on a page), we could see the entire system that our data set comprised off, allowing us to identify similarities within the cuts from each researcher, and when this was done, information was surmised into a general insight.

The general pre-codes enabled us to match segments from various interviews (Savin-Baden and Major 2013). Patterns were identified between the segments, and they were clustered by colour codes to represent either agreement or disagreement. A general inference was made from the patterns to present an overall result. The original transcripts were analysed after the patterns were identified, helping to clarify whether any insights had been omitted.

*In-depth Interview (M2)*. The analysis of M2 was similar to M3. We were seeking to identify patterns within the data set to make inferences and a thematic approach was utilised (Savin-Baden and Major 2013). These patterns could then be compared and contrasted to those elicited from M3.

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<sup>&</sup>lt;sup>8</sup> The program used was Mural. Available at https://mural.co.

Based on the interview design, each question and answer in the transcript was coded using the same codes, based on the same themes as those in M3. There were only three focus areas in M3 versus the four used in M2, however given the freedom interviewees had to respond in our semi-structured interviews, we found there were four themes from both sets of data.

After pre-coding the data was cut into segments, which were identified as being most relevant to answer our research question. This was an inductive process, with each researcher cutting the data to avoid bias from one interpretation. Presenting the information on the virtual whiteboard allowed us to identify similarities between the researchers cuts. This information was surmised into one broad segment, and patterns between the segments were then identified.

A general inference was made from the clusters of segments. We went through a reiteration process, examining the original transcript to ensure relevant information from the interviewee had been obtained and was presented accurately.

Survey (M1). The survey was administered to the leadership group (N=88) with a response rate of 21, making up 24% of respondents. The instrument we used to design our survey produced statistics of the results from those surveyed.

We were seeking to identify patterns in the results which could be transformed into a narrative, to present the information alongside M2 and M3. Our initial analysis focused on a discussion of the results to identify consistencies and inconsistencies between respondents. The interpretations of each researcher were important in scrutinising the results and how they related to our research question.

The results were then segmented based on the themes the survey had been designed around, allowing us to identify similarities between results relating to one another. These interpretations were transformed into a narrative that could be compared against M2 and M3.

#### 2.4.1. Comparing M1, M2 and M3

Our intention was to identify relationships between M1, M2 and M3, by making connections between each analysis. Analysing the results from each instrument resulted in the identification of six distinctive themes, where at least two approaches provided relevant information. A matrix was created to make comparisons and identify relationships between the various results (Table 2.1). The matrix was useful in helping to evince patterns between the different instruments that were used<sup>9</sup>. If our results (for M2 and M3) provided relevant data for the particular theme but fell outside of the scope of the interview questions, this was designated with the code +C, ensuring all relevant information was included in the results.

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<sup>&</sup>lt;sup>9</sup> A description of each theme and the information it includes is provided in Chapter 3 (Results).

*Table 2.1: Themes across instruments for Data Collection.* 

	M1	M2	М3
T1: General Views of the Socio- Economic Context (Organisation Specific)	Q1	Q1, Q2, Q3, Q12	+C
T2: General Perspective of Sustainability (Organisation Specific)	Q2, Q3, Q4	Q4, Q5, Q10, Q11, Q13	Q1.1
T3: Value of Embedding Sustainability (Organisation Specific)	Q8a, Q8b Q5, Q6, Q7, Q11, Q12, Q13 Q9, Q10	Q6, Q6.1, Q7, Q8, Q9	+C
T4: Commitment to Sustaiability (Organisation Specific)	Q14.1, Q14.2, Q15.1	+C	+C
T5: Culture-Shaping Systems (Organisation Specific)	Q15.2. Q15.3, Q15.4		Q3.1, Q3.2
T6: Alignment between Rational & Sustainability Agenda (Organisation Specific)		+C	Q2.1, Q2.2, Q2.5, Q2.8

# 2.5. Validity

A good research design is central to ensuring high validity in research (Ihantola and Kihn 2011). Our design map ensured validity was an implicit part of our research design, allowing us to conceptualise and conceive validity threats in the design process (Maxwell 2012).

Most validity threats in qualitative research must be addressed after the research has begun, and one of these threats is researcher bias (Maxwell 2012). Our biases influenced the study and the results we highlighted as being relevant. To limit our personal bias discussion was vital, and having three researchers allowed us to triangulate our data, gaining three perspectives and interpretations on the same data set, reducing individual bias (Gilbert 2003).

Our procedural reliability could have been influenced by having inaccurate and unsystematic questions (Ihantola and Kihn 2011). Extensive preparatory work limited this threat. Each phase of our research was designed systematically, and each question in our survey and interviews was justified against our research question, ensuring we obtained relevant data.

Transcribing our interviews verbatim reduced misinterpretations of what the interviewees were saying (Maxwell 2012). Interviewees can fear that answering questions truthfully in interviews may lead to trouble within their organisation (Abowitz and Toole 2010). We reduced this threat by ensuring anonymity in both parts of our research. The answers provided in the interviews could have been influenced as a result of this factor, and the data was therefore analysed to look for discrepant and negative cases, as part of the validity tests we undertook on the data set (Maxwell 2012).

Each interviewee was provided with a transcript of the interview to get respondent validation, ensuring there were no misinterpretations in the way the data had been recorded (Gilbert 2003).

We adapted a pre-existing to suit our specific needs. Therefore, the validity of the survey was lost. Our pre-survey test helped to validate our survey, ensuring the instrumentation worked and was providing us with relevant data (Ihantola and Kihn 2011). Engaging with the respondents of the pre-test allowed us to make adjustments to the survey based on this advice.

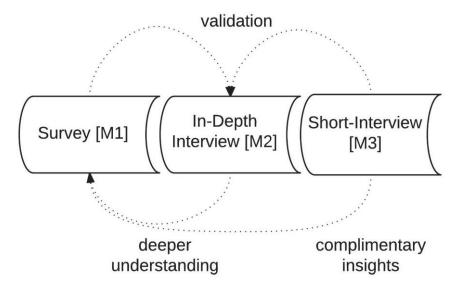


Figure 2.3 Complementarity of Research Approaches.

Figure 2.3 illustrates the complementarity of research approaches. This helped to reduce the threat of biases created from specific methods (Maxwell 2012). The validity threats resulting from studies using surveys were accounted for through the interviews and vice versa (Abowitz and Toole 2010). The adoption of a triangulation approach allowed us to analyse the data sets, helping to identify the similarities and contradictions that each approach created (Gilbert 2003). This triangulation approach provided more reliable and valid data, giving us greater confidence in our conclusions (Abowitz and Toole 2010).

## 3. Results

Our results seek to assess whether the rationale driving a company's sustainability strategy is the determining factor in whether they are ready to use the F2B2.

The results will be presented within the theme identified during our analysis. These themes will present relevant information from each approach deployed. If the approach did not provide information related to the theme, no information will be given from that particular approach. Accounting for the respondents involved in each stage of the methods, from here on in M1 is referred to as 'Perspectives from the Leadership Team', M2 as 'Perspectives from the Driver of the Sustainability Strategy', and M3 as 'Perspectives from the Top Managers in Key/Strategic Positions'.

#### 3.1. Theme #1: General Views of the Socio-Economic Context

Theme one relates to respondents views of the socio-economic system in the context of the organisation. Questions centred around how the external environment influences the business.

Perspectives from the Leadership Team

There was general agreement that the five primary challenges for the organisation within a socio-economic context are:

- 1. Reducing costs and increasing efficiencies.
- 2. Growing revenue.
- 3. Innovating to achieve competitive differentiation.
- 4. Attracting, retaining and motivating talented people.
- 5. Responding effectively to threats and opportunities of Sustainability.

Perspectives from the Driver of the Sustainability Strategy

The DSS suggested that as an airline company they 'make it possible for businesses to take meetings in (the capital city), or over the day, you can go back and forth'. They seek to work in tandem with other transport systems, 'train isn't our competition, we would like to have the train going to all the airports. So we should connect the transport system instead'.

In reference to customers, the company undertook a survey where they discovered that the issue of sustainability was a leading aspect they placed an emphasis on, 'especially customers from [the capital<sup>10</sup>]...were more into sustainability'.

Perspectives from the Top Managers in Key/Strategic Positions

The interviewees were not asked specific questions related to the socio-economic context. However, one interviewee commented that they help to facilitate a need in that 'from our perspective we participate in making possible for all of [country name<sup>11</sup>] to meet'.

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<sup>&</sup>lt;sup>10</sup> Ommited for the sake of anonymity

#### 3.2. Theme #2: General Perspectives of Sustainability

This theme placed a focus on assessing how individuals perceive sustainability in the context of the organisation. It referred to what they believed the term sustainability encompassed, how sustainability is conceived in the context of the organisation, their perceptions of whether this term was concrete and useful, and how that comprehension is expressed as a personal commitment

#### Perspectives from the Leadership Team

The majority of respondents (76%) believe that economic sustainability is as important as environmental issues when asked to account for what sustainability refers to in the context of the organisation. The respondents placed an emphasis on safety issues and customer health and well-being with 47% and 26% of respondents identifying these aspects as important in the context of sustainability.

Seventy-six percent of respondents agree the term sustainability is concrete and useful while the rest of respondents suggested that it is not concrete, but is the best term available. None of the respondents indicated that it is not a concrete and useful term.

There was a mixed response about whether sustainability is considered a priority action, with just over half of respondents stating their commitment to sustainability is in line with other priorities. Twenty-four per cent of respondents suggested sustainability is not in line with other priorities, and 19% prioritised sustainability over other considerations.

#### Perspectives from the Driver of the Sustainability Strategy

The interviewee suggested that when people think about sustainability 'most people would say in an airline it (sustainability) is climate...so most people think of the environmental aspect'. From the interviewee's perspective sustainability includes employees and employee status, and an important aspect of sustainability is 'being part of a community...having relationships with our suppliers'.

The interviewee suggested that there is no company specific definition of sustainability, but alluded to the company's general definition, the conception of which is as follows:

'We want to contribute to sustainable development that satisfies today's needs without compromising the ability of future generations to satisfy their needs. '(Quote from the partner organisations Sustainability Policy)

Similarly, there is an awareness that customers have an understanding of the environmental aspects, but 'it's hard to define what is actually the other aspects' of sustainability. Currently, while it is recognised that customers understand the environmental aspects of the airline industry, it is hard to align current targets with sustainable initiatives as sustainability falls outside of the scope of priority actions.

<sup>&</sup>lt;sup>11</sup> Omitted for the sake of anonymity.

The company are driven by three values: *Close, New, Now.* These values relate to the notion that 'we are going to solve this now, and we are going to think in a new way' and 'if you think new or you think engaged in sustainability you can add that there'.

#### Perspectives from the Top Managers in Key/Strategic Positions

There was general agreement between interviewees that sustainability in the context of their business is focused on environmental aspects. However, there was disagreement regarding other aspects of sustainability. One interviewee emphasised the importance of a long-term perspective; another stated it involves being a good ethical company while the need to broaden the focus of sustainability starting from an environmental platform was recognised by a third.

The majority of interviewees identified the need to make sustainability an integrated part of the business and it was suggested that if sustainability is not an integrated component of the business, it will not be effective. Many interviewees stated the sustainability strategy would not work if it is an add-on, and there was general agreement that for sustainability to be driven through the business effectively it had to be an integrated part of the overall strategy. The majority of interviewees stated this was important, but they only suggested this as a need, not as a reality in the business. One interviewee stood out in that respect, suggesting sustainability is an integrated part of the business.

There was a lack of agreement regarding how sustainability is being implemented in the business. Some interviewees believe sustainability has become an important component of the way decisions are made in the overall business strategy, others suggested there are a lot of conversations regarding sustainability, but an obstacle to implementing sustainability centres around a lack of resources, 'connected to costs'.

Regarding stakeholders, an interviewee stated that the primary external stakeholders have not been identified, but 'we have more stakeholders identified within the company'. These include 'the owner, the board and the employees'.

# 3.3. Theme #3: Value of Embedding Sustainability

The value of embedding sustainability refers to the rationale driving the sustainability strategy. What aspects of the external environment they perceive as important, and how much value they consider sustainability provides to the organisation. In turn, value refers to the BCS and how they conceive sustainability in regards to opportunities and risks.

#### Perspectives from the Leadership Team

The 'upside opportunities' and 'downside risks' as presented by the F2B2 were introduced to the survey respondents. They identified revenue growth (90%), savings on operating expenses (71%) and an alignment between purpose and action (48%) as the greatest upside opportunities of sustainability. The risks of eroding revenue growth (62%), the risk of higher operating expenses (52%) and other risks such as physical degradation, societal disruption, insecure supply, compliance expenses and litigation expenses (47%) were considered to be the greatest downside risks of *not* implementing sustainability.

All of the respondents believe that the pursuit of sustainability-related strategies is necessary to remain competitive, but there was a dispersed response to whether the company has a clear business case for addressing sustainability. Thirty-three percent of respondents believed the company do have a clear business case. Thirty-eight percent suggest the company have tried to conceive a business case but it is too difficult to develop while 28% believe the company do not have a business case.

When accounting for the challenges of developing a business case the most significant obstacles were considered (in order of importance):

- Competing priorities.
- Lack of a model/framework for incorporating sustainability in the overall business case and;
- A difficulty in quantifying intangible effects of sustainability strategies.

There was general disagreement regarding the profitability of sustainability related initiatives, with almost half of respondents suggesting that sustainability-related initiatives have broken even while nearly a third of respondents believe sustainability efforts have added to the bottom line.

More than half of the respondents believe the organisation's Business Model has changed as a result of sustainability. The factors leading to business practices adapting include customers willing to pay a premium for sustainable offerings, and legislative/political pressure. Seventy-two percent of respondents identified these factors as being the most influential in changing business practices, while customer preference for sustainable products/services was considered the third factor in adapting business practices, with 45% of respondents acknowledging its importance.

It was also suggested business practices have changed through increased collaboration with suppliers, with 71% indicating collaboration has grown as a result of sustainability while 57% recognise that sustainability has led to increased collaboration with industrial associations, customers and the government.

#### Perspectives from the Driver of the Sustainability Strategy

Customers associate airline companies with environmental impacts, and there is a belief that this awareness will create a 'demand from customers' that 'is going to be bigger and bigger', and therefore it is crucial the company embrace sustainability now, to prepare for this increased pressure from customers. Customers increasing concerns and awareness of sustainability issues sparked the company's engagement with sustainability, and market research on customers found that they 'were more into sustainability'. It is therefore argued that sustainability is important for two reasons; 'first of all cost saving, and on the other hand, we have the brand awareness'. Regarding sustainability, demand from customers will only increase, and the risk of not embracing sustainability is that the 'business will be questioned', ultimately the 'biggest risk would probably be not doing anything...just fading out'.

The company being certified according to ISO 14001 is reflective of this increased pressure from customers, and ISO 14001 certification has become important to their business regarding the perception of the external environment, if they 'don't deliver what we have promised, then it's going to be an issue'.

It was suggested that the current context of the business is an ideal time to push sustainability. They have a new brand and therefore 'we have a perfect time to discuss it and push it and show that this is really part of our DNA'. With the change of brand, the intention is that customers will 'feel that sustainability is part of our brand'.

Alongside customer perceptions, an external threat is government legislation in the form of an increased tax. The government is 'discussing how they are going to put taxation on aviation', and given the small profit margins in aviation, this is 'a very big threat to the industry'. Accounting for this threat, 'we are pushing biofuel'.

There is a belief that rather than the government implementing a tax 'we say it would be much more effective if we have the government helping us to have biofuel available to us'. It is therefore suggested that advancements in biofuel technology will allow the company to address the risk of legislation. However, a risk of introducing biofuel is that it is very expensive in comparison to traditional fuel, but there is a belief that customers will 'pay extra to travel with an airline that is more sustainable'.

The company are currently undertaking eco-efficiency initiatives, investing in a new fleet of aircraft that will create efficiencies. These efficiencies relate to costs, and a benefit of this new fleet of aircraft is that 'we are going to decrease the fuel costs very fast, so that's a way to be competitive'. This will also be a means to reduce environmental impacts.

Currently, quantifying a BCS is difficult as 'it's hard to find the numbers at the moment'. When looking at the business case for specific actions, e.g. the new aircraft, 'then it's clear', in 'different projects it's much easier to have the environmental aspects' but as a company, this is much harder to do. There was also reference to the timing of constructing a BCS, and it was stated that while they currently do not have a BCS the 'time would have to be right to have the business case anyway'.

#### Perspectives from the Top Managers in Key/Strategic Positions

There was agreement that adopting a sustainability agenda is necessary regarding customers. Customers play such an important role in driving sustainability, as sustainability initiatives increase the reputation of the company, attracting new customers, and increasing loyalty. One interviewee argued in the long term sustainability will be a 'key selection criteria for the customer' and will decide 'whether or not customers will choose to fly with a particular airline'. Another interviewee suggested that taking a sustainable approach will provide a competitive advantage.

The interviewees were unified in recognising the importance of adopting a sustainable approach to addressing risks. Not having sustainability initiatives would influence the reputation of the company, impacting on the brand. Moreover, if sustainability were not adopted it would impact on customers decisions as customers 'demand some kind of...sustainability and environmental plan'. The ultimate risk presented by an interviewee is that they will be out of business if they don't adopt a sustainable approach.

Some interviewees suggested that adopting an environmental aspect has been vital for the company as they are currently being threatened with legislation to increase tax on airline companies. As a result, they regularly liaise with the government regarding environmental issues. The interviewees were in agreement regarding the potential of Biofuel as a means to

limit environmental impacts. The interviewees stated biofuel technology had some benefits, including changing perceptions of the industry, and helping to attract customers. Underlying this desire to implement biofuel into their airline fleet is a political agenda.

There was an agreement between all interviewees that there are obstacles impacting sustainability initiatives, including the current climate that the organisation finds itself in, where there are lots of changes taking place. A lack of revenue means they are not able to direct investment to sustainability, this is considered a barrier to sustainability.

The interviewees all made reference to the new fleet of aircraft that is currently a significant investment in the company. They all agreed the motive behind this investment is fuel efficiency, making the aircraft more cost efficient. Some of the interviewees stated the environmental benefits, and one interviewee said that this investment will be a 'game changer' regarding the company's environmental footprint; however, they were all agreed that this decision was driven from a financial perspective.

Opinion was split regarding whether they have a business case for sustainability, some interviewees said they did not have a business case, and the lack of a business case was recognition of sustainability not being a top priority. However, another interviewee believed the business case for sustainability was driven implicitly within the overall business strategy; another interviewee suggested that the business model is not changing due to sustainability initiatives.

Each interviewee recognised that having a business case would be beneficial, with one interviewee suggesting that if sustainability efforts benefited the financial results 'it would be much easier to implement', however there were reservations regarding how a business case could improve financial performance.

Interviewees alluded to the fact that in the company's current context it was challenging to conceive a business case, given that resources are currently stretched, particularly in reference to time, with one interviewee questioning the merits of allocating time to formulate a business case.

# 3.4. Theme #4: Commitment to Sustainability

Theme four complements theme three, as it presents information relating to how the value of sustainability is translated into a demonstrable commitment and refers to how this commitment is translated regarding management attention and investment.

Perspectives from the Leadership Team

Two-thirds of respondents believe that the CEO demonstrates a commitment to sustainability while 19% think that there used to be a demonstrated commitment shown by the CEO, but now sustainability is embedded within the organisation.

Thirty-eight percent of respondents believe that in comparison to last year management attention and investment regarding a commitment to sustainability has somewhat increased this year while 24% believe that there were no changes. When asked if this commitment will

increase next year, 61% of respondents suggested that management attention and investment will somewhat increase, however, no change is expected from 14% of those surveyed.

# Perspectives from the Top Managers in Key/Strategic Positions

The interviewees were in agreement that the company is committed to sustainability and there is an awareness of the importance of adopting a sustainable approach. Becoming certified according to ISO 14001 is recognised as being an 'important first step and an important foundation for...continuous work'. However, there is disagreement regarding how engaged the company are in sustainability initiatives. Some interviewees suggested everyone is involved and working with sustainability on a daily basis while others suggested there is a commitment to sustainability but they do not have the resources to implement sustainability in a structured way. Another interviewee suggested sustainability is recognised as important but it is not a priority on the agenda.

Some the interviewees stated sustainability is not a priority action at present. However, initiatives being undertaken include a waste management program, sourcing of ethical partners for the production of uniforms, and sourcing of sustainable suppliers for the manufacture of coffee cups.

To increase engagement within the organisation, a need to improve communication regarding sustainability was recognised. The interviewees suggested an effective means to drive sustainability through the organisation was necessary to get an increased commitment from management. A demonstrable commitment from management will help to increase employee perceptions regarding the importance of sustainability.

Communication of the sustainability strategy towards employees is pushed through monthly meetings, and there was agreement that the company make efforts to ensure that employees are satisfied and engaged, through employee surveys which focus on their engagement with the business strategy and core values.

# 3.5. Theme #5: Culture-shaping Systems

Culture shaping systems focus on ways the organisation have attempted to make sustainability an integrated part of the business and referred to the measurement, management, rewards and recognition systems they have in place. This theme focuses on how the strategy is being translated and embedded into organisational practices while alluding to how much value they perceive sustainability is adding to the business.

#### Perspectives from the Leadership Team

There was inconsistency regarding whether sustainability is a measurement criterion used to ascertain success in the organisation. This lack of clarity is reflected in whether respondents have personal KPI's relating to sustainability, with nearly half of respondents claiming they did not know whether their personal KPI's are related to sustainability criteria.

This lack of clarity is reinforced concerning the relationship between sustainability and a monetary rewards mechanism, with only two respondents (out of 21) suggesting that there is a connection between sustainability and financial rewards.

#### Perspectives from the Driver of the Sustainability Strategy

Regarding whether the company measure success based on sustainability criteria, 'we do not have sustainability there'. The company assess whether sustainability initiatives are successful based on the response of customers, and a means they use to measure the effectiveness of sustainability initiatives is through a survey on board flights, to see 'how the environmental and sustainability work' is perceived by customers. The company do have indicators to measure impacts, but these are mostly focused on 'environmental impacts, so we do have KPIs around that'.

Responsibility for reporting sustainability internally falls to the DSS and regional coordinators. However, there are signs that the company are looking to distribute responsibility regarding sustainability more evenly throughout the business. Impacts are currently reported at the department level, but the partner organisation is looking to broaden this scope by making departments more responsible for sustainability initiatives, 'for example...CO2 emissions, how are you, in your department working on this? How is it, how are you going to do it?'

There are signs of engagement with suppliers. One indicator used is 'how many ecological products we have on board' the responsibility in reporting this is 'going to be the suppliers reporting every month'.

When the company became certified with ISO 14001, it created a feel good factor amongst employees and the company have implemented some initiatives to engage employees with sustainability. An example of this is an initiative where the employee with the best sustainability-related idea is awarded a prize. However, there are no specific criteria for the prize, and it is decided upon by the regional manager 'together with the employees'.

#### Perspectives from the Top Managers in Key/Strategic Positions

The interviewees agreed that sustainability is not a measurement criterion used to evaluate success, this is focused on financial aspects and a major component of how success is conceived is based on how many loyal customers they have.

There are specific KPI's within the organisation, including a KPI for biofuels. However, one interviewee highlighted the difficulty in measuring sustainability around fossil fuel aspects. Sustainability measurements will, however, be included in KPI's to measure whether they are fulfilling their customer promise,

# 3.6. Theme #6: Alignment between the Sustainability Agenda and the Rationale for Sustainability

The final theme relates to whether there is alignment between the company's rationale for embracing sustainability and how this is driven through the organisation. Is there evidence connecting how sustainability is being driven, and the rationale underlying their motives for establishing a sustainability agenda?

Aspects of this theme include the organisation's current priorities to maintain competitiveness, an acknowledgement of the relationship between sustainability and performance, and how the sustainability agenda influences executive's duties and decisions.

#### Perspectives from the driver of the Sustainability Agenda

Whether a sustainability agenda can be pushed through the partner organisation is related to the external economic environment, for example, '2010 was...a hard year where people started to not travel that much...that's a tough time to push sustainability'. This sensitivity to the external environment is significant when accounting for how the company drives sustainability.

The partner organisation has implemented a new Environmental Management System, ISO 14001, and it was argued that this certification is a 'very important way to keep going during hard times'. The company have an action plan featuring a 'hundred points that we are trying to do...but then we have the cost saving perspective as well', for example, 'shall we have newspapers or shall we have it that you' go 'online instead'. So there is recognition of a cost-saving element of adopting sustainability actions.

Currently sustainability initiatives undertaken by the organization include, 'sorting the waste on board', 'the food on board (is) produced locally', they have 'local partners and local activities,' and 'events like football (and)...tennis'. However, 'we have to do it without any costs...pushing the brand and saving costs would be a great way'. Regarding this cost element, it is challenging to implement actions as they can 'conflict with other urgent matters...if you have problems...or if you have issues, that's going to put the environmental part on the side'.

The sustainability department is nested within the communications department and the benefits of this are that 'it's effective I think, it's a good way...because we are also working in public affairs'. There was a belief that while 'we do know everything internally...most of the people don't know what's going on around'.

The DSS is responsible for the governance of sustainability initiatives; this does not fall under the executive's responsibilities. However, the management team dictates 'if we're going to do the big investments'. Every region the company operates in has a 'sustainability coordinator', who is responsible for sustainability initiatives in the respective region. Each coordinator has autonomy regarding how they implement sustainability initiatives.

Regarding communication of the sustainability strategy, there was an impression that 'we might be better on communicating it externally than internally.' Externally the company do 'press releases on pretty much everything around...sustainability, so that's important for us'. Sustainability is reported in the company's annual report, with a page allocated to initiatives that have undertaken, but regarding reporting sustainability, the emphasis is placed on being 'certified according to ISO 14001, that we are engaged in a fuel saving program'. Internally, therefore, the company currently do not have a means to report sustainability but they have done 'a lot of work around the analysis where our stakeholders rate what they find important in sustainability'.

Internally the company have taken some steps to improve engagement regarding sustainability amongst employees. They have introduced a sustainability element in monthly

meetings to try and engage employees with sustainability, and they try to have 'one slide around sustainability' at each meeting. In addition, each employee is expected to undertake a web-based education once a year, where they 'have a repetition of the environmental goals'. This is called sustainability education, and includes 'some part of the code of conduct, but it could be developed into the social and economic'.

# Perspectives from the top managers in key/strategic positions

There was broad agreement that the DSS is responsible for driving the sustainability strategy through the business and in each region, there is a sustainability coordinator. It was recognised that if responsibility for sustainability were shared throughout the management team, it would be more effective. This point was acknowledged by an interviewee who suggested having one person driving the sustainability strategy doesn't work. On the other hand, another interviewee suggested it was hard to get management engaged as there are too many other issues to solve.

There was disagreement regarding how well the sustainability strategy is being communicated in the business. Some interviewees believed communication regarding sustainability could be improved, with two interviewees suggesting that if it were on the agenda for meetings, this would be a means to increase awareness. However, an interviewee stated that sustainability is integrated in the way they communicate internally while another interviewee suggested it is part of the culture.

# 3.7. Summary of Results

Table 3.1: Summary of Results.

Theme 1: General Views of the Socio-Economic Context (Organisation Specific)	<ul> <li>Reducing costs and increasing efficiencies were regarded as the primary business challenges, regarding the socio-economic context.</li> <li>The issue of sustainability is a central component customers place a focus on.</li> <li>The airline industry provides a transport network connecting the country.</li> </ul>
Theme 2: General Perspective of Sustainability (Organisation Specific)	<ul> <li>Agreement across methods that sustainability in the context of the organisation refers to environmental impacts.</li> <li>Customers are increasingly aware of environmental aspects.</li> <li>Sustainability initiatives fall outside of the scope of priority actions.</li> <li>A lack of resources to direct attention to sustainability efforts is considered an obstacle to sustainability.</li> <li>There is recognition of the need to integrate sustainability initiatives into the overall business strategy, to drive it through the business efficiently.</li> <li>Sustainability is not embedded within the core values of the company but is considered an add-on.</li> </ul>

Theme 3: Value of Embedding Sustainability (Organisation Specific)	<ul> <li>The greatest upside benefit of implementing sustainability was increasing revenue growth; the biggest downside risk was the erosion of income.</li> <li>Important the organisation embrace sustainability to prepare for increased pressure from customers.</li> <li>Environmental issues will be key selection criteria for customers and sustainability will provide a competitive advantage.</li> <li>Alongside customer perceptions, an external threat is legislation in the form of increased tax; embracing sustainability is important to address this threat.</li> <li>General agreement that the business do not have a BCS and obstacles are making it difficult to construct a business case.</li> <li>Disagreement was apparent as to whether sustainability can improve financial performance.</li> </ul>
Theme 4: Commitment to Sustainability (Organisation Specific)	<ul> <li>Agreement that the company are committed to adopting a sustainable approach (this is reflected by the CEO, who demonstrates a commitment to sustainability).</li> <li>There was disagreement regarding how this commitment is translated into sustainability initiatives.</li> <li>While a commitment is shown, sustainability is not a priority agenda.</li> <li>To increase commitment and engagement, there is a need to improve communication regarding sustainability.</li> </ul>
Theme 5: Culture- shaping Systems (Organisation Specific)	<ul> <li>The company do not measure success based on sustainability criteria, and there is no relationship between sustainability and financial rewards.</li> <li>A major component of how success is conceived is based on customer loyalty, and KPI's on whether they are fulfilling their customer promise regarding sustainability will be introduced.</li> <li>KPI's are used to measure select environmental impacts.</li> </ul>
Theme 6: Alignment between Rational & Sustainability Agenda (Organisation Specific)	<ul> <li>Becoming certified according to ISO 14001 was a crucial step in becoming more sustainable.</li> <li>Current sustainability initiatives include a waste management system and the identification of local suppliers.</li> <li>The sustainability department is nested within communications, and the DSS is responsible for driving the sustainability strategy alongside sustainability coordinators.</li> <li>Sustainability does not fall under the scope of executives responsibilities.</li> <li>They are better at communicating sustainability externally then internally, and it was recognised that if internal communication improved it would be a means to increase awareness.</li> <li>There was agreement that if the governance of sustainability were distributed between the management team, driving the strategy through the business would be improved.</li> </ul>

#### 4. Discussion

An outline of how we believe an organisation's readiness factor to use the F2B2 will be presented, alongside a discussion on whether we can be confident in our results.

# 4.1. The Readiness Factor

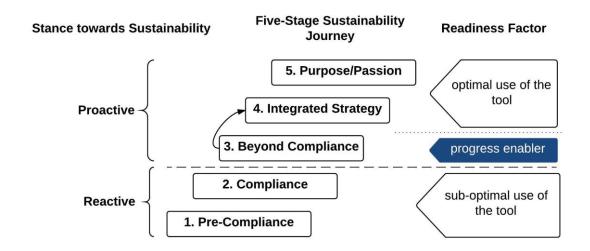


Figure 4.1: The Readiness Factor.

We propose the use of the 'Readiness Factor', assessment criteria adapted from Bob Willard's 'Five-Stage Sustainability Journey'. The Readiness Factor provides criteria that determine aspects a company should have in place that will allow them to be considered ready to use the F2B2 in an optimum manner.

Our results suggest where a company finds itself regarding the stages of the sustainability journey. Acknowledging the context a company finds itself in is important in determining if they are ready to use the tool in an optimum manner. If a company is not ready, the tools potential can not be harnessed, as the company does not have a structure which is conducive to distill benefits. The risk of this is that the company misdirect investments, assuming this misdirection can be attributed to the F2B2 if benefits are not realised.

Stage 1 and 2 companies stance towards sustainability is reactive, they do not have a particular sustainability agenda, but react to the external environment and make changes as a result. The value of a sustainable approach is not recognised, and if the tool is used, it would be utilised in a suboptimal manner, as they do not have an infrastructure in place that will allow them to harness the potential of the tool.

Stage 3 companies are at a critical phase; they recognise that sustainability has value to the organisation, but there are obstacles to being a truly sustainable business. We suggest the tool cannot be used in an optimum manner at this stage, but the F2B2 can be a progress enabler in supporting companies in their transformation to a stage 4 company, and true sustainability. We believe the tools ultimate value is in helping companies at stage 3, to increase their awareness of sustainability, and support them in a transition to a stage 4 company.

Stage 4 and 5 companies are truly sustainable. They recognise the value of embracing sustainability and have a strategy reflective of this understanding. The tool can be incorporated into the current sustainability strategy to support its fulfilment, and these companies can gain the full benefit of the tool, enabling them to use it in an optimum manner.

If we can be confident our results allow us to deduce what stage the organisation are currently in, it can be argued the results answer our research question, as they provide an assessment that determines how ready an organisation is to use the F2B2.

# 4.2. Rationale for Introducing Sustainability Initiatives

Our hypothesis was that the rationale driving an organisation's sustainability strategy is the determining factor in assessing how ready they are to use the F2B2. Our discussion will centre on whether our results provide an accurate representation of this hypothesis.

The rationale focuses on accounting for the underlying reasons driving an organisation to adopt a sustainable approach. In effect, the rationale driving a sustainability agenda is recognition of elements in the external environment that have induced the company to react by implementing sustainability initiatives (Moan et al. 2008).

There is a belief that sustainability will help to reduce these external threats, or allow the company to take advantage of opportunities sustainability can produce. In short, organisations adopt sustainability initiatives as they have identified sustainability as adding value to their business. But it is essential to account for why taking a sustainable approach will add value, in what respect is value perceived in the organisation and how is value defined?

#### 4.2.1. Customer Orientated Rationale

Accounting for their underlying rationale, in effect, *why* they are pursuing sustainability, is fundamental in determining a company's readiness factor. Using the metaphor of upstream thinking, the why is the *cause* of implementing sustainability, and influences every other aspect of how sustainability is conceived in the business. An identification of why a company is seeking to embrace sustainability is central in assessing the *effects* of this rationale, namely, *what* is being driven through the organisation and *how* it is being implemented.

The *why* trickles down into every aspect of sustainability in the organisation. If a company fail to acknowledge *the* rationale for implementing sustainability, this will have consequences on how sustainability is conceived. The partner organisation's rationale for embracing sustainability centres around two aspects: customers, and the threat of government legislation.

Customers are becoming increasingly aware of the environmental effects of flying, and whether a company is perceived to be driving sustainability initiatives, and reducing this environmental impact, is an important measure when customers decide to fly with them. Embracing sustainability is essential for the reputation of the company, enabling them to attract and retain customers. Given the context of the aviation industry, increased customer share is a means to grow revenue (IATA 2011), and sustainability is perceived to be an effective means to do so.

The second motivation is the threat of government legislation, for example, in the form of increased tax. This tax is the result of the environmental impacts of the industry and is a risk of an added cost. Given the tight margins in the industry, and the difficulty in generating profits (IATA 2013), the threat of legislation is driving the company to embrace sustainability, to limit their environmental impact, and address this threat.

The company's raison d'être is twofold, to increase marketing and thereby revenue, and to reduce the risk of an added cost. The company is stuck in a sustainability paradigm where they react to market conditions, creating policies that reflect the situation in the external environment. Sustainability is perceived as a means to respond in a positive way to these external forces. There is recognition that without embracing sustainability the company will not survive in future market conditions, however, the system they are a part of has not been recognised in accounting for why embracing sustainability is so fundamental.

The company's rationale for adopting sustainability does not account for the sustainability challenge. In reality, they are entering a funnel of limited resources, the risks of which are mounting up as we enter deeper into the funnel. These risks will translate into increased costs in every facet of the business (Robèrt 2000), and the funnel metaphor necessitates that companies adapt their business model, to prepare for future market conditions.

The partner organisations rationale in reacting to the external environment is indicative of companies attempting to solve problems in isolation (Loorbach et al. 2010). However, the socio-economic system is marked by complexity, and to recognise the interconnections within the system requires a systems perspective (Robèrt et al. 1997). An FSSD approach has been designed with a recognition of the sustainability challenge, utilising systems thinking to provide business with a planning methodology to make sense of the vastly complex system (Holmberg and and Robèrt 2000). It can be difficult to conceive what it is we are attempting to sustain by adopting such a narrow perspective, and the companies conception of success does not reflect a desire to maintain the socio-ecological system (Robèrt 2000).

The organisation's conception of success is based on retaining and enticing customers while addressing the threat of legislation. This conception of success is too narrow. Without a systems perspective how the company conceive success is focused on how to react to external changes in the environment. As these threats change, their conception of success will adapt to follow suit. The organisation perceive the external environment using an isolationist perspective and have not accounted for how elements in the external environment are interconnected.

Recognition of the sustainability challenge can work to instil a belief in a company that operating a business with an awareness of the funnel will ultimately lead to a more successful business. This is the ultimate value that embracing sustainability entails and if this awareness underpins the cause for embracing sustainability then the effects, i.e. *what* and *how* it is driven through the business, will be a reflection of this awareness.

As the partner organisations rationale centres around customers and government legislation, initiatives in the business will be reflective of this specific rationale, this is the cause they consider to be the underlying reason for embracing sustainability, therefore, what and how the business drives sustainability is reflective of this agenda.

The rationale driving a company's decision to embrace sustainability is considered a fundamental factor in determining whether an organisation is ready to use the F2B2 in an optimum manner. We suggest companies at stage 4 and 5 of the sustainability journey have recognised the sustainability challenge and adopted a systems perspective as a result. Distinguishing stage 4 and 5 companies is that stage 4 companies underlying purpose may not be recognition of the sustainability challenge. However, they recognise the sustainability challenge and seek to use that awareness to make their business successful within sustainability constraints.

The F2B2 could help companies in identifying the need to adopt a systems perspective in a transition to sustainability. The tools ultimate value could be in providing clarity of the sustainability challenge, and the need to implement a systems perspective. Therefore, the F2B2 could be a progress enabler, supporting a transition to a stage 4 company, and it has the potential to act as a leverage point, inducing a significant shift in the system (Meadows 1999).

## 4.2.2. No Coherent Business Case for Sustainability

The rationale filters through to the business case companies construct. The partner organisation does not have a BCS and this is indicative of the rationale they have adopted. It was recognised that having a business case would make it easier to identify actions to implement. However, without a business case alluding to how to address risks and quantify opportunities (Willard 2009), sustainability is conceived as an added cost, and effectively a barrier preventing the successful fulfilment of a department's specific strategy.

A lack of a business case is considered one of the biggest obstacles in pursuing sustainable initiatives, (Berns et al. 2009) and this was reflected in our results. The partner organisation are in an industry marked by small profit margins, and they are driven by reducing costs (IATA 2011). They are undertaking some investments, and a major obstacle to implementing sustainability initiatives is a lack of resources. These aspects are indicative of how sustainability is conceived within the business. As they have not identified how sustainability can create opportunities and address risks they conceive sustainability initiatives as a cost, this point was accentuated as they do not believe sustainability can contribute to the financial performance of the company.

A BCS is important in pursuing sustainability initiatives, but it must be noted how difficult it is to conceive a business case. A business only has a limited amount of time and resources, which must be directed in a cohesive way that will create a return on investment. However, recognition of the sustainability challenge can work to increase an awareness of the potential risks of *not* implementing changes (Robèrt 2000). An awareness of the sustainability challenge has the potential to create a shift where the risk of making an investment is outweighed by the risk of not making the investment (Holmberg and Robèrt 2000).

A lack of a BCS in the partner organisation indicates there is a lack of a strategic approach to planning for sustainability. Adopting a backcasting approach can help address the challenge of directing investments (Holmberg and Robèrt 2000). The strategic guidelines that are provided by this methodology ensure there is a logic and direction regarding investments that are made, which work to direct a company's actions towards an envisioned future. Adopting a backcasting approach reduces the risk that actions will induce dead ends and not provide a return on investment that can work to promulgate the process (Missimer 2015). Backcasting

helps to direct investments in a cohesive manner, with an ultimate objective in mind. This allows an organization to see the value of investing in sustainability.

Stage 4 and 5 companies recognise the return on investment a sustainable approach entails. However, stage 3 companies are not aware of the opportunities sustainability can induce. The F2B2's upside opportunities and downside risks provide a company with a rationale, allowing them to conceive the business case benefits of transforming to a stage 4 company.

# 4.3. Sustainability Strategy

The sustainability strategy alludes to *what* is being implemented and *how* the strategy is being driven through the organisation. Our results suggest the sustainability strategy is a reflection of the rationale for driving sustainability within the company, and there is alignment between the company's rationale and the strategy that is being implemented in the business.

#### 4.3.1. No Definition of Sustainability

Sustainability is perceived to be primarily focused on environmental aspects, so in this respect, there was an agreement regarding what sustainability means in the context of the business. This alludes to the companies rationale, which relates to the environmental impacts of the industry, and this rationale has been translated into how the company conceive sustainability.

The company have no precise definition of sustainability, which could lead to confusion as to what sustainability means in their context (Berns et al. 2009). But they are united in focusing on environmental aspects, which suggests that the rationale for embracing sustainability is acknowledged throughout the management team as being an important factor. The rationale relates to addressing environmental impacts in the company, the agreement regarding what sustainability means supports our hypothesis that the rationale is a fundamental determining factor in accounting for a companies readiness factor.

#### 4.3.2. Lack of Strategic Approach

The importance of a sustainable approach was recognised, and commitment was shown to sustainability, but this long term commitment is not being translated into a cohesive strategy. What is being driven through the business is reflective of the company specific rationale in adopting a sustainable approach. The company's commitment to sustainability has been translated into becoming certified according to ISO 14001, and they suggest that being certified has had a positive impact on the company. The importance of an EMS has been recognised (Epstein and Roy 2001), and it is a useful tool to address environmental degradation in organisations (MacDonald 2005). However, it has not been designed to inform a company of tangible actions and it is apparent from our results that there is a lack of a strategic approach in how sustainability is being implemented.

The sustainability department is nested in communications, and we argue this decision stems from the rationale driving sustainability through the business They are seeking to convey a positive image of the company, which will improve the reputation of the brand, and result in

the company being more attractive in the eyes of customers. The strategy surrounding sustainability has a particular agenda; to enhance the image of the brand, which will increase their customer share. The image the company presents is also important in limiting the threat of an increased tax. Therefore, the company seek to provide a positive image, demonstrating they are taking steps to limit environmental impacts.

The strategy is relevant to these particular aspects but is not considered a central element of the overall strategy. This point was reinforced as management are not responsible for implementing the sustainability strategy within their departments; the DSS is solely responsible for driving the strategy through the business. Our results suggest that the company recognise this is not a satisfactory way to drive a strategy through the business, and it is interesting that it was noted that for a strategy to be realised it must be an integrated part of the business.

Sustainability is currently on the periphery of the overall business strategy, suggesting the rationale driving sustainability initiatives is not considered to be a central determining factor in the success of the business. The fact that the sustainability coordinators in regions have autonomy over how they implement sustainability suggests there is no overall strategy guiding sustainability initiatives. There is no direction or cohesion leading to the success of the strategy.

The success of the sustainability strategy centres around solving specific issues, but sustainability issues are too complex and interconnected to be considered in isolation (Loorbach et al. 2010). They have not taken a systems perspective into account, which is a prerequisite for dealing with sustainability issues (Robèrt et al. 1997). As such, their conception of sustainability is too narrow and focused on particular aspects they consider to be important. By not acknowledging the system they are a part of, progress to a sustainable path will not be feasible.

#### 4.3.3. Action Plan

Concrete actions the company are taking focus on addressing the immediate external threats to the business, for example, the threat of increased tax means there is an emphasis on driving biofuel technology. This is indicative of a company reacting to their external environment, rather than devising a strategy informing how and when actions are undertaken. As the company have not recognised the ultimate need to transition, they are reacting to the effects of unsustainable behaviour and devising actions in response to this changing environment. The company acknowledged that sustainability was becoming an important selection criterion for customers, and initially implemented a sustainability plan as a reaction to this change. They are identifying problems and attempting to 'fix' them (MacDonald 2005). These actions are disconnected and not driving them to attain a specific overall objective.

A risk of 'fixing' short term problems is that this 'fix' contributes to creating more problems (Robert 2000). Biofuel technology is an example of this. This technology has the potential to limit emissions (Kousoulidou and Lonza 2016), however, an adverse impact of widespread use of biofuel in the aviation industry is that the production of biofuel requires extensive land use. This invariably involves deforestation, creating monocultures directly impacting on the natural habitat (Villoria and Hertel 2011). Accounting for the socio-ecological system, this 'fix' has the potential to alleviate short term problems by creating more issues, and typifies

the complexity inherant within the socio-ecological system, while highlighting the issue of establishing solutions to sustainability in isolation (Loorbach et al. 2010). This scenario reinforces why the adoption of a systems perspective is so vital in addressing sustainability issues (Robèrt et al. 2001).

#### 4.3.4. Communicating (for) Sustainability

Our results suggest a lack of communication internally is limiting the effectiveness of the companies sustainability strategy. It was recognised that an important element in driving the strategy through the organisation is to increase the management team's commitment to sustainability, however at present management are not engaged in sustainability. This is reflective of the general attitude towards sustainability. It is not a priority action and is considered secondary to other initiatives.

The company are making efforts to communicate sustainability to employees and it is apparent that employees are engaged in the process. The sustainability prize is a means to increase awareness of sustainability in the company. This demonstrates a level of commitment to sustainability, but there are no selection criteria to assess which idea is the best based on whether it is in line with the overall strategy. This strengthens the suggestion that there is no overall direction or coherence to the strategy.

External communication of sustainability is considered paramount. They are engaged in getting feedback from customers to assess how the sustainability strategy is being received. All sustainability-related endeavours are released to the press, suggesting the company's focus is on increasing the reputation of their brand to attract more customers. Communication is designed to increase awareness of their brand in line with sustainability, and therefore how it is communicated in the business is not considered a priority.

A crucial facet of a sustainability strategy is ensuring there is a common language uniting and engaging employees to support a strategy (Epstein and Roy 2001). This can bring cohesion and work to motivate and inspire a workforce, enabling sustainability to become embedded in every aspect of work life (Robèrt et al. 1997). A lack of communication around sustainability reflects the rationale in the company and is indicative of the company's readiness factor.

#### 4.3.5. Culture Shaping Systems

How sustainability is communicated in the business alludes to the fact that sustainability is not embedded in the culture of the company. Our results highlight that the measurement systems that success is based on are not related to sustainability, and there is an emphasis on financial aspects. There are no incentives for ensuring sustainability is driven by the business (Epstein and Roy 2001). Sustainability is not embedded within the decision-making process; executives do not have governance over the sustainability strategy, suggesting the business does not drive it as an essential component but effectively as an add-on. This aspect is reflected in the values of the company. Sustainability is not an intrinsic part of these values but is considered an add-on.

The management systems in the organisation are not aligned to sustainability. This is reflected in the KPI's that are used to measure sustainability aspects. There are certain KPI's

to measure environmental aspects, but these are reported by the DSS and the regional coordinators. Within departments responsibilities do not relate to sustainability objectives. This is reflected in how success is measured. Success criteria in departments are not based on sustainability, implying that the decision-making process within departments does not take sustainability aspects into account. In this regard, the departments are under no obligation to pursue sustainability, as there is no motivation or incentive to do so (Epstein and Roy 2001).

Embedding sustainability into the culture of an organisation is crucial to ensuring sustainability initiatives are driven successfully through the business (Epstein and Roy 2001). A lack of emphasis on embedding sustainability in the partner organisation's culture is indicative of the value that is placed on sustainability. It is not considered a necessary part of the business, but as something that must be adhered to for the business to remain successful. Performance indicators have not been developed to assess the value of sustainability actions, it is, therefore, difficult to establish the success of initiatives, and whether they are progressing to the fulfilment of an overall strategy (Epstein and Roy 2001).

If there were an awareness of the underlying rationale to drive sustainability through the organisation, this would be reflected in the pursuit of measures to integrate sustainability. In our results, the need to incorporate sustainability for it to be driven successfully through the business was recognised, but the fact that steps are not being taken to make sustainability an integrated part of the business is reflective of it not being a priority action.

To drive a sustainability strategy successfully through a business it must be embedded within the culture of the company (Epstein and Roy 2001). However, without accounting for the sustainability challenge it is likely that the value of doing so will not be recognised, and sustainability will remain an add-on.

# 4.4. Determining the Readiness Factor

We believe an organisation's readiness factor to use the F2B2 can be determined by assessing how sustainability is conceived and implemented in an organisation. The Readiness Factor can be utilised as criteria to establish the stage a company is on in their journey. If the assessment places a company at stage 4 or 5 of the Readiness Factor, we suggest the company is ready to use the F2B2 in an optimum manner.

The notion of an optimum manner is critical in our reference to 'readiness'. A company at any stage of the Readiness Factor can use the tool, but we argue that the effectiveness of the tool increases as the organisation transitions further along the stages. Any company is welcome to use the tool, but it has been designed to support a strategic process. If that process is not congruent to leading a company onto a sustainable path, then it is counter intuitive to use the tool, as the company will not be able to reap the rewards of doing so. The ultimate value of the tool, however, may be in supporting companies in their transition to true sustainability.

We believe the Readiness Factor can be determined through an analysis of three aspects or indicators of a company's sustainability plan. Accounting for *why* a company has embraced sustainability can help to elicit their rationale for adopting sustainability. Our research suggests that the rationale underlying a decision to embrace sustainability is an essential

aspect in driving the overall strategy. This is in effect the *cause* and every feature of sustainability in a business is an *effect* of this cause.

The rationale trickles down into every aspect of a company's conception of sustainability. A company's rationale for implementing sustainability influences *what* is being driven by the business. In turn, this impacts *how* sustainability is being carried out in the organisation.

Having analysed these aspects against the criteria of the Five-Stage Sustainability Journey, we believe the partner organisation is currently at stage 3 on their journey. They are making inroads in the transition to becoming a stage 4 company. However, they still have steps to take on their sustainability journey that will allow them to use the F2B2 in an optimum manner. The partner organisation has undertaken some eco-efficiencies and is currently implementing incremental initiatives such as a waste management system that are saving costs. There is an emphasis on creating a sustainable brand and steps have been taken to ensure that the brand is synonymous with sustainability. They are also making a sustained effort to limit their carbon footprint, through investment in a new fleet of aircraft.

Steps have been taken to work with suppliers to ensure they meet environmental criteria, but there is a need to become far more involved with suppliers to enable them to implement ecoefficiencies in their processes. A shift away from creating eco-efficient processes, to create more eco-effective processes is necessary, and sustainability governance needs to be embedded in the decision making, policies and culture of the company. This aspect could be improved as currently sustainability initiatives and responsibility are marginalised to a particular department. There is a need to institutionalise sustainability and make it an integrated part of the business. Therefore, we argue that the F2B2 can be useful for the partner organisation as a progress enabler, supporting them in their transition to becoming a stage 4 company.

#### 4.4.1. Potential benefits of Research for Organisations

Our research provides indicators that can be used by an organisation to help assess what stage they are in on the Readiness Factor. This can enable the organisation to identify the means with which they can enhance their approach. The metaphor of upstream thinking illustrates the vital nature that the rationale plays in a sustainability agenda (Robèrt 2000). The rationale has consequences on every aspect of a sustainability strategy and by helping to identify how imperative the motives for embracing sustainability are, our indicators can help a company question why they have adopted sustainability initiatives, and how sustainability adds value in their context. Ultimately it can work to catalyse conversations regarding sustainability and its underlying importance for the survival of the company, leading to the rationale adapting in line with the sustainability challenge.

Our research also highlights the need to adopt a strategic sustainable approach in transitioning to sustainability. Without a strategic approach, a company cannot hope to progress, and will continue to make incremental changes with no notion of an overall direction the company is seeking to take. But a company can only see the value of adopting an SSD approach if they have the underlying rationale in place. In the context of the partner organisation the rationale that is currently being pursued can still be useful in their context. It can help to guide priority actions; however these are aspects of a strategy in the context of the business at hand. They

should not be the drivers of the overall strategy but should act as guidance regarding where and when actions should be prioritised (Holmberg and Robèrt 2000).

# 4.5. Credibility of Results

We set out to answer a research question based on how an assessment of an organisation's readiness to use the Future-Fit for Business Benchmark can be determined. Our results provided us with a basis to answer our research question, however, while we were able to make inferences from our results, regarding explicitly demonstrating how an organisation's readiness factor can be determined, our research has not been designed to answer this directly. Rather, our research is the means with which we believe an organisation's readiness to use the F2B2 can be determined.

The results are descriptive in that they help to clarify if the approach that has been taken provides the necessary diagnosis and details regarding specific aspects of sustainability in a company. Our results allowed us to make a diagnosis and in this regard, they have provided a means to assess how an organisation's readiness factor can be determined.

How confident can we be that our results can be generalised to other companies? Our research was undertaken on one company; therefore, when assessing the credibility of our results, it is necessary to note that the findings are contextual and specific to the organisation at hand. Undertaking research using multiple case studies would have enabled us to conceive patterns between organisations, rather than just within the realms of a particular company (Frankfort-Nachmias and Nachmias 1996).

Some practical constraints had to be accounted for when designing our research. Our research was under strict time constraints, meaning we had to weigh up the feasibility of carrying out research against how long a particular method would take. It was necessary to design a method that was realistic within the time frame. Accounting for our time frame we believed the most efficient way to carry out our research was a case study on a particular company, this provided a good scope for the project (Savin-Baden and Major 2013) and gave us an opportunity to undertake a thorough analysis of one company.

The DSS was the gatekeeper providing access to the business, so we had to take into account that gaining access to the respective employees within the organisation was the responsibility of the DSS. Within our preliminary interviews, we were able to establish access to executives through an invitation to a monthly executive meeting. This meeting was to be the basis of our fieldwork and having developed a means to gain access to the executives we knew that we would have only one opportunity to meet the respondents face-to-face.

When identifying our sample, it was useful for us to focus on the purpose of our research (Fowler 2009). The intention of our research was not to gain an insight into the entire population (Frankfort-Nachmias and Nachmias 1996), but rather to identify the decision makers that had an integral role in driving the company's strategy. We anticipated that an assessment of a company's readiness factor would be determined through the identification of these decision makers. The decision makers in the partner organisation acted as the limiters within which the investigation would be focused on, setting the boundaries for our study (Savin-Baden and Major 2013).

Executives play a crucial role in decision making in organisations (Moan et al. 2008), and gaining access to executives was considered essential to the success of our research. In reality, given their status, it was hard to gain access to this group. Therefore, our preliminary interviews were useful in enabling us to build rapport with the DSS (Neuman 1997). This was undertaken over some weeks and was a time-consuming process, but the time we dedicated to building a relationship with the DSS was essential to the success of our research.

A danger of these preliminary interviews was that while the DSS was very open in our conversations, 'even the most friendly and cooperative gatekeepers...will shape the conduct and development of research' (Neuman 1997, 351). This was a limiting factor as we could only delve into areas we were permitted to do so. We were aware that the interpretation and personal bias of the DSS would provide us with a conception of reality from one person, who has an agenda they would like to drive forward. Therefore, while the interviews were beneficial we were wary of not drawing any conclusions, but this was hard to do in reality.

The transparency that was shown to us by the partner organisation must be acknowledged. The DSS saw the potential benefit of our research to the company and was enthusiastic and motivated to help carry out our research. The engagement of the DSS was crucial to the success of the project and if we did not have such an engaged gatekeeper, it would have affected how our research was undertaken.

The engagement that the DSS had is reflected in the survey we were able to administer to the entire leadership team. This gave us a unique opportunity to garner the opinions and attitudes surrounding sustainability of a broad cross section of the decision makers who had been identified as being so crucial to the success of our project. The response rate of 24% allowed us to be confident that the survey was providing us with results that could be generalised to the entire leadership team (Fowler 2009), and the survey gave us a rich data source that helped to conceive how sustainability is perceived within the organisation.

We were aware that constructing a survey is difficult (Dentry-Travis 2014), therefore, rather than focusing on trying to create a survey from scratch, we sought a survey that could act as a model to suit our needs. The advantage of using a pre-existing survey is that it has been validated (Dentry-Travis 2014), and it is highly recommended to use a pre-existing survey if it suits the needs of the research project (Dentry-Travis 2014). The MIT Sloan Management Review (Kiron et al. 2012) survey of managers and executives places a focus on how organisations are developing and implementing sustainable business practices (Kiron et al. 2012). The survey was considered ideal to form the basis of our study as it was constructed from a management/executive perspective within an organisation, and the focus of the survey was congruent to the purpose of our survey.

The participant organisation are not based in an English speaking country. Therefore undertaking research in English could have been a limiting factor. An advantage of the survey was that it provided respondents the time to complete the survey at their leisure, but a disadvantage was that it presented relatively simple questions (Fowler 2009). An online survey could only be administered if the questions were straightforward enough to be answered solely by instructions, without the aid of interviewees (Frankfort-Nachmias and Nachmias 1996). In addition, an online survey provided no opportunities to probe respondents beyond the given answer (Frankfort-Nachmias and Nachmias 1996).

Accounting for these weaknesses, the strengths of the interviews complemented the weaknesses inherent in a survey (Frankfort-Nachmias and Nachmias 1996). This allowed us to triangulate and analyse three data sets, enabling us to identify consistencies and inconsistencies between and within the data sets.

An issue we identified as potentially affecting our research is that it became apparent on analysing data from our interviews that some of the interviewees were not providing an accurate portrayal of the organisation's current reality. In some instances, the views of a minority varied widely from the view being presented by the majority, suggesting bias influenced some of the interviewees through their interaction with us as external interviewers (Frankfort-Nachmias and Nachmias 1996). Some interviewees provided us with a public relations piece, where they presented the answer perceived to be 'correct'. This is understandable given that we were only able to spend a day with the executives. From their perspective, we were an external threat, and the information they provided to us was considered sensitive. Therefore, there was an issue of trust, and if we were able to spend more time engaging with the company this issue could have been alleviated.

Focus groups could have potentially alleviated the issues that we faced in our interviews. They would have provided us with an opportunity to gather individual's perceptions in an environment where their view could be either corroborated or questioned by the other participants (Savin-Baden and Major 2013). A focus group could have provided an opportunity for a frank discussion where respondents could talk openly about their opinions and address the issue of individuals being influenced by interviewer bias (Savin-Baden and Major 2013). Alternatively, the focus groups may have had an adverse effect in censoring interviewees who were forthcoming and open in their opinions.

We were provided with feedback on the interviews and it was suggested that as English is not the mother tongue of respondents some interviewees found it difficult to express themselves. This may have affected how interviewees were able to communicate their opinions.

Cultural aspects may have affected how respondents provided answers to the survey. An analysis of the results indicates in some instances respondents provide an answer where they are not willing to commit to an opinion and give a neutral response. This could have been due to cultural aspects or it may be a reflection of people not understanding the question. Our research may have been strengthened if it was undertaken in the organisations mother tongue, but this was not a viable option.

#### 4.6. Future Research

During the construction of our research, we wanted to devise a method that would provide an assessment of the company's current conception of why sustainability is important in their context. We would then make an 'intervention' through the introduction of the sustainability challenge. This would have provided us with an opportunity to introduce the F2B2 as the tool is designed based on the underlying rationale for why taking a sustainable approach is so essential. The F2B2 refers to global risks that can be addressed by introducing the tool. This aspect of the F2B2 was presented in our survey. However, we were not able to delve deeper by providing the context on which these benefits and risks are based.

After presenting the global risks we were seeking to assess how the introduction of the rationale could impact on individuals thinking regarding sustainability, and whether it would impact on how they perceived sustainability in the context of the organisation. Would the intervention affect their conception of sustainability? Crucially, would it provide a clear rationale of why embracing a sustainable approach is so essential in their context? Our intention would be to see if this rationale could impact on how sustainability initiatives were undertaken in the partner organisation. In essence, we wanted to conduct action research but given our time constraints, this was not feasible.

We have provided a template that can be used to determine an organisation's readiness factor, but given that we undertook a case study on one company, it would be an assumption to make generalisations about other businesses. To strengthen our results, it is necessary to conduct further research on companies in other sectors to verify our findings.

We have only proposed the Readiness Factor, this was not tested in the field and is a tentative attempt to devise criteria that a company's assessment can be compared against. Future research to develop the Readiness Factor, investigating whether it does allow for general guidelines, would work to increase the validity of this approach.

Of particular interest would be to analyse whether the F2B2 could be a progress enabler for stage 3 companies. Can it support a transformation and allow businesses to transition to stage 4?

Another interesting avenue is that after an organisations readiness factor is determined how does this impact on their conception of sustainability? This would be interesting follow-up research on the partner organisation, regarding investigating the extent that the Readiness Factor influences their understanding of sustainability. Would their understanding of sustainability be affected or would they continue with their current strategy? This research could provide an illustration of the value of our research.

We assume the value of our research will be in helping to catalyse conversations on sustainability, enabling a realisation of the sustainability challenge as the raison d'être for embracing sustainability. But, would this play out in reality? Moreover, if the company were presented with the underlying rationale after their readiness factor was determined would this impact on their strategy?

Regarding the FSSD, can the F2B2 support an SSD process, and if so, how? Is there synergy between the F2B2 and the FSSD with regards to the F2B2 strengthening an SSD process? If so, what aspects of the F2B2 are most useful in aiding an SSD process in an organisation?

The F2B2 has been released recently, so it would be interesting to analyse how effective the tool is once a company has used it for a sustained period. As of yet, no research has been undertaken on how the tool can contribute to supporting a sustainable process. By using the tool, would this impact on how the business drives sustainability? Addressing how the F2B2 can help organisations sustainability endeavours would be an interesting scope for future research, particularly regarding the value of the tool when used by different companies, in various contexts and at various stages of their sustainability journeys. But this can only be undertaken once the tool has been used for a sustained period by an array of companies.

## 5. Conclusion

Identifying the rationale driving an organisation's sustainability strategy is essential in determining whether an organisation is ready to use the F2B2 in an optimum manner. The rationale is the *why*, namely elements in the external environment that have compelled the organisation to react by introducing sustainability. The rationale filters through to how the success of sustainability is conceived. The rationale can be considered the raison d'être, and this decision is made as a result of how the socio-ecological system is perceived.

The rationale has a trickle down effect. It is the *cause* of sustainability, and every decision regarding sustainability is an *effect* of this rationale. The sustainability strategy that has been adopted, or *what* is being driven through the organisation is indicative of this rationale. In turn, *how* the strategy is being implemented (the actions and tools that have been deployed), are reflective of the initial rationale that is driving sustainability.

Creating a means to establish how ready a company is to use the F2B2 has the potential to catalyse conversations regarding a company's rationale. The F2B2 is just a tool to support a process and if that process is not congruent to leading an organisation towards a sustainable path, then the tool can not be harnessed in its optimum manner. The Readiness Factor demonstrates that in establishing the rationale for embracing sustainability, it is crucial to adopt a systems perspective and account for the system. Recognition of the sustainability challenge as the underlying rationale for adopting sustainability can lay the foundation for the success of a strategy.

The ultimate value of the tool could be in enabling companies to understand the sustainability challenge from a systems perspective, rather than acknowledging elements of the external environment they consider important. Therefore, we believe the tool has the potential to support stage 3 companies in a transition to a stage 4 company and thus true sustainability.

The identification of the sustainability challenge induces a long-term perspective as these challenges will remain consistent over time. This allows companies to plan ahead to address their contributions to the sustainability challenge. Our results demonstrate how pivotal the initial rationale is in driving a sustainability agenda. The *why* trickles down into every facet of sustainability in a company. Within organisations our research can enable the process of acknowledging the need to develop a systems perspective, accounting for the system in driving sustainability initiatives in a company. This can result in an adaptation of *what* is being driven by the business and *how* it is being implemented.

Companies find themselves at a crossroads and have to choose whether to place a full commitment to sustainability and aspire to transform into a stage 4 company, or to continue following a BAU approach. A tool to support companies to choose the path leading to true sustainability will not only be of benefit for the company in preparing for future market conditions, but it has the potential to set a trend in motion, compelling other companies to follow suit to address the competitive advantage that this transformation entails. If the F2B2 can set in motion a transformation of business organisations and place them on a sustainable path, it has the potential to act as a leverage point in the system, significantly contributing to a transition away from a BAU approach. Rather than developing at the behest of the Earth system, human society can begin to flourish in tandem with the Earth system.

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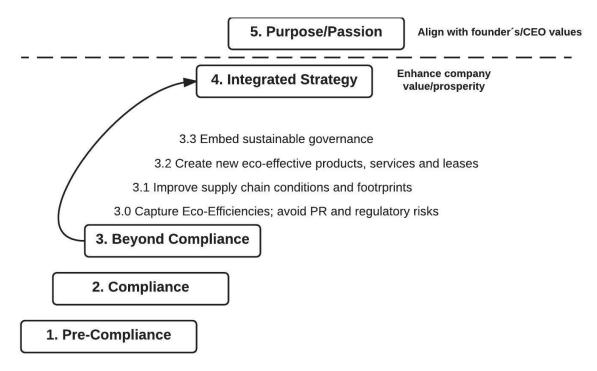
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# **Appendices**

# **Appendix A: The Five-Stage Sustainability Journey**



The Five-Stage Sustainability Journey (Willard 2012)

Each stage of the sustainability journey provides an illustration of the context within which a company finds itself. Company's progress through five stages in their sustainability journey, as this commitment increases their business framework evolves as a result. There are distinctive criteria that help to define each stage in this journey, and they are as follows;

**Stage 1: Pre-Compliance.** The company 'cuts corners or tries not to get caught if it breaks the law or uses exploitative practices that cheat the system' (Willard 2012, p. 20). There is a disregard for environmental, health and safety regulations (Willard 2012).

**Stage 2: Compliance.** The business manages its liabilities by obeying labour, health, and safety regulations in the jurisdictions where it operates (Willard 2012, p. 20). It will have implemented an EMS and have company policies on environmental protection and human rights. The business 'reactively does what it is legally bound to do while happily externalising it's ecological and social collateral damage' (Willard 2012, p. 20).

**Stage 3: Beyond Compliance.** A company reaches stage 3 when it recognises it can save money with proactive operational eco-efficiencies (Willard 2012). It implements incremental sustainability initiatives focused on saving energy, saving water, saving materials and saving costs (Willard 2012). At stage 3 'sustainability initiatives are usually marginalized within specialized departments...rather than being institutionalized in the company's governance systems (Willard 2012, p. 20).

Making a transition from a stage 3 to stage 4 company requires a significant transformation, therefore, there are four intermediate stepping stones between stage 3 and 4 (Willard 2012). These stepping stones may be taken sequentially or concurrently, but to become a stage 4

business, each stage must have been recognised and implemented (Willard 2012). These intermediate stages are as follows;

- Stage 3.0: Improve Company Eco-efficiencies and Sustainability Brand. The company 'captures energy, water, materials, and waste handling eco-efficiencies within the company's current internal operations and processes' (Willard 2012, p. 24). Carbon footprint reductions usually accompany energy reductions in anticipation of government-imposed prices on carbon emissions (Willard 2012).
- **Stage 3.1: Improve Supply Chain Conditions and Footprints.** The company implements sustainable procurement practice in recognition of the environmental and social impacts of its products throughout their life cycle (Willard 2012). They work with suppliers to enable them to achieve the eco-efficiencies the company achieved in stage 3.0 (Willard 2012).
- **Stage 3.2:** Create New Eco-effective Products, Services, and Leases. The company 'redesigns its products and reengineers its processes to be radically more eco-effective, rather than simply eco-efficient' (Willard 2012, p. 24). Innovation abounds through collaborative projects with diverse stakeholders in co-creating new services and products (Willard 2012).
- **Stage 3.3: Embed Sustainable Governance.** Sustainability becomes embedded in the company's decision-making, policies and culture, and sustainability is integrated into the company's financial measurement and management systems (Willard 2012). The executive teams and board revamp the company's governance system to assess how the business is contributing to a sustainable global economy, society and environment (Willard 2012).
- Stage 4: Integrated Strategy & Stage 5: Purpose/Passion. Stage 4 and 5 companies are on the whole similar but have different motivations (Willard 2012). These companies place sustainability principles at the core of their DNA and deploy business strategies that respect the environment, the community and the ongoing business health of the organisation (Willard 2012). Sustainability expectations are aligned within the organisation and across the entire value chain, and instead of viewing sustainability regarding costs and risks; companies see investments and opportunities (Willard 2012). The factor distinguishing stage 4 and 5 companies are that stage 4 companies are publicly traded and aim to attain competitive advantage from their sustainability initiatives (Willard 2012). Stage 5 companies, on the other hand, are founder-owned companies with a priority on value-based corporate citizenship (Willard 2012).

# **Appendix B: Future-Fit for Business Benchmark Overview**

# Future-Fit for Business Bechmark (F2B2)

... enables the business to be fit for the future

Attaining science-based performance goals ...

						Inco	me S	Statem	ent / F	Profit & I	oss S	Stateme	nt				Mar Val			ues / pose		
	39 Potential Business Case Benefits	24 Downside Risk if do not meet the Goals	Risk of eroding revenue growth	<ul> <li>reputation / brand</li> <li>outdated products</li> </ul>	missed services and financing opportunites	Risk of higher operating	energy expenses	materials and water     expenses     expenses	<ul><li>waste expenses</li><li>maintenance</li><li>expenses</li></ul>	travel expenses     insurance premiums     borrowing expenses	Risk of less productive employees / Higher HR	expenses • Productivity & Innovation	Aurition expenses     Hiring expenses	Other risks Physical disruption	Societal disruption Insecure supply	Compliance expenses  • Litigation expenses	Risk of lower market value Share price	Value of company portfolio		KISK Of actions not aligning with company values and purpose		
	39 Potential Busin	19 Upside Opportunities if meet the Goals	Grow Revenue • good company reputation / brand	<ul> <li>innovative products</li> <li>innovative services</li> </ul>	and financing offerings	Save operating expenses	energy expenses     carbon expenses	materials and water expenses	• maintenance expenses	<ul> <li>travel expenses</li> <li>insurance premiums</li> <li>borrowing expenses</li> </ul>	Employee productivity & innovation / Lower HR	expenses - Productivity & Innovation	Autrition expenses     Hiring expenses	Other • Physica		Compliar     Litigatic	Higher market value  Share price Value of company	portfolio	Values-actions alignment      Alignment of actions	with company values and purpose		
THE PARTY OF THE P		l Risks		Ecosystem degradation				tabalization fication	S	crisis	materials able materials	crisis			Education crisis		failure		Education	crisis	ust	
	-	16 Global Risks		Ecosystem				<ul> <li>Climate destabalization</li> <li>Ocean acidification</li> </ul>	Energy crisis	Fresh water crisis	Access to mined materials     Access to renewable materials	Biodiversity crisis	Health crisis	Food crisis	Financial inequality		Governance failure		• Social	instability	Erosion of trust	
		20 Future-Fit Goals	Operations emit no substances which cause harm.	Operational byproducts are repurposed.	Products emit no substances which cause harm.	Products and packaging can be repurposed.	Operations emit no	Products emit no greenhouse gases.	Energy is from renewable sources.	Water is used in an environmentally responsible and socially equitable way.	Materials are from responsible managed or recycled sources.	Operations do not negatively impact areas of high conservation value.	Employee health is	Customers are informed about any aspect of products that may cause harm.	Employees are paid at least a living wage.	Employees concerns are actively solicited, impartialy judged and transparentaly addressed.	Community concerns are actively solicited, impartialy judged and transparentaly addressed.	Customer concerns are actively solicited, impartialy judged and transparentaly addressed.	Employees are subject to fair employment terms	Employees are not subject to discrimination	Lobbying is for outcomes that align with future-fit business.	Ĭ
	7 Business	Principles		The business ensures no harmful substance	escapes into the environment.			The business protects the	environment from physical degradation.	The business safeguards the health of everyone it	depends on.	The business ensures that everyone it depends	OI 1143 A VOICE.	The business ensures that everyone it depends	to grow.	The business treats everyone it depends upon	ımpartıally.	The business protects the values of everyone it depends upon.				
6		8 Systems Conditions	in a sustainable society, nature is not subject to systematically increasing concentrations of substances extracted from the Earth's	crust (e.g. heavy metals and fossil fuels)	In a sustainable society, nature is not subject	to systematically increasing concentrations of substances produced by society (e.g.	plastics, dioxins, PCBs, DDT)	In a sustainable society, nature is not subject to systematically increasing degradation by	physical means (e.g. destroying habitats, overfishing, overharvesting)	In a sustainable society, people are not subject to structural obstacles to health (e.g.	acces to fresh water, healthcare, nutrition, shelter, safety, security)	In a sustainable society, people are not subject to structural obstacles to influence for union participation propagages.	(e.g. voice, parachardy processes, respect	In a sustainable society, people are not subject to structural obstacles to competence (e.g. access to education right	to know, learning, growing)	In a sustainable society, people are not subject to structural obstacles to impartiality	(e.g. non descrimination, equity, justice)	subject to structural obstacles to meaning-making (e.g. making sense of their	role and place in the world, values, cuiture)			

**Appendix C: Potential Business Case Benefits of Meeting the Future-Fit Business Goals** 

INCOME STATEMENT / PROFIT & LOSS STATEMENT						
Grow Revenue Good company reputation / brand; Innovative products; innovative service and financing	Risk of Eroding Revenue Grow Good company reputation / brand; Innovative products; innovative service and financing					
Save Operating Expenses Energy; Water; Materials; Waste:, Maintenance; Travel; Insurance; Borrowing	Risk of Higher Operating Expenses Energy; Water; Materials; Waste; Maintenance; Travel; Insurance; Borrowing					
Engage Employees Productivity & innovation; attrition; hiring	Risks of disengaged employees Productivity & innovation; attrition; hiring					
Other Risks Physical disruptions; societal disruptions; insecure supply; compliance expenses; litigation expenses						
Higher market value MARKE	Risks of lower market value					
Alignment PURPOSE & VAL	UES ALIGNMENT Risk of misalignment					

# Appendix D: Survey design (M1)

### A. BACKGROUND

As a way to ascertain our hypothesis, we are aiming to have a deeper insight by asking the following overarching questions:

- Why do they (as an organisation) care about sustainability?
- As individual members of the organisation, what do they think about the relevance of sustainability within the organisation? Do they believe there is any relevance at all, if so, how is this expressed?

The analysis of this data will evince employee's opinions and acknowledgements regarding sustainability. It will also identify their perceptions on the relevance of the opportunities/risks from the Business Case Benefits portrayed by the F2B2.

**Purpose:** to ascertain the extent that employee's "reasons behind" addressing sustainability are hindering the required organisational performance

### Goals:

- ➤ Identify the underlying motives that are currently shaping the organisations behaviour regarding sustainability
- ➤ Determine the specific relevance of the Opportunities/Risks from the Business Case referred by the F2B2

# **B. SAMPLING**

Round 1: 19 top managers in key strategic positions:

Round 2: 69 internal collaborators that have a command line.

Total: 88 that comprise the "Leadership Team."

# C. SURVEY CONTENT

# a. SURVEY INTRODUCTION

# **Perspectives on Sustainability**

[Greetings]

As you are part of (name of the organisation), your opinion matters! Thereby we welcome you to fill out the following Survey about Perspectives on Sustainability.

This Survey is part of an ongoing research project powered by a team of students of the Masters in Strategic Leadership towards Sustainability programme at the Blekinge Tekniska Högskola. The purpose is to understand how the organisation (as a leading organisation) can effectively transition towards Sustainability.

As it aims to gain an insight on how Sustainability is conceived there are no right/wrong answers. The focus is placed on your ideas and opinions.

All contributions are anonymous and the results of the survey will be used for academic purposes only.

This survey will be receiving responses until [response window].

The survey completion time is no more than 10 minutes.

If you have any comments about this Survey, please contact:

Click "NEXT" to start ...

# **b. SURVEY QUESTIONS**

The survey questions are a selection from the survey used for the "Sustainability Nears a Tipping Point" (Kiron et al. 2012). These have been adapted to fit the purpose and goal of this particular method and the contextual conditions such as research goals, research design (validation) and a population of study. Previous methods used such as Informal Interviews and Expert Interviews ...

In this way, the questions to be asked have been clustered in five themes to lay out the rationale for each item in relation to its particular contribution to the Research Question. Additionally, demographic information is requested for further analysis and comparisons (Knapp and Mujtaba 2010).

	Theme 1: General Views of the Specific Socio-Economic Context	Туре	Relevance for RQ
Q1	What do you think are the primary business challenges facing (the organisation <sup>12</sup> ) over the next two years? (Please choose up to three options)	Checkbox	Opinion on the relevant business challenges

	Theme 2: General Views of Sustainability in the Company	Туре	Relevance for RQ
Q2	What factors do you think (the organisation) consider as part of Sustainability?  (Please choose all that apply)	Checkbox	Opinion on scope of sustainability
Q3	Is the term "Sustainability" concrete and useful?	Multiple choice	Opinion based on a perception of the term
Q3.1	What term(s) would you suggest to be more concrete and useful?	Short open answer	Acknowledgement
Q4	How strong is your personal commitment to Sustainability?	Multiple choice	Opinion on their individual commitment to sustainability

Theme 3: Value of Embedding Sustainability (Business Case for Sustainability)	Type	Relevance for RQs	
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<sup>&</sup>lt;sup>12</sup> The name of the partner organisation was used in the designs of M1, M2 and M3 but this has been omitted to maintain anonymity ('The Organistion' has replaced mention of the partner organisation).

Q5	Is pursuing sustainability-related strategies necessary to be competitive?	Multiple choice	Opinion on the relevant effects that pursuing sustainability has on competitiveness
Q6	Have the business practices of (the organisation) changed as a result of sustainability?	Multiple choice	Opinion on the relevant effects of sustainability on the business model in the organisation
<b>Q</b> 7	Which of the following factors have led to changes in the business practices as a result of sustainability considerations? (Please choose all that apply)	Checkbox	Opinion (further opinion on specific answer from the previous question)
Q8a	What do you think are the greatest upside opportunities if (the organisation) address sustainability?  (Please choose all that apply)	Checkbox	Opinion on the F2B2's business case benefits.
Q8b	What do you think are the greatest downside risks if (the organisation) do NOT address sustainability?	Checkbox	Opinion on the F2B2's business case benefits.
Q9	(Please choose up to three reasons)  Overall, has (the organisation) developed a clear business case or proven value proposition for addressing sustainability?	Multiple choice	Acknowledging the value of embedding sustainability
Q10	How significant are each of the following obstacles in evaluating the business case for sustainability-related strategies?  (Please rate on a scale of 1 to 5, where 1 = "very significant" 5 and = "Not at all significant")	Multiple choice grid- linear scale	Opinion on hurdles to evaluate the business case benefits of sustainability.
Q11	In general, how do you believe (the organisation)'s sustainability-related actions/decisions have affected its profitability?	Multiple choice	Opinion on the influence of sustainability on profitability.
Q12	Has sustainability caused (the organisation) to increase its collaboration with any of the following? (Please choose all that apply whether they refer to your department/function or not)	Checkbox	Acknowledging the effects on the business from stakeholder engagement
Q13	Could a difference in the sustainability commitment between you and (the organisation) be a reason to stay in or leave the company?	Multiple choice	Acknowledging relevant business effects on employee retention

	Theme 4: Company's commitment to Sustainability	type	Relevance for RQs
Q14.1	How has the company's commitment to sustainability changed in the past year? — in terms of management attention and investment	Multiple choice	Opinion on organisational behaviour
Q14.2	How do you expect the company's commitment to sustainability to change in the year ahead? — in terms of management attention and investment	Multiple choice	Opinion on organisational behaviour
Q15.1	Regarding sustainability, does (the organisation) have a strong CEO commitment to Sustainability?	Linear scale	Opinion on leadership

	Theme 5: culture-shaping systems	type	Relevance for RQs
Q15.2	Regarding sustainability, does (the organisation) have company-wide/operational KPIs related to Sustainability?	Linear scale	Acknowledging whether there is alignment between indicators for company performance metrics and sustainability metrics.
Q15.3	Regarding sustainability, does (the organisation) have personal KPIs related to Sustainability?	Linear scale	Acknowledging whether there is alignment between indicators for personal performance metrics and sustainability metrics.
Q15.4	Regarding sustainability, does (the organisation) have a link between Sustainability performance and financial incentives?	Linear scale	Acknowledging whether there is alignment between financial rewards and sustainability performance.

	Demographics for analysis and comparisons of group results	type	Relevance for RQs
i	How long have you been working for (the organisation)?	Dropdown	Determining time in service for the company.
ii	For how long you have been working in your current position?	Dropdown	Determining time on current job assignment.
iii	What level of responsibility does your position entail?	Dropdown	Determining the level of responsibility of the position held by the respondent.

iv	What department does your position belong to?	Dropdown	Determining the organisational placement of the respondent position.
v	Gender	Dropdown list	Determining the gender of respondents.

# **Appendix E: In-depth Interview (M2)**

### 1. BACKGROUND

**Purpose:** Gain an insight into the organisation's structure and how the (partner organisation's) sustainability strategy is being implemented.

**Goal:** Assess if the company's organisational structure and sustainability strategy are affecting the fulfilment of the sustainability strategy.

**Hypothesis:** The partner organisations rationale is inhibiting the fulfilment of their sustainability strategy.

The interview will help to account for an assumption made within our preliminary interviews that there are obstacles inhibiting the fulfilment of sustainability goals in the organisation.

This interview will help us to confirm and elaborate on the organisational structure within the organisation, how decisions are made and what specific aspects of the organisation are contributing to hampering the fulfilment of goals from the DSS's perspective.

The interview will begin with a short introduction where the intent of the interview will be shared. We foresee the interview lasting for an hour and it will be held at the partner organisation's headquarters.

# 2. SAMPLING

The driver of the Sustainability Strategy (DSS)

# 3. INTERVIEW CONTENT

# a. Guiding Questions

Interview Structure (60-minute interview):

	Theme 1: General views of the socio- economic context (organisation- specific)	Outcome (exp.)	Relevance for RQ
Q6	What priorities does (the organisation) currently have to maintain their competitiveness?	Insight into priority actions	Gaining insight into the priority actions within the company will provide an overview of their current context and whether the priority actions are inhibiting the sustainability plan.

	Theme 2: general perspectives of Sustainability (organisation-specific)	Outcome (exp.)	Relevance for RQ
Q1	How would you define sustainability?	General insight	If there is misalignment between the DSS's definition of sustainability and that

			of the organisation, it will suggest a lack of harmony and direction.
Q2	Does (the organisation) have a definition of sustainability?	Clarification as to how sustainability is perceived	If there is misalignment between the DSS's definition of sustainability and that of the organisation, it will suggest a lack of harmony, coherence and direction.
Q3	As the (DSS) what are your responsibilities?	Clarification as to what the DSS's role entails	Has the DSS been given the responsibility to make a clear and tangible difference in the company or is the role a smoke screen?
Q6.1	Regarding (the organisation)'s priority actions what objective does sustainability serve?	Insight into priority actions	How can sustainability drive priority actions? An insightful answer will convey the extent to which this has been discussed within the business.

	Theme 3: Value of Embedding Sustainability / Business Case of Sustainability (organisation-specific)	Outcome (exp.)	Relevance for RQ
Q10	Have (the organisation) identified the key stakeholders that are the drivers of your strategy?	Insight into current strategy	The identification of key stakeholders is crucial in identifying the most important aspects of the sustainability plan.  Regarding strategy if the key stakeholders have been identified this can enable the sustainability objectives to be translated with these specific stakeholders in mind.
Q8	Does (the organisation) have a business case for sustainability-related strategies?	Business Case for Sustainability.	Whether they have a BCS will be a useful measure of the value that is placed on sustainability.
Q9	Have the benefits and risks of the (organisation's) sustainability strategy been accounted for?	Business Case for Sustainability.	A lack of awareness of the risks and benefits of their sustainability strategy will account for why sustainability is not high on the agenda

	Theme 5: Culture-shaping systems (organisation specific)	Outcome (expected)	Relevance for RQ
Q12	What criteria are used to evaluate success within (the organisation)?	General view of company	Is sustainability an indicator of success within the company or is a more traditional evaluation carried out? This will indicate whether the sustainability strategy is embedded within the company.
Q13	Have (the organisation) implemented sustainability indicators to monitor and assess the value of sustainability actions undertaken?	Insight into current	Are the company measuring progress in their strategy? If they do not measure progress, this suggests that the strategy is not being conceived as a whole, but actions are undertaken incrementally.

Q3	As the (DSS) what are your responsibilities?	Clarification as to what the DSS's role entails	Has the DSS been given the responsibility to make a clear and tangible difference in the company or is her role a smoke screen?
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	Theme 6: Rational - Sustainability Agenda alignment (organisation- specific)	Outcome (expected)	Relevance for RQ
Q4	How is the implementation of (the organisation's) sustainability strategy going?	Insight into the current strategy	Provide a general overview of how the strategy is perceived to be going currently.
Q5	What level of management is assigned to the governance of the sustainability strategy?	Insight into current strategy	This will provide clarification on who is administering the strategy. If it is an integral part of the organisation, the executives will be responsible for ensuring initiatives are administered.
Q7	How can the pursuit of a sustainability strategy drive (the organisation's) performance?	The business case for sustainability.	Has this been considered or is sustainability simply an add-on to the business? If this has been considered it will be a clear indication that the organisation have conceived a BCS.
Q11	How is (the organisation's) sustainability strategy communicated and driven across the business?	Insight into current strategy	If the strategy is not being communicated effectively across the organisation, then the employees cannot have an understanding of why this strategy is important or relevant to them, this will be indicative of the level of importance given to a sustainable approach.

# **Appendix F: Short Interview (M3)**

### 1. BACKGROUND

**Purpose:** Gain a thorough insight into the organisation's structure and how the (partner organisation's) sustainability strategy is being implemented.

**Goal:** Validate whether the opinion of the DSS is reflected from other perspectives.

**Hypothesis:** The opinion of interviewees will help to corroborate the views of the DSS, suggesting there are obstacles to the fulfilment of the sustainability strategy.

The interview will help to gain a thorough insight into the potential obstacles inhibiting the fulfilment of sustainability goals in the organisation.

This interview will help us to confirm and elaborate on the organisational structure within the organisation, how decisions are made and what specific aspects of the organisation are contributing to hampering the fulfilment of goals from executive's perspective. These interviews will allow us to validate the view being provided from M2 and provide a more indepth insight into the opinions of survey respondents.

The interview will begin with a short introduction where the intent of the interview will be shared. The interviews will last for half an hour and will be held at the partner organisation's headquarters.

### 2. SAMPLING

Sampling was comprised of interviewees (respondents from survey sample) that are in key strategic positions and are the main drivers of the business strategy.

# 3. INTERVIEW CONTENT

# a. Guiding Questions

Interview Structure (30-minute interview):

	Theme 1: General views of sustainability (organisation-specific)	Outcome (exp.)	Relevance for RQ
Q1.1	What does sustainability mean for you?	General insight	This will provide an insight into how they conceive the term sustainability, a lack of agreement will suggest a lack of clarity regarding the sustainability strategy.

Theme 6: Rational - Sustainability Agenda	Outcome	Relevance for RQ
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	alignment (organisation-specific)	(exp.)	
Q2.1	What priorities does the Company currently have to maintain their competitiveness? (Regarding the company's priority actions what objective does sustainability serve?)	Insight into priority actions	Gaining insight into the priority actions within the company will provide an overview of their current context and whether the priority actions are inhibiting the sustainability plan.
Q2.2	How can the pursuit of a sustainability strategy drive company performance?	Business Case for Sustainability	Is there awareness of the value that a sustainability strategy can induce. A lack of awareness will suggest how sustainability is conceived in the organisation.
Q2.5	How are your responsibilities influenced by the Company sustainability strategy?	Insight into current strategy	If their role does not include governance of the sustainability strategy, it will suggest sustainability is not an integrated part of the business.
Q2.8	How is (the organisations) sustainability strategy influencing the department?	Insight into current strategy	This will provide an insight into whether sustainability is embedded within the Company. If sustainability does not influence the department, this will suggest obstacles to the strategies fulfilment.

	Theme 5: culture-shaping systems (organisation-specific)	Outcome (exp.)	Relevance for RQ
Q3.1	Within your department what criteria are used to evaluate success?	General Insight	If sustainability is not success criteria, it will suggest that sustainability is not embedded in the overall strategy.
Q3.2	Are your personal Key Performance Indicators related to sustainability?	Insight into current strategy	On a personal level if KPI's are not related to sustainability it will allude to how sustainability is conceived in the organisation.

