

INTERNATIONAL MARKET-LEADING ENTREPRENEURIAL ORGANISATIONS: IDENTIFICATION OF THE CHARACTERISTICS OF THEIR BUSINESS MODELS

Ms Nanette Du Randt

Department of Business Management
University of Pretoria

Prof. Jurie van Vuuren

Department of Business Management
Faculty of Economic and Management Sciences
University of Pretoria
E-mail: jurie.vanvuuren@up.ac.za

ABSTRACT

Organisations can be the shapers and leaders of industries, while others follow. The question is what makes a company a leader in the industry? The aim of this study was to investigate and unveil the unique characteristics of business models in large entrepreneurial organisations that will support market leadership. An exploratory approach was followed since the construct business model and the associated business model characteristics have limited theoretical grounding in literature. The study involved reviewing the literature of four entrepreneurial organisations with established business models in their respective fields. The findings revealed that the characteristics of the business models of all four companies were similar, although some were more conducive to entrepreneurial intensity and market leadership. Four characteristics were found to be particularly important: alignment to company goals, robustness, sustainability and effective management within a business to strengthen and ensure competitiveness. This research further demonstrated that the uniqueness of the business models of successful entrepreneurial organisations is crucial for success and survival in the long term. Additionally, the research highlighted the critical role that management plays in the steering of the business model within the whole company. The importance of the findings is that an innovative business model should be used and implemented on a continuous basis to benefit companies and small businesses. The value and anticipated impact of business models are projected to help entrepreneurs make better informed decisions regarding their business models, thus increasing the chances of success.

INTRODUCTION

Most organisations find it difficult to describe their business model in 25 words or less, let alone explain how it is used to reach decisions. Having a good business model is an important support structure for organisations and these models need to be simple, logical, measurable, comprehensive and operational as well as including meaningful definitions to plan, monitor and evaluate profitable deliverables. In fact, business models currently play a constructive and powerful role in corporate organisations. Over the past few years, “business models” have featured more frequently in management vocabulary, but not necessarily with the understanding of the value of their potential. There is no consensus on a unified, academic definition, with much confusion about what business models are and how they can be used by smaller entrepreneurial businesses. To address the lack of a clear, commonly accepted definition of a business model, a fresh definition that incorporates and amalgamates prior work is offered in this article (Morris, Schindehutte and Allen, 2005; Ricart, 2011; Trimi and Berbegal-Mirabent, 2012).

Little is known of whether specific characteristics of implemented business models are evident within well-known large entrepreneurial organisations. For the purposes of this article, the focus will be on recognised entrepreneurial organisations with evident entrepreneurial intensity. To understand what supports an entrepreneurial organisation's success, this article aspires to identify the distinguishing characteristics of a business model of a market-leading company with high entrepreneurial intensity.

Aim/ Objective of the Paper

This paper's aim is firstly to differentiate between a business model and a strategy; then to describe business model innovation; and lastly, to establish the specific characteristics of business models. The individual characteristics are identified in four large entrepreneurial organisations and the commonality of these characteristics is investigated. For the purposes of this study, an entrepreneurial organisation is best described as a business that creates and grows economic value with the required entrepreneurial intensity (Olawale and Garwe, 2010).

This article endeavours to contribute to the understanding of business models and to highlight the significance of their characteristics for aspirational entrepreneurial businesses. Utilising the findings of this research, businesses can develop or refine their business models by incorporating goal alignment, robustness, sustainability and cognisant and dynamic leadership in order to achieve a leading position amongst competitors (Ricart, 2011).

This article reviews the importance and meaning of the characteristics of business models. The practical and theoretical impact is explained and the paper closes with reflections on future research topics to advance business model research as well as to link it to entrepreneurial businesses in the South African context.

Problem statement

The term "business model" is loosely used by business owners and researchers without consensus as to a uniform definition (Morris *et al.*, 2011). After establishing a definition for this study, the main challenge was to identify the correlation between the entrepreneurial intensity and the business model characteristics of market-leading companies, as data on this topic is inadequate.

Research question

Is there a correlation between entrepreneurial intensity and the characteristics of the company's business model?

Unit of measurement

The reason for studying larger entrepreneurial organisations rather than small and medium enterprises was that the larger organisations have formal business models whereas smaller business entrepreneurs utilise informal ones (Morris and Sexton, 1996).

RESEARCH METHODOLOGY

The research design employed is a case study design supported by inductive reasoning to develop theory from this research, i.e. to provide a thorough understanding of the role of the business model and related characteristics for an entrepreneurial business to become a market leader (Cooper and Schindler, 2011).

As a first step of the qualitative research process and in order to produce initial insights into their associated characteristics, four entrepreneurial organisations were chosen as companies with established business models: Apple, Ryanair, Xerox and Minnesota Mining and Manufacturing (3M). Literature was consulted that was relevant to each of the four entrepreneurial organisations and this

information was used to identify characteristics of the business models of each company.

The method is exploratory since the business model characteristics have limited theoretical grounding in the literature and there is limited academic agreement on the business model definition. Exploratory research is inclined to confront new problems on which little or no previous research has been done. Exploratory research is the initial research undertaken, which forms the basis for further conclusive research in the future (Cooper and Schindler, 2011).

Propositions

Strong business models are distinct from weaker models and together with strong entrepreneurial intensity, they place a business in a market- leading position. Therefore, the following propositions are put forward for this article:

Proposition 1: Apple does not have a high entrepreneurial intensity and it does not reflect in their business model.

Proposition 2: Xerox does not have a high entrepreneurial intensity and it does not reflect in their business model.

Proposition 3: Ryanair does not have a high entrepreneurial intensity and it does not reflect in their business model.

Proposition 4: 3M does not have a high entrepreneurial intensity and it does not reflect in their business model.

LITERATURE REVIEW

Entrepreneurship

Entrepreneurship can be best described as the creation of value by applying the correct resources to gain benefit from an opportunity and is a concept that is evident in almost all growing organisations (Matzler, Bailom, Eichen and Kohler, 2013). This research is in the field of Corporate Entrepreneurship which is defined as “entrepreneurial behaviour inside established medium and large organisations” (Kuratko, Morris and Covin, 2011:11). First and foremost, a business needs an entrepreneurial attitude and behaviour, which serves as the key element for the capability of a large business to survive and prosper in difficult times. The main question to ask is to which degree and how often entrepreneurship is practised in these businesses. This question is answered by measuring the entrepreneurial intensity (EI) of a business. The three key dimensions of entrepreneurial intensity are proactiveness, risk- taking and innovativeness. Proactiveness is described as whatever is required to start the entrepreneurial event. Risk- taking includes the motivation to commit resources to an opportunity without having the guarantee of success and innovativeness is the active seeking for unusual, new and creative answers to problems (Morris and Sexton, 1996). To explain this further, when products, services, production, distribution, business relationships and marketing in a business are renewed and renovated, they reflect the innovation in the business model of a company (Zott and Amit, 2010).

To survive, businesses need to develop a comprehensive innovation framework, which a well-defined business model can offer (Morris, 2003).

Overview and development of the business model concept

The concept of the business model has advanced over the years, commencing when the concept was formally recorded in 1998. Although academics do not agree with one another’s findings, there has

been a certain evolution in the field of the business model. Osterwalder, Pigneur and Tucci (2005) identified five phases in the evolution of the business model. The first phase was the definition and classification of the business model, as defined mainly by Timmers (1998). In the second phase, the components of the business model were listed, as contributed by Magretta (2002) and Amit and Zott (2001). The third phase described the business model elements as components and building blocks. The fourth phase defined the elements of the business model by using reference models and ontologies while the fifth phase focused on the applications and conceptual tools. An additional phase is proposed, which will address and identify the characteristics of the business model within an entrepreneurial business. These characteristics can additionally contribute to and secure the business model's uniqueness and the future survival and competitiveness of a business.

What is known of a business model

According to Magretta, (2002) and Teece (2010) the business model, as a concept, is widely used but loosely defined in literature. The term is inconsistently employed by authors and is frequently distorted, misused and rarely clearly defined (Mansfield and Fourie, 2004). Thus, the concept of the business model requires further research and refinement (Doganova and Eyquem-Renault, 2009).

The term "business model" is confused with terms such as "strategy", "business concept", "revenue model" and "economics model" (Morris *et al.*, 2005) and can be associated with or regarded as "business plans". Business models can be valuable when motivating investment or may be considered as a mere ritual. To illustrate this further, the phrase "business model" can be directly divided or broken into two words: "business" and "model", where "model" describes the business as a scale model to allow manipulation, experimentation and the presentation of evidence for feasibility (Doganova and Eyquem-Renault, 2009). A realistic description depicts a business model as a structure that illustrates how the parts of a business work together to tell a story. It is essential for any business, but must firstly be understood clearly by a simple definition; that is, to describe who the customer is and what the customer values. In short, the business model must present better alternatives to existing practices (Magretta, 2002).

A business model is not an explanation of how a company hopes to make money and it is not a strategy either (Timmers, 1998), although business models can be confused with strategies. There is a tendency to use the terms "strategy" and "business model" interchangeably. A definition of a strategy is the high-level plan to ensure that a company's desired future is achieved by, for example, implementing competitive behaviour and effective business management (Mansfield and Fourie, 2004). Business models are, however, more generic than strategies. The combination of strategy and business model analysis is required to protect the organisation's competitive advantage (Teece, 2010). Before a business model can work, business model implementation or execution must be done to achieve the desired results. It is important to distinguish the business model (i.e. the business concept) from the implementation thereof (i.e. the form it takes in reality? practice?). While a business model can be comprehensive and sound to a certain degree in theory, it must however be implementable.

A business model can be strong but managed badly and fail, in the same way that a weak business model can thrive because of strong management, organisational and implementation skills (Osterwalder *et al.*, 2005).

Business model definitions

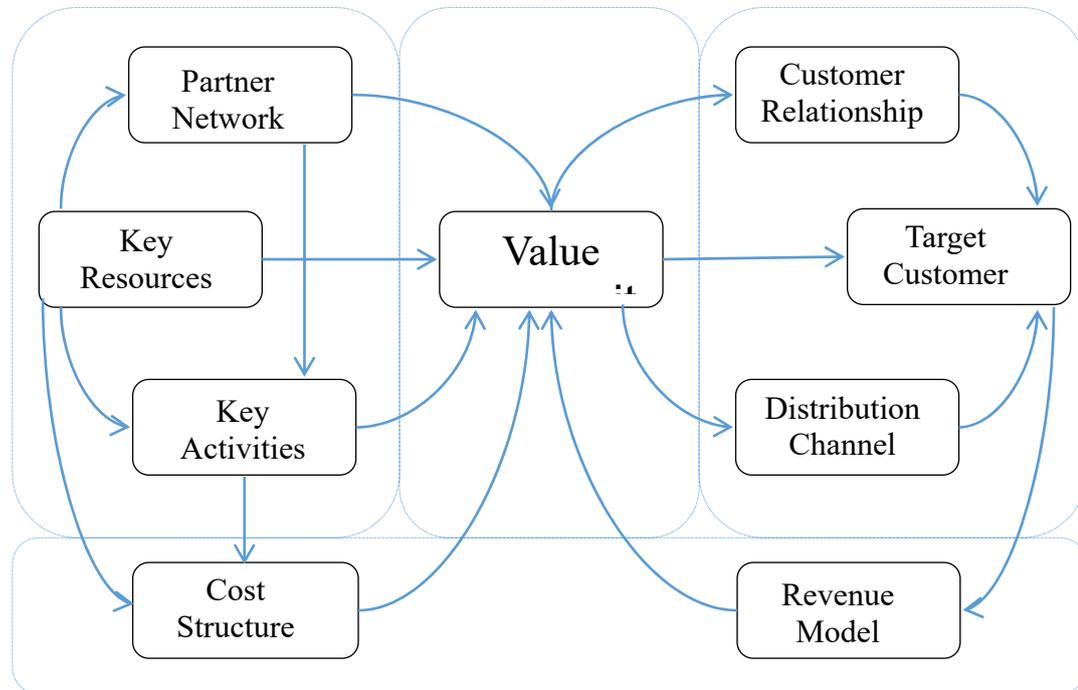
To illustrate the diversity in the understanding of the term "business model", 14 definitions are listed chronologically in Table 1.

TABLE 1
DEFINITIONS OF BUSINESS MODELS

Author(s), Year	Key terms in business model definitions	Citations
Timmers, 1998	Architecture, product, service, information flow, the actors in the business plus their roles, potential benefits, sources of income	2260
Amit and Zott, 2001	Exchange content, design, governance to generate value, business opportunities, centre of innovation, basis of value creation, firm, associates, customers, suppliers.	3119
Chesbrough and Rosenbloom, 2002	Heuristic logic, technical potential, realisation of economic value	1994
Magretta, 2002	Stories, how enterprises work, customers, customer value, generating income, underlying economic logic, delivery of value, appropriate cost	1703
Morris, Schindedutte and Allen, 2005	Concise representation, interconnected set of decision variables, business strategy, architecture, economics, creation of sustainable competitive advantage, value offering, the customer, internal practices, external positioning, economic philosophy, personal / investor factors.	994
Osterwalder, Pigneur and Tucci, 2005	Conceptual tool, set of elements, relationships, business logic, value offered by a company, several business segments, customers, architecture of the business, partner network, creating, marketing and delivery, value, relationship capital, profitable and sustainable revenue streams generation	1199
Johnson, Christensen, and Kagermann, 2008	Customer value, profit formulation, crucial resources and main processes, creation of value, customer value	832
Teece, 2010	Logic, data, evidence, support of a value proposition, customer, viable structure, income streams, costs, enterprise, delivering the promised value	1173
Zott and Amit, 2010	System, interdependent activities, holistic perspective, value creation	505
Zott, Amit and Massa, 2011	Holistic approach, how firms do business, clarification of value	514

The above-named definitions were consolidated into a working definition for the purposes of this study: *A business model is a framework of value creation in the format of a product or service. The business model includes a depiction of all the various business partners, their roles and processes together with a description of the potential benefits. The business model is a description of the following nine elements: value offering, target customer, distribution channel, customer relationship, value configuration, core competency, partner network, cost structure and revenue model, as illustrated in Figure 1.*

FIGURE 1
NINE ELEMENTS OF A BUSINESS MODEL



Osterwalder *et al.*, (2005) and Osterwalder (2007)

Business models and strategy

Designing new business models may be seen as an art form rather than an exact science and by meaningfully applying strategy and business models, these two interrelated constructs can be the anchors of a company's competitive advantage. The terms "business model" and "strategy" are very closely linked, but are concepts that are distinct from each other. Where "business model" describes the manner in which the business operates and how value is created for the stakeholders, "strategy" is the choice of business model that a business will use in order to be competitive. In other words, a business model is the direct outcome of the strategy (Casadesus-Masanell and Ricart, 2011).

Business model innovation

Business model innovation is still not a clearly defined concept in the academic world. Business leaders can identify the concept when they see it, but find difficulty in defining the phenomenon (Giesen, Berman, Bell, and Blitz, 2007).

Increasing competition, accelerating change and increasing complexity are three critical factors in the marketplace with severe implications for the business model of a business (Morris, 2003). In the marketplace there is a common understanding that the business model is the source of innovation for business transformation, renewal and survival (Trimi and Berbegal-Mirabent, 2012). The business model should present the capability to outperform the competition and therefore it is imperative that the innovation of the business model is sustained. The concept of business model innovation is described as being aware of the market and being able to adapt rapidly and strategically to changing market conditions (Mitchell and Coles, 2003).

Strategic interruptions and disruptions are some of the reasons that cause business models to change. It is noteworthy that business models evolve over time, which increases the stability and robustness of the business. Furthermore, a business needs to be flexible which requires strategic sensitivity, harmony in leadership structures and resource fluidity. Additionally, enabling leadership actions are required to fast-track the renewal and transformation of business models (Doz and Kosonen, 2010). Business model innovation occurs within the business model as a whole and is cheaper than innovating technology (Schaltegger, Lüdeke-freund and Hansen, 2011).

To outperform the competition and be prominent in the market place, product innovations alone no longer provide the competitive edge. The life cycles of the products are shortening and cheap imitations from low-wage countries are realistic threats to competitiveness (Matzler *et al.*, 2013; Schaltegger *et al.*, 2011). Therefore, a unique, non-duplicable business model is essential for exploiting new business opportunities (Matzler *et al.*, 2013).

Barriers to business model innovation

The economic impact of innovation is to make resources more productive and therefore innovation is crucial for the economic growth of any country. Although it is obvious that innovation should rely on creativity, it is hindered by the fact that there are too many influencing factors around innovativeness (Lee, Shin, and Park, 2012).

One of these factors is the customer. Customers are the ones who pay for the value and they will be the main critics who define the actual value of innovations. There is thus reason for a business to be continuously involved in discovering and creating more innovative offerings (Morris, 2003).

Bouchikhi and Kimberly (2003) and Chesbrough (2010) have identified obstacles to business model innovation, as the business's processes and assets and its configuration can be out of date or difficult to change. Therefore leadership with insight, commitment and adaptability is required for innovation in a business model (Svejenova, Planellas, and Vives, 2010). To achieve more flexibility in established business models, Doz and Kosonen (2010) suggest that firms become more responsive and entrepreneurial. The efficient management of difficult business models depends upon management that can make dynamic decisions, generate commitment and champion the company's vision and goals. Management should be able to practise mutual engagement in the organisation and manage the dynamics of relationships. Management should also focus on organisational justice to ensure that employees' judgments of management decisions result in the desired cooperation (Zott, Amit, and Massa, 2011).

Characteristics of a competitive business model

In order to obtain the desired results and achievements from a business model, the business model must be clearly understood, successfully implemented and defined by a number of characteristics (Osterwalder *et al.*, 2005).

Four criteria are compulsory for the business model to be effective and competitive.

- Firstly, the business model must mirror and be aligned to the company goals.
- Secondly, the business model must be robust.
- Thirdly, the model must be sustainable, novel and effective enough to ensure longevity and to protect the business from threats from a hostile external environment.
- Fourthly, the business model must have an element of self-reinforcement, which implies that there is internal consistency and that all the decisions and choices made by management are complementary to one another.

This emphasises the point that management needs to be cognisant of the whole business on a strategic level. Agility, together with strategic sensitivity include being able to experiment, anticipate and

adjust to possible perceptions of the business internally as well as in the marketplace. The top team's responsibility is to plan, align aspirations and goals, coordinate and care for the team in the company in order to achieve collective commitment and engagement towards corporate entrepreneurship within all the ranks in the organisation (Baden-Fuller and Morgan, 2010). Management therefore needs to be insightful and practise mutual engagement and organisational justice to sustain the required relational dynamics within all levels of the organisation (Zott *et al.*, 2011).

Entrepreneurial Organisations

To qualify as an entrepreneurial organisation, a company has to demonstrate continuous financial and economic growth, innovativeness, risk-taking and proactiveness within the lifetime of the business. The four companies investigated in this study, Apple, Ryanair, Xerox and Minnesota Mining and Manufacturing (3M), are all examples of entrepreneurial organisations and are discussed below.

Apple

Apple implemented innovativeness by combining the sale of music with their products. Risk-taking was evidenced by offering radically different designs, the first of their kind in the market, as well as creating new market segments. Proactiveness was effected by offering a product before the market asked for it. Apple continues to offer a high number of multiple entrepreneurial events over time by offering new items such as watches, the iPhone, iPod and iPad with music, on a regular basis.

The constraints on corporate entrepreneurship within Apple are minimal as illustrated in the company's systems, structures, strategic direction, policies and procedures, people and culture, all of which are aligned to entrepreneurial behaviour.

In 2003, Apple revolutionised portable entertainment and at the same time transformed the company. The iPod together with iTunes became a \$10bn product, contributing close to 50% of the company's income and pushing the market capitalisation from \$1bn in 2003 to \$150bn in 2007. The company's true innovation was to bring music closer to the consumer by making downloading music as easy as possible. This was achieved by designing the best combination of hardware, software and service. Apple's example of business model innovation is rare as companies mainly focus on product innovation models (Johnson *et al.*, 2008). By introducing the iPod and the iTunes Store together with digital music record sales, Apple became a company with a completely novel model of doing business (Geterud and Tegern, 2012). The aim of the business model is to maintain the relationship with the customer over a long period of time and this provides Apple with enormous power over the end-to-end supply chain.

Apple supplies products to the larger chain stores and competitors through Apple-branded outlets. Retailers value Apple products due to the high customer demand, prices, quality products and profit margins. However, Apple exercises strict control over displays and prices within these retailers. Apple's reality is that competition has replicated the same offerings (Montgomerie and Roscoe, 2013).

Apple outsources the hardware production to China while keeping the software expertise within the company. Steve Jobs declared: "One of our biggest insights (years ago) was that we did not want to get into any business where we did not own or control the primary technology because you will get your head handed to you" (Matzler *et al.*, 2013:33).

As a company, Apple has inspired other companies to imitate their business model directly due to the unique business approach and type of interaction with customers and suppliers. According to Gambardella and McGahan, (2010) Apple is a legendary firm, leader and shaper of the industry.

FIGURE 2
CHARACTERISTICS IDENTIFIED IN APPLE’S BUSINESS MODEL

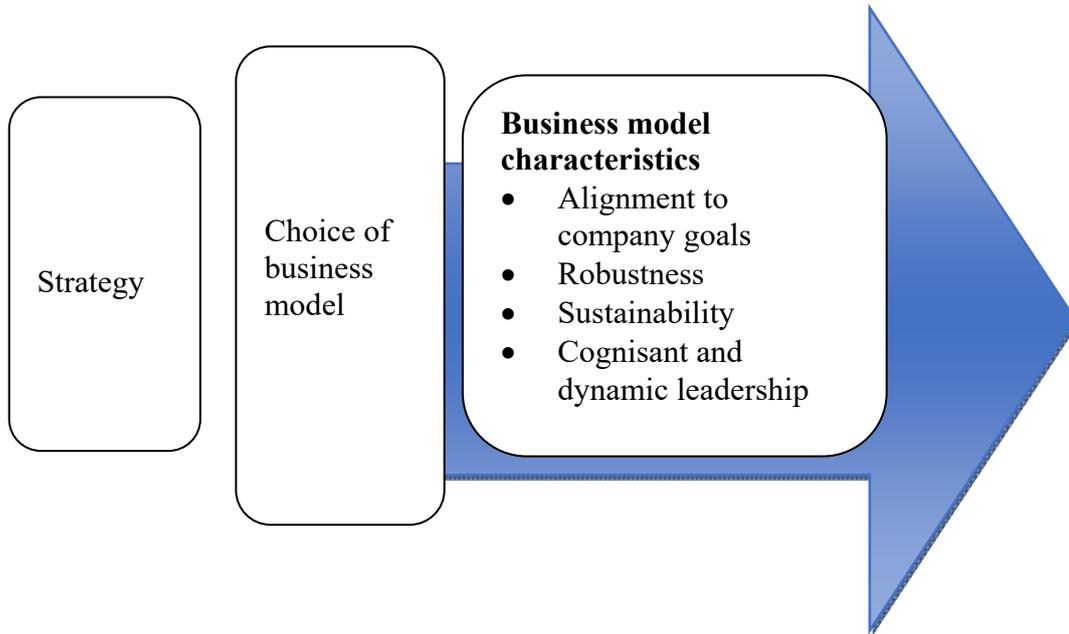


TABLE 2
EVIDENCE OF FINDINGS FOR APPLE

Supporting evidence	Characteristics
<p>Apple’s creation of new markets has drawn competitors’ attention and even companies in other industries have followed examples set by Apple. Apple’s business model is aligned to company goals and is driven by supplying stellar products and service in as short a time as possible and at a reasonable price (Johnson <i>et al.</i>, 2008), (Montgomerie and Roscoe, 2013).</p>	<p>□ Business model aligned with company goals</p>
<p>Apple’s business model innovations redeployed billions of dollars of value, while the company inspired competitors to imitate and to innovate efforts. Apple maintains sole control over their primary technology, which strengthens their robustness (Matzler <i>et al.</i>, 2013).</p>	<p>□ Robust</p>
<p>Apple’s business model has a sustainable, proven track record internationally. Sustainability is supported by the continuous novelty of the business model together with the lock-in effect by owning the consumer (Gambardella and McGahan, 2010; Montgomerie and Roscoe, 2013).</p>	<p>□ Sustainable</p>
<p>The top team is able to display unity by reaching collective commitments as well as having strategic sensitivity and flexibility towards the company as a whole. Not only does the management effectively steer the company but also maintains mutual engagement to ensure an agile workforce (Montgomerie and Roscoe, 2013; Ricart, 2011).</p>	<p>□ Cognisant and dynamic leadership present</p>

Ryanair

Ryanair's innovativeness was restricted to the use of old aircraft flying short distances between secondary airports, which was based on a business model that already existed. Risk-taking was not significant as the offering had been tested and proven in other markets and the customer segment could be guaranteed based on other similar, existing businesses. Proactiveness was not significant as this was a copy of the offering that already existed. Ryanair cannot be regarded as implementing innovation, risk taking and proactive endeavours regularly.

The constraint on corporate entrepreneurship within Ryanair its strategic direction as the company operates on a fixed structure with no novel changes to stimulate entrepreneurial behaviour. Evidence suggests that Ryanair's policies and procedures, people and culture are not all aligned to entrepreneurial behaviour.

EasyJet and Ryanair were launched in Europe in the 1990's. From here on, several low cost carriers (LCC) entered the market and competition increased. Ryanair is one of the more profitable LCCs and operates on a low-cost, no frills model and its business model relates closely to Michael Porter's theory: firstly it comprises cost leadership, i.e. sales of mass products; secondly, differentiation is applied where Ryanair offers a unique product that the market deems as important; and thirdly, there is focus, where the company targets a specific segment in the market, which is not necessarily the main aim of LCCs (Anon, 2006). The business model of traditional airlines has been remodelled by LCCs and the competition in the market is continually increasing as operational costs are kept low. Price is the most important factor for passengers using LCCs and customers are willing to adapt their schedules in order to fly on these airlines. LCCs have become such an embedded brand with customers that for some, no other airline prices will be considered. These customers are even willing to make use of secondary airports. Ryanair customers prefer quality, adherence to flight schedules, reliability, comfort and frequent flyer programmes (O'Connell and Williams, 2005).

In the 1990's Ryanair had to reinvent their business model as the company was close to bankruptcy. The business model change saw them focussing more on the value offering to the customers. The Irish airline eradicated all luxuries and lowered prices to excessively low levels. The airline then started offering just one class to the passengers by flying only from secondary airports and not offering meals and charging for any added services, e.g. selling of beverages. The company moreover solely offered short haul flights and made use of Boeing 737s. It is important to mention that Ryanair chose only to make use of a workforce not belonging to any union and by offering very attractive incentives to employees. An aggressive management team achieved this. Profits were higher as variable and fixed costs were kept to a minimum. By keeping costs down, the redesigned business model attracted more customers through the acceptable prices and service levels (Ricart, 2011).

FIGURE 3
CHARACTERISTICS IDENTIFIED FROM RYANAIR'S BUSINESS MODEL

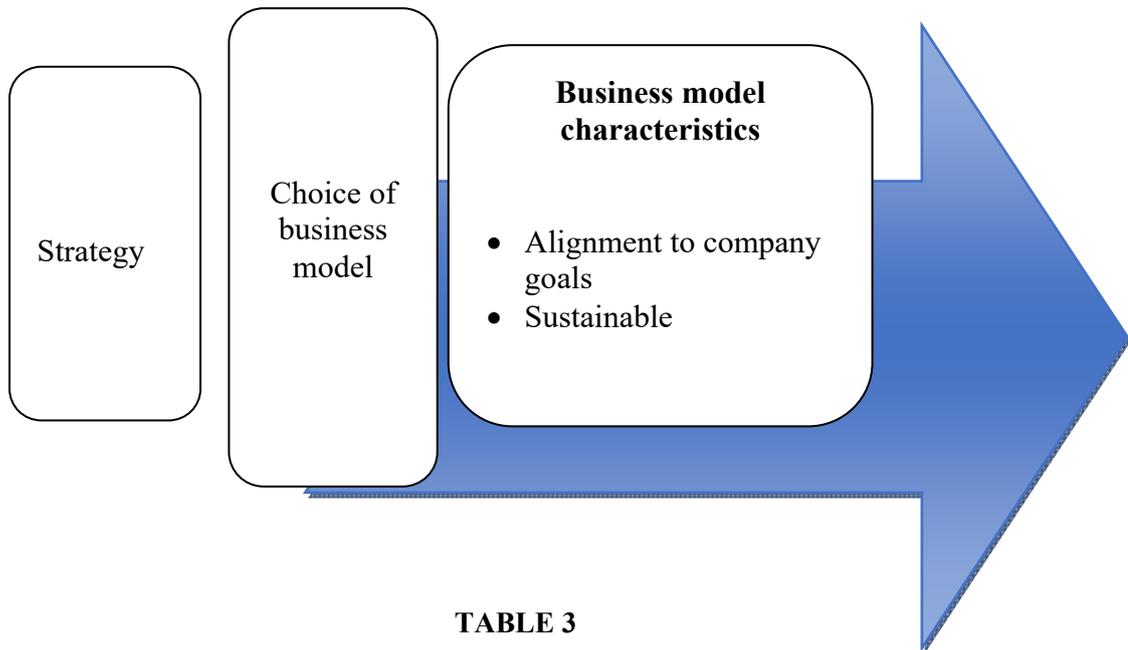


TABLE 3
EVIDENCE OF FINDINGS FOR RYANAIR

Supporting evidence	Characteristics
<p>Low cost carriers restructured the well-known traditional airline business model and have drastically altered the competitive forces of the airline industry. Ryanair's business model is based on cheap fares, which is aligned to company goals of attracting customers with low fares (Anon, 2006; Ricart, 2011).</p>	<p><input type="checkbox"/> Business model aligned with company goals</p>
<p>Ryanair as a company originated by duplicating the business model of Southwest airlines. The business model is not unique, which does not make the business model of Ryanair robust. The business model can successfully be copied (O'Connell and Williams, 2005).</p>	<p><input type="checkbox"/> Not robust</p>
<p>The business model of Ryanair is sustainable, and survives due to low prices, decent service levels and the loyalty programmes that attract passengers. Ryanair has a reputation for reasonable fees and regenerates its business by means of complementarities i.e. car hire relationships and destination accommodation offerings. Novelty is not prominent in the offering although novel marketing attracts customers (Anon, 2006).</p>	<p><input type="checkbox"/> Is sustainable</p>
<p>The only evidence of dynamism is that management strategically employed a non-unionised workforce and offered high-powered incentives to employees to maintain loyalty (Ricart, 2011).</p>	<p><input type="checkbox"/> No cognisant and dynamic leadership present</p>

Xerox

Xerox demonstrated innovativeness by introducing new technologies, which were the first of their kind in the market. Risk-taking was evident in creating radical new offerings in the market; for example, copier rental based on a page- by- page basis. Xerox demonstrated proactiveness by offering a product before the market asked for it. The number of multiple entrepreneurial events over time were evident in the ways in which Xerox regularly created several spinoff companies, although these endeavours were not sustainable or successful in the long term.

The constraints on corporate entrepreneurship within Xerox were the company's systems, structures and strategic direction (Chesbrough and Rosenbloom, 2002). The spinoff companies were not aligned to its long-term goals and success within the bigger company. The core processes, policies and procedures were out of date. The people and culture were all aligned to entrepreneurial behaviour but the strategic goals and focus of the company's management were centred on technological innovation and not the customers' needs or market requirements.

In the 1980s, Xerox was the industry leader, but unfortunately could not sustain the leadership as management was not aware of how to handle and manage new technologies (Chesbrough, 2010; Morris, 2003). Xerox's growth was partly due to the fact that they designed a business model to commercialise technologies that was ground-breaking and which, at that time, was rejected by other leading companies (Chesbrough and Rosenbloom, 2002; Zott *et al.*, 2011). At one point in time Xerox dominated the market to such a degree that US government gave Xerox no choice but to license the technology to competitors (Chesbrough and Rosenbloom, 2002).

Xerox generated spin-off concepts and products in their Palo Alto Research Center (PARC) and it was the management of these technologies that appeared to be the challenge (Chesbrough and Rosenbloom, 2002). The spin-offs became so successful, that they led to the evolution of other business models which differed from the parent company, Xerox (Cavalcante, Kesting and Ulhøi, 2011).

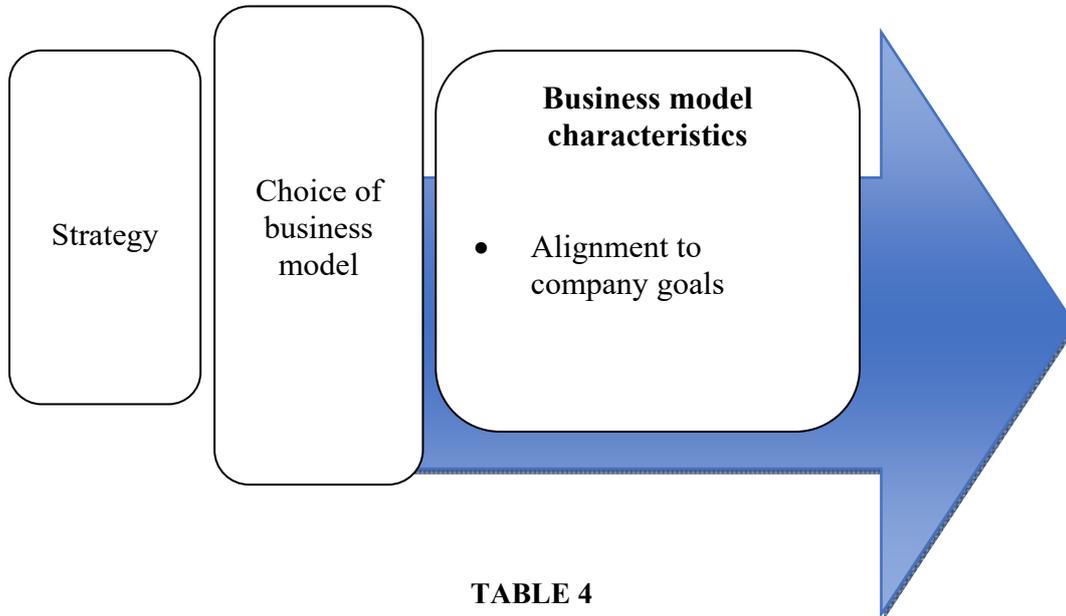
One of Xerox's successes was its ingenious approach to innovating the distribution of the products to the market. The photocopy machines were leased to customers on a per use base, instead of a once-off sale (Chesbrough, 2007). Today Xerox's competitors are far more creative and have surpassed Xerox in products and distribution (Doz and Kosonen, 2010).

Ironically, in the 1970s Xerox invented the PC amongst other innovations, such as laser printing, Ethernet, graphical user interfaces and integration for semiconductors (Ricart, 2011). Due to the lack of knowledge of exactly who the PC target market would be, and by using the wrong distribution channel, the sales dwindled. In actuality, Xerox's management did not understand the market nor did it have the knowledge to adapt the business model accordingly (Morris, 2003). With adequate financing and determination, it is easy for competitors to duplicate technology (Morris, 2003). Xerox relied too much on its temporary advantages until competitors caught up. Former CEO Paul Allaire stated that the company's decline was due to an unsustainable business model (McGarth, 2010).

Management relied on the use of past knowledge, which placed the business model in jeopardy. The top management at Xerox was not aware of the market, the company's lack of stability or longevity. (Chesbrough and Rosenbloom, 2002; Markides, 2008; Johnson, 2010; Matzler, Bailom, Anschober, and Richardson, 2010). A company competing for new business, such as Xerox, needed leadership that continuously interrogated and questioned the feasibility of the business model (McGrath, 2010).

FIGURE 4

**CHARACTERISTICS IDENTIFIED FROM XEROX’S BUSINESS MODEL. SOURCE:
AUTHOR’S OWN COMPILATION**



**TABLE 4
EVIDENCE OF FINDINGS FOR XEROX**

Supporting evidence

Xerox was a successful company when looking at its initial business model, but the business model failed as long-term strategy and leadership in the industry could not be secured (McGrath, 2010).

Robustness was evident in the company’s history, as past events show that the Xerox Corporation grew in part by implementing an efficient business model to commercialise technology rejected by other prominent companies. Enhancing the leadership of the company, there was an awareness, experimentation and implementation of innovation in business models, i.e. by establishing PARC. Xerox innovations were copied and improved on by competitors (Morris, 2003; Doz and Kosonen, 2010).

Xerox’s business model was sustainable and novel by means of spin-offs which exceeded the market expectations and potential at the time, but were short lived. The company focussed on innovative technology at the centre of the value offering, but without the support of robustness and cognisant management, could not sustain the business in the long run (Morris, 2003; McGrath, 2010; Chesbrough, 2010).

Characteristics

Business model aligned with company goals

Not robust

Not sustainable

Top management was removed from reality, not having the right discussions about the future and how to adapt appropriately. The inefficient management cascaded down to the sales force that was incapable of effective sales due to senior management's largely apathetic attitude to prospective buyers (Chesbrough and Rosenbloom, 2002; Morris, 2003; Markides, 2008; Chesbrough, 2010; Johnson, 2010; Matzler *et al.*, 2010).

□ No cognisant and dynamic leadership present

Minnesota Mining and Manufacturing (3M)

According to Kuratko, et al (2011), 3M implemented Innovativeness by introducing previously unknown products to the market. They demonstrated risk-taking by offering radically different designs, a new approach that involved risk-taking as well as proactiveness. In other words, the company was offering a novel product before the market asked for it. 3M is driven to create and innovate on a regular basis and the incentive structure promotes regular innovative and profitable products over an extended period.

The constraints on corporate entrepreneurship within 3M are minimal as the company's systems, structures, strategic direction, policies and procedures, people and culture are all aligned to entrepreneurial behaviour and growth.

Globally, 3M is one of the most innovative and admired companies. It began in 1902 in the abrasives market, but failed to make a profit for at least 14 years. Five entrepreneurs realised that their abrasive products did not meet the requirements in the industry and that they had to adapt them (Conceição, Hamill and Pinheiro, 2002). Since then, innovation has become the focus of the company (Brand, 1998).

3M is worth US\$ 15bn as a company, employs over 70,000 employees worldwide and has more than 60,000 products in the market (Conceição *et al.*, 2002). This innovative company is goal- oriented and researchers have placed 3M in the dynamic category of entrepreneurial intensity (Morris and Sexton, 1996).

3M has a clear vision: "To be the most innovative company in the markets it serves". A set of strategies was implemented to support the vision: strict sales targets; freedom for employees to choose their projects; customer orientation; sharing and combination of technology throughout the company; resilient intellectual property protection and extra funding for game- changing global impact products (Conceição *et al.*, 2002). James McNerney Jr. took over as CEO in 2001 and set an additional goal of 5%-8% annual growth. The number of new ideas entering the commercial market had to double and the products that were launched into the market had to have a triple effect on the bottom line (Stevens, 2004).

The combination of promoting risk taking, teamwork innovation and entrepreneurship as their culture is their formula for success (Conceição *et al.*, 2002). The culture in 3M is orientated towards long-term commitment to staff in order to create loyalty (Smith, 2007).

3M strongly believes in effectively using organizational knowledge, which is crucial for innovation. It is imperative that the staff have the correct personality and attitude. These conditions are ensured by top management, which in turn requires the recruitment of correct staff as well as a strong recognition programme (Brand, 1998).

FIGURE 5
CHARACTERISTICS IDENTIFIED IN 3M'S BUSINESS MODEL

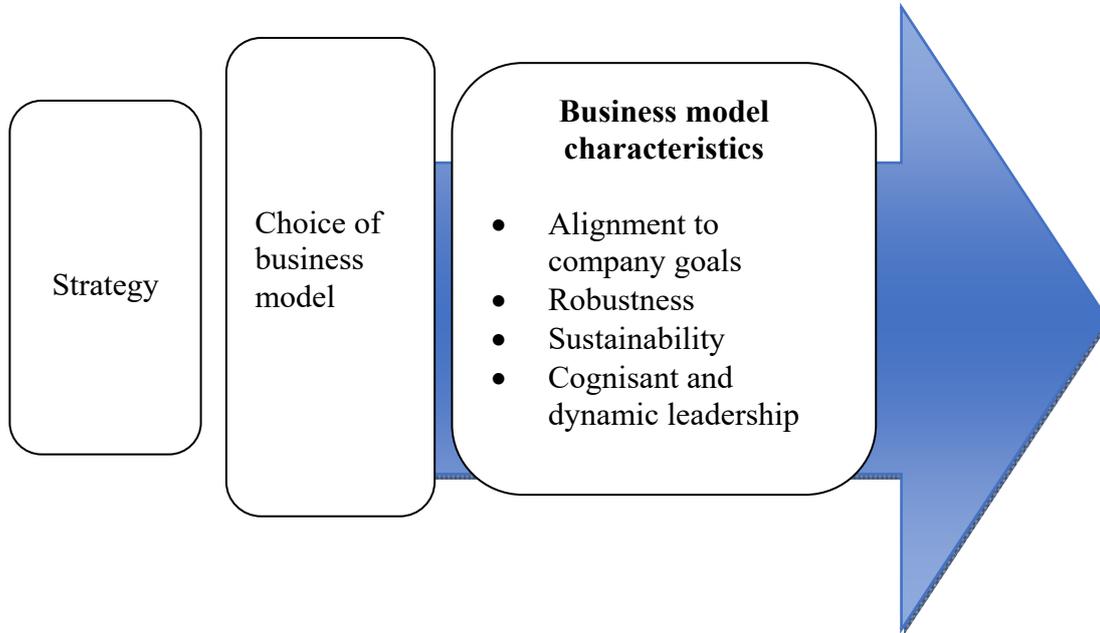


TABLE 5
EVIDENCE OF FINDINGS FOR 3M

Supporting evidence	Characteristics
3M has a clear vision and strategy for the company and 3M management ensures that the business model is aligned to company goals (Brand, 1998; Conceição <i>et al.</i> , 2002).	Business model aligned with company goals
Robustness of the business model is ensured by employing effective knowledge management together with strong HR policies. 3M's model has evolved over years, which makes duplication of the business model difficult, but not impossible. 3M has pioneered products in the market and allocated specific names to products (Conceição <i>et al.</i> , 2002; Stevens, 2004).	Robust
Sustainable novelty is a constant drive by 3M management at all levels within the company, which supports the company's competitive advantage (Morris and Sexton, 1996; Stevens, 2004).	Sustainable
Management actively pursues innovation, performance, agility and flexibility within the company. Mutual engagement is sought after at all levels of staff and room is provided for own initiatives for new products. The culture in 3M is long-term orientated and strongly supported by management, who proactively ensure customer awareness and need identification (Conceição <i>et al.</i> , 2002; Smith, 2007; Brand, 1998).	Cognisant and dynamic leadership present

FINDINGS

Four substantial corporate entrepreneurial organisations: Apple, Xerox, Ryanair and 3M, were studied and the findings are recorded below. Table 2 lists the presence of four main characteristics of a business model as identified within the four organisations investigated, for the purposes of comparison.

TABLE 6
COMPARISON OF THE MAIN CHARACTERISTICS OF THE BUSINESS MODELS OF
THE FOUR ENTREPRENEURIAL ORGANISATIONS

	Characteristics identified in business model	Apple	Ryanair	Xerox	3M
1	Business models aligned to company goals	Yes	Yes	Yes	Yes
2	Robustness	Yes	No	No	Yes
3	Sustainability	Yes	Yes	No	Yes
4	Cognisant and dynamic leadership	Yes	No	No	Yes

Apple and 3M are resilient entrepreneurial organisations with a strongly innovative approach to their business models. Both Apple and 3M have proven track records of high entrepreneurial intensity. Additionally, these two market-leading companies have displayed all four prominent characteristics in their business models, whereas Ryanair and Xerox could not demonstrate market leadership. Ryanair and Xerox's business models only displayed one of the four main characteristics: company goal alignment.

From the findings, Proposition 1 is rejected because Apple has proven that a strong entrepreneurial intensity exists in the company, which is consequently reflected by the strong business model and its associated characteristics.

Propositions 2 and 3 are accepted as both Xerox and Ryanair have displayed limited entrepreneurial intensity with limited characteristics associated with their business models.

Proposition 4 is rejected because 3M has proven that as a company, a strong entrepreneurial intensity is evident, which is consequently reflected by its strong business model and the associated characteristics.

Discussion of findings

The main purpose of this study was to identify, understand and ascertain which characteristics were needed for a business model to place an entrepreneurial company in a position of market leadership.

A business model can present one or more characteristics identified in this study, but individually and without the required entrepreneurial intensity, the characteristics will not ensure market leadership. A combination of characteristics such as in the example of Apple and 3M, will strengthen the probability of market leadership. The presence of the characteristics will have to be continuously verified and regular innovation of the business model will be required, should any of the four characteristics cease to operate effectively.

The importance of the study was to identify, understand and link the characteristics of a business model to those of companies that are market leaders with high entrepreneurial intensity.

Based on the findings and literature review of this study, the researcher holds the view that a company must have well- defined goals and a supportive strategy to serve as guidelines for the selected choice of business model. The goals can be seen as the foundation for business aspirations. The business model elements will need to align with the business goals or efforts will be wasted, resulting in poor outcomes. Misalignment can lead to several business models being generated, wasting time and potentially creating a window of opportunity for competitors to duplicate current offerings. Management and business stakeholders will have to ensure that the business model and the innovations associated with it never lose sight of the company's goals.

Robustness in a business model is not easily achieved, but is crucial for market leadership. Robustness requires continuous business model innovation, which does not rely on technology innovation alone, but also on the innovation of the business model as a whole. Several elements within the business model can be creatively transformed to develop their uniqueness. A unique business model combined with high entrepreneurial intensity can ensure leadership in the market place. By relying solely on technological innovation, competitors can easily copy the concepts, which in themselves, do not bestow robustness on a business model. The unique character of certain business models cannot be duplicated, thereby contributing to the success and market leadership of that company. On the other hand, some business models originate as duplications of other business models, which also does not ensure sustainability, as in the case of Ryanair, which is not a market-leading company in the low- cost carrier industry.

Sustainability of a business model does not necessarily depend on any of the other three characteristics, but can be the result of strong alignment to the company goals, robustness and effective leadership. Sustainability focusses on long-term market leadership and relies on the continuous innovation of the business model. Continuous market awareness together with business model innovation secures sustainability of the company, but will not necessarily ensure a market leading position. Novelty can be a prerequisite for a strong and successful business model as in the case of Apple, but no novelty is present in Ryanair's business model.

Dynamic and cognisant leadership of a business is critical in achieving market leadership. Managers can experience difficult challenges regarding business model development and innovation. The first reason for this could be the lack of a definition: very little formal research has been done on the dynamics, methods and processes of business model development. Secondly, few business owners and managers understand their existing business model well enough. In challenging times, management needs to believe business model innovation will become even more crucial for success than product or service innovation, especially in harsh economic times.

Once the business model is in place, the four identified characteristics are applied to drive the business into a market leadership position.

Support

The four stakeholders that play a role in the future of a business are: the customer, the business, the authorities and the competition. Competition has a direct influence on how business is conducted and how the value proposal is compiled and presented to the stakeholders (Maglio and Spohrer, 2013). This is the reason why a business needs to compile a business model that presents unique and distinguishing characteristics in order to compete in the market (Osterwalder, 2007).

Strategy is associated with competitiveness in the market, thus the decision regarding the correct business model is crucial. It is vital that the strategy must first be in place before compiling a sustainable competitive business model. Business models are a result of customer preference, the transaction costs and the competition, which are essential descriptions of the market economies. A business model needs to be coupled with the strategy in order to gain a competitive advantage (Teece, 2010). Additionally, a business model in itself presents a form of innovation, which will add to the strength of the business as the effectiveness of the business strategies will be enhanced (Schaltegger *et al.*, 2011).

Business model innovation has become the centre of attention in boardrooms (Osterwalder, 2007). By innovating the business model, further opportunities in the market will be exploited and new knowledge will be gained, which could lead to building the competitive advantage of the business (Teece, 2010). In order to stay ahead, companies make business model shifts every two to four years (Mitchell and Coles, 2003).

To a certain degree, competitors can copy one another's business models. Thus, a business model must be robust, differentiated and difficult to imitate, while simultaneously being efficient enough to maintain the competitive advantage. To gain financial benefit and a competitive advantage from business model innovation, the business owner must not only focus on customer needs and product innovation, but on the whole business model design (Teece, 2010). Product and process innovations often present short term, competitive advantages and should be performed separately from business model innovation (Schaltegger *et al.*, 2011). The internal competencies of the company and the management of these are key factors in a business's competitive advantage (Morris, Schindehutte and Allen, 2005; Teece, 2010; Schaltegger *et al.*, 2011). Undeniably, there is a human dimension to competing in business. Inspiring leaders need to continuously interrogate the feasibility of a business model. Increasingly important is the fact that managers need to be cognisant by having truthful discussions with those who may challenge the business model (McGrath, 2010).

CONTRIBUTION

This article contributes to the practical understanding of the relationship between entrepreneurial intensity and a business model and highlights the importance of business model characteristics for aspirational entrepreneurial businesses. The implications for practice are that companies and entrepreneurial businesses need to clearly understand what a business model is and create their own business model as well as have a full appreciation of the importance of continuous business model innovation. Businesses can endeavour to characterise their business models by incorporating goal alignment, robustness and sustainability as well as cognisant and dynamic leadership in order to achieve a leading position amongst competitors. All four characteristics should preferably be associated with the entrepreneurial business model to achieve optimum competitiveness. In South Africa, a lack of managerial skills has been identified as a contributing factor in failure of new firms. The skills lacking were identified as knowledge, behaviours, attitudes and personal effectiveness. By enhancing the education and training of the entrepreneurial management and increasing the capacity of entrepreneurs, business leaders will be able to address gaps in their business models in order to be more competitive (Olawale and Garwe, 2010). The implication for theory is that together with entrepreneurial intensity, the business model characteristics can support the achievement of competitive market leadership. When the known characteristics are identified, business models can be judged as competitive or non-competitive entities.

LIMITATIONS

No study is without limitations. The present study incorporated four companies and by studying additional companies in other market sectors, more characteristics than just the four identified in this study, could be added. Studying the business models of diverse businesses over a period of time and observing what the impact of these might be, if additional characteristics were introduced, could provide further insight. Such a study could support the validity of the findings in this study.

FUTURE RESEARCH

Business model innovation cannot take place without the presence of entrepreneurial intensity and the link between the two constructs could be studied in further detail. The degree and frequency of business model innovation contributes to the competitiveness of the business, but requires further investigation. Another avenue for research would be a more in-depth evaluation of the consumer in Apple's business model and how, or if, Apple plans to further innovate their model to meet changing

consumer attitudes regarding social responsibilities. Finally, further detailed research into additional companies has the potential to allow learners to understand how market leaders are created and how decline can be avoided. Additionally, the strength of a business model could be investigated. An additional future field of study could be to evaluate the viability of business model design workshops for South African entrepreneurial corporate businesses.

REFERENCES

- Amit, R., and Zott, C. 2001. Value creation in e-business. *Strategic Management Journal*, 22(6-7), 493–520.
- Anon. 2006. Easyjet and Ryanair flying high on the Southwest model: Charting the ups and downs of low-cost carriers. *Strategic Direction*, 22(6), 18–21.
- Baden-Fuller, C., and Morgan, M. S. 2010. Business models as models. *Long Range Planning*, 43, 156–171.
- Bouchikhi, H., and Kimberly, J. R. 2003. Escaping the identity trap. *MIT Sloan Management Review*, 44, 20–26.
- Brand, A. 1998. Knowledge management and innovation at 3M. *Journal of Knowledge Management*, 2(1), 17–22.
- Casadesus-Masanell, R., and Ricart, J. E. 2010. From strategy to business models and onto tactics. *Long Range Planning*, 43, 195–215.
- Cavalcante, S., Kesting, P., and Ulhøi, J. 2011. Business model dynamics and innovation: (Re)establishing the missing linkages. *Management Decision*, 49(8), 1327–1342.
- Chesbrough, H. 2007. Business model innovation: It's not just about technology anymore. *Strategy and Leadership*, 35(6), 12–17.
- Chesbrough, H. 2010. Business model innovation: Opportunities and barriers. *Long Range Planning*, 43(2-3), 354–363.
- Chesbrough, H., and Rosenbloom, R. S. 2002. The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change*, 11, 529–555.
- Conceição, P., Hamill, D., and Pinheiro, P. 2002. Innovative science and technology commercialization strategies at 3M: A case study. *Journal of Engineering and Technology Management - JET-M*, 19, 25–38.
- Cooper, D.R. and Schindler, P.S. 2011. *Business Research Methods*. Singapore: McGraw-Hill
- Doganova, L., and Eyquem-Renault, M. 2009. What do business models do? Innovation devices in technology entrepreneurship. *Research Policy*, 38, 1559–1570.
- Doz, Y. L., and Kosonen, M. 2010. Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long Range Planning*, 43, 370–382.
- Gambardella, A., and McGahan, A. M. 2010. Business-model innovation: General purpose technologies and their implications for industry structure. *Long Range Planning*, 43(2-3), 262–271.
- Geterud, J., and Tegern, S. 2012. *An empirically derived framework for early stage business model innovation*. Gothenburg, Sweden: Chalmers University of Technology.
- Giesen, E., Berman, S. J., Bell, R., and Blitz, A. 2007. Three ways to successfully innovate your business model. *Strategy and Leadership*. New York. doi:10.1108/10878570710833732
- Johnson, M. W. 2010. *Seizing the white space. Business model innovation for growth and renewal*, Boston: Harvard Business Press.
- Johnson, M. W., Christensen, C. M., and Kagermann, H. 2008. *Reinventing your business model*.

Harvard Business Review, 86, 59 – 68.

Kuratko, D.F., Morris, M.H. and Covin, J.G. 2011. *Corporate innovation and entrepreneurship*. Canada: South Western, Cengage Learning

Lee, Y., Shin, J., and Park, Y. 2012. The changing pattern of SME's innovativeness through business model globalization. *Technological Forecasting and Social Change*, 79(5), 832–842.

Maglio, P. P., and Spohrer, J. 2013. Industrial marketing management: A service science perspective on business model innovation. *Industrial Marketing Management*, 42, 665–670.

Magretta, J. 2002. Why business models matter: A conversation with Robert Redford. *Harvard Business Review*, 3–8.

Mansfield, G. M., and Fourie, L. C. H. 2004. Strategy and business models - strange bedfellows? A case for convergence and its evolution into strategic architecture. *South African Journal of Business Management*, 35(1), 35–40.

Markides, C. 2008. Game-changing strategies: How to create new market space in established industries by breaking the rules. *Strategies*, 179, 31–52.

Matzler, K., Bailom, F., Anschober, M., and Richardson, S. 2010. Sustaining corporate success: What drives the top performers? *Journal of Business Strategy*, 31(5), 4-13.

Matzler, K., Bailom, F., Eichen, S. F. V. Den, and Kohler, T. 2013. Business model innovation: Coffee triumphs for Nespresso. *Journal of Business Strategy*, 34(2), 30–37.

McGrath R. G. 2010. Business Models : A Discovery Driven Approach. *Long Range Planning*, 43(2-3), 247–261.

Mitchell, D., and Coles, C. 2003. The ultimate competitive advantage of continuing business model innovation. *Journal of Business Strategy*, 24, 15–21.

Montgomerie, J., and Roscoe, S. 2013. Owning the consumer: Getting to the core of the Apple business model. *Accounting Forum*, 37, 290–299.

Morris, L. 2003. *White paper on Business model warfare: The strategy of business breakthroughs*. The University of Pennsylvania and A-CASA.

Morris, M. H., and Sexton, D. L. 1996. The concept of entrepreneurial intensity: Implications for company performance. *Journal of Business Research*, 36, 5–13.

Morris, M., Schindehutte, M., and Allen, J. 2005. The entrepreneur's business model: Toward a unified perspective. *Journal of Business Research*, 58, 726–735.

O'Connell, J. F., and Williams, G. 2005. Passengers' perceptions of low cost airlines and full service carriers: A case study involving Ryanair, Aer Lingus, Air Asia and Malaysia Airlines. *Journal of Air Transport Management*, 1–18.

Olawale, F., and Garwe, D. 2010. Obstacles to the growth of new SMEs in South Africa : A principal component analysis approach. *African Journal of Business Management*, 4(5), 729–738.

Osterwalder, A. 2007. How to describe and improve your business model to compete better. *Draft Version*, 1–23. Retrieved from http://www.google.co.za/url?sa=t&drct=j&dq=andescr=sandsource=webandcd=2andved=0CCMQjBAwAQandurl=http://www.setoolbelt.org/system/files/re-sources/Draft-Business-Model-Manual_830.pdf&ei=TVv3VLnNJsKBU7PagqgP&andusg=AFQjCNF2PKgLokBtIwefxrpBVKZqbNkF6gandsig2=h2o_9L_afpR0qf_62 accessed September 2014

Osterwalder, A., Pigneur, Y., and Tucci, C. L. 2005. Clarifying business models: Origins, present, and future of the concept. *Communications of AIS*, 16(1), 1–25.

Ricart, J. E. 2011. How to design a winning business model. *Harvard Business Review*, (February), 1–9.

Schaltegger, S., Lüdeke-freund, F. and Hansen, E. G. 2011. *Business Cases for Sustainability and the Role of Business Model Innovation: Developing a Conceptual Framework*. Social Science Research Network. Luneberg: Leuphana University.

Smith, B. 2007. Comments on “The parting gift.” *Thunderbird International Business Review*, 49 (December), 630–631.

Stevens, T. 2004. 3M reinvents its innovation process. *Research Technology Management*, 47(2), 3–5. Retrieved from <http://elibrary.ru/item.asp?id=7579184>

Svejenova, S., Planellas, M., and Vives, L. 2010. An individual business model in the making: A chef’s quest for creative freedom. *Long Range Planning*, 43, 408–430.

Teece, D. J. 2010. Business models, business strategy and innovation. *Long Range Planning*, 43(2-3), 172–194.

Timmers, P. 1998. Business models for electronic markets. *Electronic Markets*, 8, 3–8. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eoahandAN=11346696&site=ehost-live>

Trimi, S., and Berbegal-Mirabent, J. 2012. Business model innovation in entrepreneurship. *International Entrepreneurship and Management Journal*, 8(September), 449–465.

Zott, C., and Amit, R. 2010. Business Model Innovation: Creating value in times of change. IESE Business School Working Paper No. 870, Navarra.

Zott, C., Amit, R., and Massa, L. 2011. The business model: Recent developments and future research. *Journal of Management*, 37(4), 1019–1042.