

An assessment of selected organisational-based factors on the perceived success of agribusinesses: a corporate entrepreneurship perspective

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ABSTRACT

The objective of this study was to investigate the influence of selected organisational-based factors on the perceived success of agribusinesses in South Africa. Business success, for the purposes of this study, was measured by means of two dependent variables, namely *Business development and improvement* and *Business growth*. Structured questionnaires were administered to the managers of five of the largest and three smaller agribusinesses in South Africa. A total of 533 usable questionnaires were returned. The construct validity of the measuring instrument was assessed by means of a principal component exploratory factor analysis and by calculating Cronbach's alpha coefficients. The results show that the managers in the participating agribusinesses perceived the selected organisational-based factors of *Strategic intent*, *Autonomy*, *Customer orientation* and *Rewards* to have a positive influence on their *Business development and improvement*. A positive relationship was also found to exist between the selected organisational-based factors of *Strategic intent* and *Customer orientation* and the dependent variable *Business growth* in the participating businesses. Practical recommendations were also proposed to enhance and foster corporate entrepreneurship within these businesses.

Key words: corporate entrepreneurship, agribusinesses, perceived success

Introduction

Today's business environment is characterised by continuous change as a result of fast-changing technologies, ever-increasing changes in customer demand, and growing

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levels of intense global competition (Castrogiovanni, Urbano & Loras 2011: 34; Ireland & Webb 2009: 469). Corporate entrepreneurship, broadly defined as entrepreneurship within an existing business (Heinonen & Toivonen 2008: 583), is increasingly being viewed as a tool that allows businesses to rejuvenate and revitalise and to create new value through innovation, business development and renewal (Kraus, Kauranen & Reschke 2011: 60; Bhardwaj, Agrawal & Momaya 2007: 131).

Many factors influencing corporate entrepreneurship can be identified in the literature (Bhardwaj, Sushil & Momaya 2011; Ireland, Covin & Kuratko 2009; Goosen, De Coning & Smit 2002; Hornsby, Kuratko & Zahra 2002, among others). This study, however, focuses only on selected organisational-based factors, namely *Strategic intent*, *Risk-taking*, *Autonomy*, *Customer orientation* and *Rewards*, that have an influence on corporate entrepreneurship within agribusinesses.

This paper proceeds as follows. Firstly, the research problem and objectives of the study are presented, followed by the operationalisation of the organisational-based latent variables explored in this study. We then discuss the research methodology and the findings of the study. Finally, we present and discuss the conclusions and recommendations followed by the limitations of the study and suggestions for further research.

Problem statement and objectives

Agribusinesses play an important role in the development of a country's agricultural sector as suppliers of farming requisites, marketers of agricultural commodities and providers of services such as storage and transport (Ortmann & King 2007: 62). For the purposes of this paper, agribusinesses are those businesses formerly known as agricultural co-operatives.

The many challenges that agribusinesses in South Africa face include policy reforms, increasing global competition, the changing social environment and complex consumer demand (Doyer, D'Haese, Kirsten & Van Rooyen 2007: 495). These challenges demand that decision-makers effectively manage uncertainty and the resources of their business in order to position it in ways that will allow it to adapt to these changes and challenges. Corporate entrepreneurship may provide a tool for agribusiness development, revenue growth, enhanced profitability and pioneering the development of new products, services and processes that could lead to sustained competitive advantage (Baran & Velickaité 2008: 22).

Although the body of knowledge concerning the relationship between corporate entrepreneurship and business performance is growing, it is still an under-explored topic (Covin, Green & Slevin 2006: 58), with most of the research conducted within

the United States of America (Frank, Kessler & Fink 2010: 175). Within the South African context, limited such research has been conducted, but none of it within agribusinesses. Against this background, this study investigates the relationship between corporate entrepreneurship within agribusinesses and their perceived success.

Operationalisation of variables

Corporate entrepreneurship promotes entrepreneurial behaviour within a business. It is the process of enhancing the ability of the business to acquire and utilise the creative and innovative skills and capabilities of all the members of the business (Rutherford & Holt 2007: 429). It uses the fundamentals of management, but adopts a behavioural style that challenges bureaucracy and encourages innovation through the examination of potential new opportunities, implementation, exploitation and commercialisation of new products/services (McFadzean, O'Loughlin & Shaw 2005: 351).

For the purposes of this study, corporate entrepreneurship is defined as a vision-directed, organisation-wide reliance on entrepreneurial behaviour that purposefully and continually creates a new business or instigates renewal or innovation within the current business, in order to create or sustain competitive superiority.

Many conceptual arguments from previous research suggest that corporate entrepreneurship is positively related to business performance (Özdemirci 2011; Yang, Li-Hua, Zhang & Wang 2007; Antoncic & Hisrich 2004; Goosen et al. 2002; Zahra & Garvis 2000).

In Figure 1 (the hypothesised model), the selected organisational-based factors influencing the dependent variable, *Perceived success* of the organisation, are depicted, namely *Strategic intent*, *Risk-taking*, *Autonomy*, *Customer orientation* and *Rewards*. The model proposes that the selected entrepreneurial organisational factors that exist within a corporate organisation positively influence the *perceived success* of the organisation.

The selected dimensions of an entrepreneurial climate included in this study (see Figure 1) are justified by a sufficiency of theory in the corporate entrepreneurship literature, and the model does not claim to provide exhaustive coverage of every possible value influencing the *Perceived success* of the organisation.

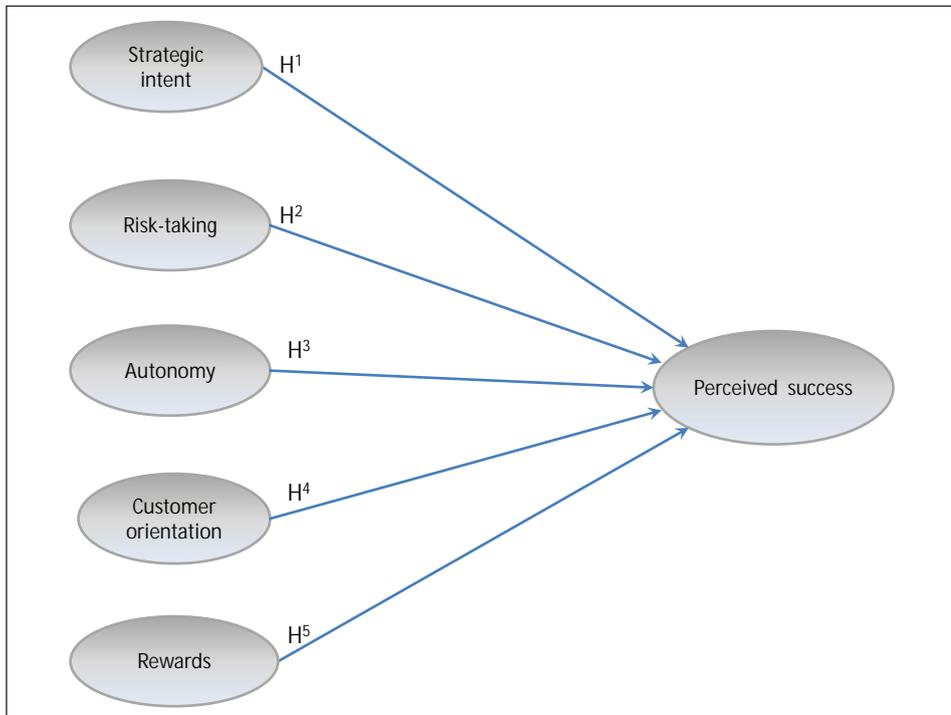


Figure 1: Hypothesised model

Dependent variables

There is general agreement in the literature that performance is a multidimensional concept (Lumpkin & Dess 1996: 137; Madsen 2007: 195; Rauch, Wiklund, Lumpkin & Frese 2009: 765), and that multiple performance measures must be used rather than a single dimension. Unfortunately, there is no consensus on the appropriate measures of performance (Wiklund 1999: 39), and the literature supports a high variety of performance measures (Madsen 2007: 195). Performance may therefore depend upon the indicators used to assess performance. A common distinction is often made between financial and non-financial performance measures (Rauch et al. 2009: 765).

Financial measures, according to Van der Post (1997: 75), provide a solid foundation from which to draw inferences regarding the success and effectiveness of an organisation, because all efforts and systems are eventually aimed at ensuring sustainable financial returns. The most popular financial measures have included sales growth (Covin & Slevin 1991; Covin et al. 2006; Frank et al. 2010; Madsen 2007;

Richard, Wu & Chadwick 2009; Wiklund & Shepherd 2005); growth in revenue (Wiklund & Shepherd 2005); growth in cashflow (Frank et al. 2010; Wiklund & Shepherd 2005); return on assets (Covin & Slevin 1991; Richard et al. 2009); and growth in market share (Madsen 2007).

Non-financial measures have included growth in employment (Gürbüz & Aykol 2009; Madsen 2007; Wiklund & Shepherd 2005); new product/service/process (Lee & Sukoco 2007; Wiklund & Shepherd 2003); and customer satisfaction (Wiklund & Shepherd 2003), among others.

Corporate entrepreneurship implies, among other things, that a commitment to innovation must be at the heart of the strategic management process (Kuratko & Audretsch 2009: 3). Terminating innovation efforts during bad times (Christensen, Johnson & Rigby 2002: 22), therefore, may have the consequence that promising initiatives are cut off, and probably worst of all, that it creates scepticism about and resistance to any future innovation initiatives (Wolpert 2002: 78).

A measure of business success is often related to the effectiveness and efficiency that the employees of a business are able to employ in producing the outputs of the business (Dess, Ireland, Zahra, Floyd, Janney & Lane 2003: 370). In this regard, Kuratko and Audretsch (2009: 9) note that innovations can significantly increase the efficiency or effectiveness of businesses.

Finally, the intrinsic and extrinsic rewards flowing from a culture of corporate entrepreneurship strongly drive both organisational commitment and job satisfaction among employees (Bulut & Alpkın 2006: 67). This is important in fostering corporate entrepreneurship, as the heart of corporate entrepreneurship lies precisely in the ability of businesses to foster, develop and utilise the creative talents of all their employees (Searle & Ball 2003: 51).

For the purposes of this study, the dependent variable *Perceived success* will be measured by using the following items: whether employees are viewed as the most valuable asset of the business; whether employees are highly committed to the business; whether the morale (job satisfaction) of employees has improved over the past few years; whether the image (stature) of the business, relative to competitors, has grown over the past few years; whether the effectiveness (doing the right things) of the business has improved over the past few years; whether, during difficult economic periods, investments in research and development/innovative projects continue with no significant financial cuts; whether the efficiency (doing things right) of the business has improved over the past few years; whether the business has experienced growth in profits over the past few years; whether the business has experienced growth in turnover over the past few years; whether the business has experienced growth in market share over the past few years; and whether the competitive position of the business has improved over the past few years.

Independent variables

Based on sufficient anecdotal and empirical evidence (Morris, Van Vuuren, Cornwall & Scheepers 2009; Kuratko, Morris & Covin 2011; Oosthuizen 2006; Antoncic & Hisrich 2004), five latent organisational-based factors influencing corporate entrepreneurial behaviour and ultimately the perceived success of the business were selected. For the purposes of this study, these five dimensions will be considered as independent variables influencing the dependent variable *Perceived success* in agribusinesses and will be discussed in this section.

Strategic intent

Strategic intent refers to the strategic way of thinking (also known as ‘dominant logic’) and is the way in which managers conceptualise the business, formulate business strategies, set and monitor performance targets (Obloj et al. 2010: 153) and make critical resource allocations (Morris et al. 2008: 191). An entrepreneurial strategic intent is reflected in the vision of the business and represents a commitment to innovation and entrepreneurial processes and behaviour (Ireland et al. 2009: 26).

The effective communication of the vision is, however, vital to enlist the commitment of employees (Thompson, Peteraf, Gamble & Strickland 2012: 71; Kelley 2011: 80) and to direct their attitude, outlook and behaviour towards moving in the intended direction (Ireland et al. 2009: 26; Baum, Locke & Kirkpatrick 1998: 45).

As strategic intent, corporate entrepreneurship will promote strategic agility, flexibility, creativity and continuous innovation throughout the business (Ireland, Hitt & Sirmon 2003: 967). The focus of the business therefore becomes opportunity identification, discovery of new sources of value, and product and process innovation that could lead to greater profitability (Obloj et al. 2010; Kuratko et al. 2011: 152).

Empirical support for the impact of strategic intent on business performance, especially where the strategic intent is corporate entrepreneurship, has been limited. However, Baum et al. (1998) found significant direct effects between the vision and overall business performance within entrepreneurial businesses. Similarly, Obloj et al. (2010) found a strong positive relationship between the entrepreneurial dominant logic of a business and its performance. The following hypothesis is therefore subject to further testing:

H¹: There is a significant relationship between the *Strategic intent* and the *Perceived success* of the participating businesses.

Risk-taking

The term 'risk' is defined by Dewett (2004: 258) as the extent to which there is uncertainty about whether potentially significant and/or disappointing outcomes of a decision will be realised. In this regard, Mullins and Forlani (2005: 51) characterise risk as either the potential to act too quickly on an unsubstantiated opportunity (sinking the boat) or the potential to wait too long before acting (missing the boat).

Risk is inherent in the operations of any business, and almost every decision taken by managers involves risk (Von Stamm 2008: 387). Often, corporate entrepreneurial businesses that have an entrepreneurial orientation are typified by risk-taking behaviour, such as incurring heavy debt or making large resource commitments, in the interests of obtaining high returns by exploiting opportunities in the marketplace (Bhardwaj et al. 2007: 134). However, this risk does not refer to extreme or uncontrollable risk, but rather to moderate and calculated risk (Kuratko et al. 2011: 67). Corporate entrepreneurs are therefore not high risk-takers (Lambing & Kuehl 2007: 19). Instead, they try to define the risk they have to take, minimise it as much as possible and manage it (Timmons & Adams 2012: 41). These enterprises should rather be viewed as risk-aware and opportunity-focused (McBeth & Rimal 2004: 18).

The relationship between risk-taking and the success of a firm is not as clear (Rauch et al. 2009) and Wiklund and Shepherd (2005: 75) argue that research suggests that while tried-and-true strategies may lead to high performance, risky strategies may lead to performance variation, since some projects fail while others succeed. Against this background, the following hypothesis is subjected to further testing:

H²: There is a significant relationship between the *Risk-taking* propensity and the *Perceived success* of the participating businesses.

Autonomy

Autonomy refers to the independent actions of an individual or a team in bringing forth an idea or a vision and carrying it through to completion (Lumpkin & Dess 1996: 140; Lee & Sukoco 2007: 551).

To encourage autonomy, business uses both 'top-down' and 'bottom-up' approaches. The top-down approach includes aspects such as management support for programmes, giving incentives that foster a climate of entrepreneurship and welcoming autonomous decision-making (Dess & Lumpkin 2005: 149). In this regard, Dess et al. (2003: 355) are of the opinion that such business design features may be as important to entrepreneurial success as the other dimensions of an entrepreneurial orientation. To encourage autonomy from the bottom up will require

special incentives and structural arrangements designed to develop and build support for entrepreneurial initiatives (Lumpkin, Cogliser & Schneider 2009: 49).

Furthermore, many businesses have engaged in actions such as flattening hierarchies and delegating authority to operating units. While these moves are intended to foster autonomy, the process of business autonomy requires much more than a change in design. Businesses must actually grant autonomy, and individuals must be encouraged to exercise it (Mumford, Scott, Gaddis & Stange 2002: 724).

Although Lumpkin and Dess proposed the inclusion of *Autonomy* as a dimension of entrepreneurial orientation in 1996, very few studies have investigated autonomy as an element of entrepreneurial orientation (Lumpkin et al. 2009: 48). Consequently, the relationship between *Autonomy* and *Business success* has not been debated. Autonomy, however, constitutes one of the bases for innovative and entrepreneurial behaviour (Casillas & Moreno 2010: 270), and businesses that rely on corporate entrepreneurship to create new value and growth must encourage entrepreneurial behaviour by allowing employees to act and think more independently (Gürbüz & Aykol 2009: 324). *Autonomy* is therefore essential to the process of leveraging a business's existing strengths, identifying opportunities and encouraging the development of new ventures and/or improved business practices (Lassen, Gertsen & Riis 2006: 361). Prior research (Rauch et al. 2009) also supports the view that autonomy encourages innovation, promotes the launching of new ventures and increases the competitiveness and effectiveness of businesses. Therefore, considering the above arguments, we propose the following hypothesis:

H³: There is a significant relationship between *Autonomy* in the workplace and the *Perceived success* of the participating businesses.

Customer orientation

Customer orientation is embodied and subsumed under the idea of market orientation (Pitt & Boshoff 2010: 43), which was initially conceptualised by Kohli and Jaworski (1990: 6). They defined market orientation as the organisation-wide generation of market intelligence pertaining to current and future customer needs, dissemination of intelligence across departments and organisation-wide responsiveness to it. Correspondingly, Narver and Slater (1990: 21) define market orientation as an organisational culture made up of three behavioural components, namely customer orientation, competitor orientation and inter-functional co-ordination. The focus of this study is, however, only on the customer orientation component.

Narver and Slater (1990: 21) initially defined customer orientation as the sufficient understanding of one's target buyers to be able to continually create superior value

for them. Homburg, Müller and Klarmann (2011: 796) view customer orientation as a set of task-oriented behaviours, and the philosophy contends that identifying the needs and wants of the target market and delivering products and services that satisfy these are key to attaining organisational goals (Pitt & Boshoff 2010: 42; Anosike & Eid 2011: 2491). Included in the set of task-oriented behaviours, Homburg et al. (2011: 796) are of the opinion that customer orientation also comprises behaviours aimed at establishing a personal relationship with the customer, such as getting to know the customer personally.

It is therefore not surprising that the importance of a customer orientation within the corporate entrepreneurial context is gaining momentum, especially within today's increasingly competitive and highly volatile environment coupled with the pressure of rapidly changing customer needs and desires (Barret & Weinstein 1998: 57; Aldas-Manzano, Küster & Vila 2005: 438).

The relationship between market/customer orientation and business performance has been widely examined. In theory, it can be argued that businesses with a customer orientation and entrepreneurial drive understand customers' expressed and latent needs better, finding innovative ways to address these needs, which should lead to higher customer satisfaction and increased business performance (Crittenden, Crittenden, Ferrell, Ferrell & Pinney 2011: 72). This is supported by a number of empirical studies that all found a significant positive relationship between market orientation and business performance (Baker & Sinkula 2009; Narver & Slater 1990). A positive relationship between market orientation and business performance was found by Aldas-Manzano et al. (2005), Slater and Narver (2000) and Sin, Tse, Yau, Lee, Chow and Lau (2000). More specifically, a positive relationship between customer orientation and business performance was found by Sorensen (2011). Although Sin et al. (2000) only found a positive relationship between market orientation and business performance, the customer orientation component showed a significant positive relationship with business performance. Therefore, considering the above arguments, we propose the following hypothesis:

H⁴: There is a significant relationship between the *Customer orientation* and the *Perceived success* of the participating agribusinesses.

Rewards

There is much disagreement over the relative value of intrinsic and extrinsic rewards from the perspective of encouraging entrepreneurial behaviours. It is argued by some that the challenge, autonomy, responsibility and status associated with bringing a new idea to fruition should be sufficient reward in itself. Others argue that there

is evidence that extrinsic rewards are indeed associated with greater innovativeness (Hayton 2005: 35). Entrepreneurial behaviour, however, calls for both intrinsic and extrinsic motivation (Mumford 2000: 324), and therefore compensation and reward systems for corporate entrepreneurs should emphasise financial gains (extrinsic), as well as formal recognition (intrinsic) for their achievements (Ireland, Kuratko & Morris 2006: 16; Kuratko, Ireland & Hornsby 2001: 63).

Concerning financial rewards, incentive programmes are increasingly developed to encourage entrepreneurial behaviour for both individuals as well as teams (Laursen & Foss 2003: 256). This strategy attempts to align individual motivation and goals with the objectives of the business (Schraeder & Becton 2003: 20), to reinforce risk-taking, to increase teamwork and to promote flexibility (Kuratko et al. 2011: 252). Other financial rewards, which are more linked to product success, include offerings such as profit sharing, bonuses, stock options and sharing patent rights (Mumford 2000: 324).

Creating unique non-financial rewards is also important. Often, entrepreneurial behaviour is motivated, not only by financial gains or power, but also by the intellectual stimulation and excitement of seeing ideas transformed into action (Davenport, Prusak & Wilson 2003: 63). In such instances, recognition rewards such as status, challenging work and autonomy could be offered as reward. Recognition rewards should furthermore be genuine, generous and customised to suit different types of people and their preferences (Thite 2004: 39). Businesses such as 3M and Intel, for example, grant the status of 'fellow' to employees who continually make important innovative contributions to the business (Davenport et al. 2003: 63).

The previous discussion on compensation and rewards mainly focuses on outcomes (i.e. a successful new innovation). However, given the inherent risk involved in entrepreneurial behaviour, businesses should also compensate and reward effort, irrespective of whether the project was a success or failure (Martins & Terblanche 2003: 71). This will importantly reinforce the notion that risk-taking and failure are acceptable (Ireland et al. 2009: 32).

The empirical research evidence regarding the link between rewards and business performance has been limited (Den Hartog & Verburg 2004: 60), as most studies include rewards as part of human resource practices. Although focusing on employees' extrinsic financial motivation (which consisted of formal and informal recognition, monetary and non-monetary bonuses and opportunities for advancement), Ferguson and Reio (2010) found a positive relationship with business performance. Incentive pay and profit sharing were also found to be strongly related to business performance (Den Hartog & Verburg 2004). Despite the limited empirical research, we propose the following hypothesis:

H⁵: There is a significant relationship between the *Rewards* systems and the *Perceived success* of the participating businesses.

Research methodology

Research approach

The research approach followed in this study was quantitative in nature, since quantitative research is used to answer questions about relationships among measured variables with the purpose of explaining, predicting and controlling phenomena (Leedy & Ormrod 2005: 94–95).

Primary data were collected by means of structured questionnaires and analysed by conducting an exploratory factor analysis and multiple linear regression. The research approach is deemed appropriate for gaining information to answer the overall research question and against which the hypotheses could be tested.

Research method

The research method will be discussed in the following sections, namely the measuring instrument, research participants, research procedure and statistical analysis.

Measuring instrument

The 29 items measuring the organisational-based factors and the 11 items measuring perceived success were compiled based on the following measuring instruments: *Corporate entrepreneurship climate instrument* (Kuratko et al. 2011), *Entrepreneurial climate* (Oosthuizen 2006), *Measuring intrapreneurship* (Hill 2003), *Corporate entrepreneurship assessment instrument* (Hornsby et al. 2002), *Intrapreneurship items* (Antoncic & Hisrich 2001), *Entrepreneurial orientation items* (Lumpkin & Dess 2001), *Organisation structure and strategic posture scale* (Covin & Slevin 1989) and *Entrescale* (Knight 1997). Respondents were requested to indicate the extent of their agreement with each statement posed by means of a five-point Likert scale (where 1 indicates that they strongly disagree and 5 that they strongly agree with the statement).

A section of the measuring instrument included the gathering of biographical information for possible future correlation with the opinions expressed in the survey. Respondents were asked to indicate their age group, gender, race, managerial level,

highest academic qualification and the division in which they worked according to predefined categories.

Research participants

The study population consisted of agribusinesses in South Africa. By means of stratified sampling, five of the largest agribusinesses (in terms of group turnover and group assets) and three smaller agribusinesses were selected for the study.

Within these agribusinesses, all the managers (senior, middle and junior levels) were requested to participate in the study. With the assistance of the Human Resource Managers in each of the agribusinesses, management levels were identified by means of the particular job grading system used by the particular agribusiness. A list of all the managers was provided by the Human Resource Manager for each of the participating agribusinesses.

Research procedure

The questionnaires were mailed or personally delivered to a designated person (in most instances the Human Resource Manager) in a particular agribusiness, who acted as a contact person and also assisted with the distribution and subsequent collection of the questionnaires. Respondents were requested to anonymously and voluntarily complete the questionnaire and to return the completed forms to the designated person. In total, 1 792 questionnaires were distributed, from which 533 usable questionnaires were returned, representing a response rate of 29.74%.

Statistical analysis

The data were firstly subjected to an exploratory factor analysis to assess the construct validity of the measuring instrument. This was followed by calculating the Cronbach's alpha coefficients to assess the reliability of the measuring instrument. Finally, the relationships between the independent and dependent variables were examined by means of multiple linear regression analysis. The above analyses made use of Statistica (Statsoft 2010) and PASW Statistics (2010).

Results and discussion

Demographic information

The majority of the participating managers in this study were between the ages of 30 and 39 years (32.5%), followed by the second highest group (31.2%) between the ages

of 50 and 59 years, and the third highest group (25.5%) between the ages of 40 and 49 years. Together, these three groups accounted for 89% of the total respondents. Males constituted approximately 84% of the respondents. A total of 53% of the respondents represented lower level management, with middle and higher management levels represented by 34% and 11%, respectively.

Construct validity of measuring instrument

In order to conduct the exploratory factor analysis, the data were divided into two models. The first model related to the dependent variable, whereas the second related to the independent variables. In identifying the factors to extract for each model, the percentage of variance explained and the individual factor loadings were considered.

With regard to the first model concerning the dependent variable, an Oblimin oblique rotation was performed on the principal components of the exploratory factor analysis. Two tests, namely Bartlett's test of sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy, were considered important in determining the appropriateness of the data for factor analysis (Gürbüz & Aykol 2009: 327). The data measuring the perceived success yielded a sampling adequacy of 0.863, and the Bartlett's test of sphericity yielded a p-value of smaller than 0.0001, indicating that patterns of correlations are compact and that factor analysis should yield reliable factors (Field 2009: 647).

To determine the number of factors to be extracted, Kaiser's criterion was used, namely to retain factors with eigenvalues greater than one (Field 2009: 647). All of the 11 items demonstrated sufficient discriminant validity by loading to a sufficient extent. Factor loadings greater than 0.35 were considered to be significant (Field 2009: 637; Stevens 1992: 382–384). The factor matrix of the 11 items is provided in Table 1.

Table 1 shows that the items expected to measure *Perceived success* split into two separate factors that were named *Business development and improvement* and *Business growth*. Three items loaded significantly on to both the factors (values greater than 0.35). Rather than deleting the items, it was decided to classify them under the factor with the highest loading. The correlation matrix for the two dependent variables indicated a correlation of 0.569 between the variables (Ellis & Steyn 2003: 53), confirming that an oblique rotation should have been used (Field 2009: 643).

For this study, *Business development and improvement* refers to highly committed employees viewed as the most valuable asset of the business, and the improvement of job satisfaction, image of the business, efficiency and effectiveness over the past few

Table 1: Oblimin rotated factor matrix: Dependent variable⁽¹⁾

Item ⁽²⁾	Factor 1: Business development and improvement	Factor 2: Business growth
Success 7	0.801	0.161
Success 9	0.791	0.008
Success 8	0.714	0.064
Success 10	0.510	-0.361
Success 5	0.471	-0.334
Success 11	0.449	-0.017
Success 6	0.382	-0.352
Success 2	-0.067	-0.848
Success 1	-0.151	-0.846
Success 3	0.213	-0.610
Success 4	0.397	-0.418
Cronbach's alpha	0.812	0.731

(1) Loadings greater than 0.35 were considered significant.

(2) The items included in the factor analysis are provided in the Appendix.

years with continued investments in research and development/innovative projects even during difficult economic periods. *Business growth* refers to growth in profits, turnover, market share and the competitive position of the business over the past few years.

To assess the discriminant validity of the 29 items measuring the selected organisational-based factors, an exploratory factor analysis was conducted. Two tests (i.e. Bartlett's test of sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy) were considered important in determining the appropriateness of the data for factor analysis (Gürbüz & Aykol 2009: 327). The data measuring the entrepreneurial orientation yielded a sampling adequacy of 0.916, and the Bartlett's test of sphericity yielded a p-value of smaller than 0.0001, indicating that patterns of correlations are compact and that factor analysis should yield reliable factors (Field 2009: 647).

To determine the number of factors to be extracted, Kaiser's criterion was used, namely to retain factors with eigenvalues greater than one (Field 2009: 647). All 29 items demonstrated sufficient discriminant validity by loading to a sufficient extent, as indicated in Table 2.

Assessment of selected organisational-based factors on perceived success

Table 2: Oblimin rotated factor matrix: Independent variables⁽¹⁾

Item ⁽²⁾	Factor 1: Strategic intent	Factor 2: Risk-taking	Factor 3: Autonomy	Factor 4: Customer orientation	Factor 5: Rewards
Vision2	0.732	0.065	0.136	-0.041	0.063
Vision3	0.676	-0.077	0.174	0.014	0.059
Risk3	0.562	-0.092	-0.037	0.108	0.022
Hrm1	0.499	0.181	0.071	0.173	-0.049
Innovative2	0.475	0.152	-0.064	0.044	0.292
Proactive4	0.454	0.196	-0.134	0.375	0.047
Vision1	0.452	0.041	0.121	0.017	0.369
Vision4	0.413	0.171	-0.003	0.134	0.241
Risk2	0.138	0.800	-0.099	-0.041	-0.114
Risk5	0.130	0.636	0.149	0.133	-0.027
Culture2	0.051	0.464	0.096	-0.010	0.248
Culture11	-0.161	0.443	-0.052	-0.031	0.263
Risk4	-0.060	0.410	0.298	0.092	0.195
Autonomy1	-0.102	-0.134	0.709	0.101	0.022
Autonomy2	0.266	-0.026	0.679	-0.84	0.077
Autonomy4	0.231	-0.147	0.662	0.030	0.115
Autonomy5	0.091	0.302	0.524	-0.061	-0.141
Culture19	0.006	0.126	0.512	0.154	0.032
Autonomy3	-0.240	0.320	0.389	0.132	0.118
Customer4	-0.046	0.030	-0.022	0.798	0.067
Customer6	-0.095	-0.079	0.065	0.723	0.127
Customer2	-0.029	-0.089	0.137	0.722	-0.031
Customer5	0.120	0.058	-0.215	0.654	-0.062
Customer1	0.119	0.068	0.169	0.567	-0.103
Customer3	0.337	-0.011	0.034	0.487	0.042
Hrm11	-0.013	-0.042	0.018	-0.019	0.790
Culture10	0.131	0.015	0.050	0.016	0.675
Hrm10	0.064	0.264	-0.113	-0.017	0.635
Culture9	0.113	-0.116	0.112	0.144	0.503
Cronbach's alpha	0.829	0.678	0.714	0.796	0.705

(1) Loadings greater than 0.35 were considered significant.

(2) The items included in the factor analysis are provided in the Appendix.

Applying the factor extraction criterion that the eigenvalues must be greater than one (Davis 2005: 446), five factors were extracted in the exploratory factor analysis, explaining 49.7% of the variance before rotation. After rotation, these factors could be identified as the theoretical dimensions of *Strategic intent*, *Risk-taking*, *Autonomy*, *Customer orientation* and *Rewards*.

Two items loaded significantly on to two factors (values greater than 0.35). The item Proactive4 loaded on both *Strategic intent* and *Customer orientation* and the item Vision1 loaded on to *Strategic intent* and *Rewards*. Rather than deleting the items, it was decided to classify them under the factor with the highest interpretation value, namely *Strategic intent*.

Factor one, labelled *Strategic intent*, comprised eight items. Four items (Vision2, Vision3, Vision4 and Vision1) that were used to measure the latent variable *Vision* loaded on to factor one, as expected. One item (Risk3), related to the latent variable *Risk-taking*, one item (Hrm1) related to the latent variable *Human resource management*, one item (Innovative2) related to the latent variable *Innovativeness*, and one item (Proactive4) related to the latent variable *Proactiveness* were also included in factor one, being regarded by respondents as being related to *Strategic intent*.

For the purposes of this study, *Strategic intent* refers to the extent to which the vision of the business is clear and articulated to employees, encourages innovative behaviour and helps in setting priorities. Furthermore, *Strategic intent* also refers to the extent to which leaders in the participating agribusinesses take a long-term view of their business by identifying future market trends and customer needs and then placing a strong emphasis on innovative products/services/processes.

The second factor, which comprised five items, was labelled *Risk-taking*. Three items (Risk2, Risk5, Risk4), out of the five items that were used to measure the latent variable *Risk-taking*, loaded on to this factor. Two items (Cul2, Cul11), measuring the latent variable *Culture*, also loaded on to the *Risk-taking* factor. In this study, *Risk-taking* refers to the business having a strong inclination towards high-risk projects, and when confronted with uncertainty, the business typically adopts a bold posture to maximise the probability of exploiting opportunities. Furthermore, the term 'risk-taker' is considered a positive attribute for employees, and consequently employees are encouraged to take calculated risks concerning new ideas without going through elaborate justification and approval procedures.

The third factor, labelled *Autonomy*, comprised six items. Five of the six items that were originally intended to measure the latent variable *Autonomy* (Autonomy1, Autonomy2, Autonomy4, Autonomy5, Autonomy3) loaded on to *Autonomy*, as expected. One item (Cul19), measuring the latent variable *Culture*, also loaded on to factor three, being regarded by respondents as being related to *Autonomy*. For

the purposes of this study, *Autonomy* refers to the extent to which employees are encouraged to manage their own work without continual supervision and have the flexibility to be creative and try different methods to do their jobs while treating mistakes as a learning experience.

Factor four consisted of six items and was labelled *Customer orientation*. All six of these items (Cus4, Cus6, Cus2, Cus5, Cus1, Cus3) were used to measure the latent variable *Customer orientation*. For the purposes of this study, *Customer orientation* refers to attaching a high priority to the needs of customers, and developing products and services with customers in mind, resulting in the retention of loyal and satisfied customers.

The final factor, labelled *Rewards*, consisted of four items. Two items (Cul10, Cul9) that were used to measure the latent variable *Culture* loaded on to factor five. Two items (Hrm11, Hrm10) used to measure the latent variable *Human resource management* were also included, being regarded by respondents as also being related to *Rewards*. In this regard, *Rewards* refers to the availability of financial support for the development of innovative ideas and projects and the granting of financial and non-financial rewards for entrepreneurial behaviour.

The wording of the statements (items) originally measuring the five latent variables is provided in the Appendix. The exploratory factor analysis, together with the interpretability of the factors, provides some evidence of construct validity.

Reliability of measuring instrument

To assess the internal consistency between the items of the measuring instrument, Cronbach's alpha coefficients were calculated (Bryman & Bell 2007: 164). Coefficient alpha represents internal consistency by computing the average of all split-half reliabilities for a multiple-item scale (Zikmund & Babin 2007: 322). The coefficient varies between 0 for no reliability and 1 for maximum reliability (Kent 2007: 142). The results in Table 2 suggest that the proposed instrument is reliable with no factors below the Cronbach's alpha value of 0.7.

Modified hypotheses

As a result of the exploratory factor analysis, it was deemed necessary to reformulate the original hypotheses or the hypothesised model (Figure 1), which are summarised below:

H^{1a}: There is a significant relationship between the *Strategic intent* of the business and its *Business development and improvement*.

- H^{1b}: There is a significant relationship between the *Strategic intent* of the business and its *Business growth*.
- H^{2a}: There is a significant relationship between the *Risk-taking* propensity in the organisation and the *Business development and improvement*.
- H^{2b}: There is a significant relationship between the *Risk-taking* propensity in the organisation and *Business growth* in the participating organisations.
- H^{3a}: There is a significant relationship between *Autonomy* in the workplace in the organisation and the *Business development and improvement*.
- H^{3b}: There is a significant relationship between *Autonomy* in the workplace in the organisation and *Business growth* in the participating organisations.
- H^{4a}: There is a significant relationship between the *Customer orientation* of the organisation and the *Business development and improvement*.
- H^{4b}: There is a significant relationship between the *Customer orientation* in the organisation and *Business growth* in the participating organisations.
- H^{5a}: There is a significant relationship between the *Rewards* system of the organisation and the *Business development and improvement*.
- H^{5b}: There is a significant relationship between the *Rewards* system of the organisation and *Business growth* in the participating organisations.

The modified hypothesised model is illustrated in Figure 2.

Relationship between the constructs

In order to determine whether the independent variables (i.e. *Strategic intent*, *Risk-taking*, *Autonomy*, *Customer orientation* and *Rewards*) have an influence on the dependent variables *Business development and improvement* and *Business growth* factors, a multiple regression analysis was performed. Factor scores for each participant were computed as the average of all items contributing to the relevant factor, automatically replacing missing values by means of substitution. The results of the multiple regression analysis for the influence of the independent variables on the dependent variables are presented in Tables 3 and 4, respectively. A normal probability plot on the residuals of this fit confirmed the assumption of normality.

Table 3 indicates that, in practice, a significant percentage (64.8%) of the variation in the *Business development and improvement* of the participating organisations is explained by the five selected organisational-based factors (i.e. *Strategic intent*, *Risk-taking*, *Autonomy*, *Customer orientation* and *Rewards*).

Assessment of selected organisational-based factors on perceived success

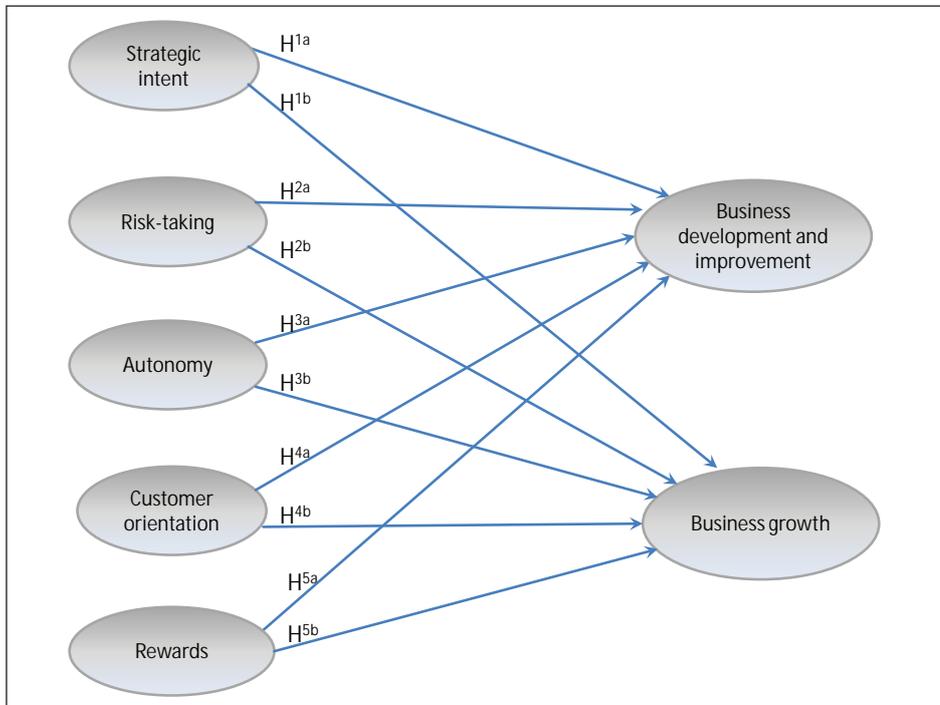


Figure 2: The modified hypothesised model

Table 3: Multiple regression results: impact of the independent variables on the dependent variable *Business development and improvement*

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. error	Beta		
(Constant)	0.338	0.111		3.032	0.003
Strategic intent	0.362	0.036	0.376	10.109	0.000**
Risk-taking	-0.013	0.028	-0.014	-0.457	0.648
Autonomy	0.167	0.029	0.018	5.847	0.000**
Customer orientation	0.325	0.030	0.347	10.700	0.000**
Rewards	0.090	0.026	0.115	3.514	0.000**

R² = 0.648 (** p<0.05)

The multiple regression analysis indicates significant positive relationships between the independent variables *Strategic intent* ($p < 0.000$), *Autonomy* ($p < 0.000$), *Customer orientation* ($p < 0.000$) and *Rewards* ($p < 0.000$) and the dependent

variable *Business development and improvement*, respectively. No relationship could be found between the independent variable *Risk-taking* and *Business development and improvement*.

The hypotheses that there is a significant relationship between the variables *Strategic intent* (H^{1a}), *Autonomy* (H^{3a}), *Customer orientation* (H^{4a}), *Rewards* (H^{5a}) and *Business development and improvement*, respectively, were therefore accepted. The hypothesis that there is a significant relationship between the independent variable *Risk-taking* (H^{2a}) and *Business development and improvement* was, however, not accepted.

Table 4: Multiple regression results: impact of the independent variables on the dependent variable Business growth

Model	Non-standardised coefficients		Standardised coefficients	t-value	p-level
	B	Std. error	Beta		
(Constant)	2.112	0.141		14.364	0.000
Strategic intent	0.332	0.045	0.370	7.295	0.000**
Risk-taking	-0.013	0.035	-0.016	-0.380	0.704
Autonomy	-0.030	0.036	-0.035	-0.830	0.407
Customer orientation	0.267	0.038	0.307	6.332	0.000**
Rewards	0.015	0.032	0.021	0.461	0.645

R² = 0.345 (** p<0.05)

Table 4 indicates that, according to Cohen (1998) and Steyn (2002), an R² is, in practice, significant, indicating that an important percentage (34.5%) of the variation in *Business growth* is explained by the five selected entrepreneurial organisational variables (i.e. *Strategic intent*, *Risk-taking*, *Autonomy*, *Customer orientation* and *Rewards*).

The multiple regression analysis indicates significant positive relationships between the independent variables *Strategic intent* ($p < 0.001$) and *Customer orientation* ($p < 0.001$) and the dependent variable *Business growth*, respectively. Negative relationships were found between the independent variables *Risk-taking* and *Autonomy* and the dependent variable *Business growth*.

The hypothesis that there is a significant relationship between the selected organisational-based independent variables – i.e. *Strategic intent* (H^{1b}) and *Customer orientation* (H^{4b}) – and the dependent variable *Business growth*, respectively, was therefore accepted. The hypothesis that there is a significant relationship between the independent variables *Risk-taking* (H^{2b}), *Autonomy* (H^{3b}) and *Rewards* (H^{5b}) and *Business growth* was, however, not accepted.

Conclusion and recommendations

The objective of this study was to investigate the relationship between selected organisational-based factors that enhance corporate entrepreneurship and the perceived success of agribusinesses in South Africa. The results show that managers in the participating agribusinesses perceived the following selected organisational-based factors as influencing their *Business development and improvement* (i.e. *Strategic intent, Autonomy, Customer orientation* and Rewards). Expressed differently, agribusinesses that make corporate entrepreneurship their strategic intent through a strong emphasis on innovative products/services/processes and articulating this vision to all employees to enlist commitment and to provide direction to employees, encourage their employees to manage their own work without continual supervision and allow flexibility to be creative and try different methods to do their jobs, attach a high priority to the needs of customers and customer retention, provide financial support for innovative ideas and grant financial as well as non-financial rewards for entrepreneurial behaviour, are more likely to experience an increase in organisational efficiency and effectiveness, improved image, as well as increased job satisfaction and highly committed employees.

A significant positive relationship was also found between the organisational-based factors *Strategic intent* and *Customer orientation* and the *Business growth* of the participating agribusinesses. Concerning strategic intent, this implies, in practice, that agribusinesses that employ corporate entrepreneurship as their strategic intent through a strong emphasis on innovative products/services/processes and articulating this vision to all employees to enlist commitment and to provide direction to employees will experience an increase in profits, turnover, market growth and an improvement in the competitive position of the business. This finding is consistent with the findings of Obloj et al. (2010), who also found a positive relationship between the entrepreneurial strategic intent of a business and its turnover, profits and market share.

The significant positive relationship found between *Customer orientation* and *Business growth* practically means that those agribusinesses that place a high priority on customers by developing and providing products and services that satisfy the needs of their customers will experience an increase in profits, turnover, market share and competitive position. This finding is supported by empirical findings in the literature. Sin et al. (2000), for example, found a significant positive relationship between *Customer orientation* and business performance. More specifically, Baker and Sinkula (2009) found a significant positive relationship between *Customer orientation* and *Business growth* (turnover and profit).

Both *Autonomy* and *Rewards*, although showing significant relationships with *Business development and improvement*, showed no significant relationship with *Business growth*. A possible explanation is that the granting of autonomy to employees and providing rewards for entrepreneurial behaviour may improve employee morale and commitment, but may not necessarily lead to an improvement in turnover or profitability.

To enhance corporate entrepreneurship within agribusinesses, a number of recommendations are put forward. Firstly, because corporate entrepreneurship has its roots in the strategy-making process, it is recommended that entrepreneurship become the strategic way of thinking (dominant logic) within agribusinesses. This can be done by specifically including the word 'entrepreneurship' in the vision statement of the business, setting goals and developing strategies for entrepreneurship. This vision must be clear and articulated to all employees. The focus of the business then becomes opportunity identification, discovery of new sources of value, and product and process innovation that could lead to greater success.

It is the task of management to create an environment in which workplace autonomy can be fostered. Furthermore, autonomy must actually be granted to employees to enable them to exploit new opportunities and ideas. In this regard, task objectives should be framed in such a way that they are clear, but defined in broad terms to allow employees the freedom to pursue a number of different approaches to perform their tasks.

The aversion to risk-taking in agribusinesses must be addressed. Risk-taking behaviour needs to be encouraged in agribusinesses by articulating to employees that calculated risk-taking behaviour is acceptable. Naturally, employees will be sceptical, and it may be necessary to set boundaries for risk-taking behaviour by explaining the types of risk-taking behaviour that will be acceptable. Agribusinesses must develop rules and procedures regarding risk-taking behaviour and identify areas where risk-taking would be acceptable as well as the level of risk that would be tolerated.

Customers today are highly informed and more demanding than ever before. We therefore recommend that agribusinesses implement customer orientation strategies to enhance the collection and use of customer information and strategies to build personal customer relationships. For example, representatives of agribusinesses must regularly visit farmers and be alert to any needs that farmers may have.

To encourage entrepreneurial behaviour, seed funds must also be provided to develop promising ideas. Furthermore, the compensation and reward systems of agribusinesses should emphasise financial gains as well as the formal recognition of employee achievements. Financial rewards may, for example, be in the form of bonuses, profit sharing and incentive programmes. Formal recognition may be in the form of status or challenging work. A 'best idea' award could, for example, be presented to the employee with the most promising ideas at a year-end function.

Finally, in today's dynamic and uncertain competitive environment, successful agribusinesses will be those in which entrepreneurial behaviour will be used to explore opportunities to build a foundation for future success.

Limitations and suggestions for further research

This study attempted to make a contribution to the body of knowledge on the relationship between selected organisational-based factors and the perceived success in agribusinesses. Although there is general consensus in the literature that an environment supportive of corporate entrepreneurship is important, the organisational-based factors have not been fully explored and determined and have also not been related to business success. Furthermore, there is little consensus on the underlying dimensions of business success. Success may thus depend upon the indicators used to assess success. More comprehensive research is therefore still needed to clarify the underlying dimensions of business success.

The sampling method used to determine the agribusiness study population was a non-probability sample. Furthermore, only agribusinesses previously known as agricultural co-operatives were considered for this study. The findings can thus not be considered to be representative of all agribusinesses in South Africa. Care should therefore be exercised in the interpretation and utilisation of the results, and the findings of the study cannot be generalised to all agribusinesses. In other words, typical agribusinesses may not be represented in the sample.

The low response rate from some of the agribusinesses may also skew the findings towards those agribusinesses with a higher response rate.

Another limitation is that this study relied entirely on the perceptions of the respondents. To close the gap between perception and reality, future research could, for example, be designed to collect actual data on business success such as turnover, profits and market share.

Finally, in this study, the exploratory factor analysis of the measuring instrument assessing the selected organisational-based factors and perceived success in agribusinesses provides some evidence of construct validity and reliability. Further research is, however, needed before the measuring instrument can be utilised to diagnose these issues in corporate businesses.

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Appendix

Items measuring the dependent variable

Item	Statement
BUSINESS DEVELOPMENT AND IMPROVEMENT	
Success7	In our business, employees are viewed as the most valuable asset of the business.
Success8	Our employees are highly committed to our business.
Success9	The morale (job satisfaction) of our employees has improved over the past few years.
Success10	The image (stature) of our business, relative to our competitors, has grown over the past few years.
Success5	The effectiveness (doing the right things) of our business has improved over the past few years.
Success11	During difficult economic periods, investments in research and development/ innovative projects continue and no significant financial cuts are made.
Success6	The efficiency (doing things right) of our business has improved over the past few years.
BUSINESS GROWTH	
Success2	Our business has experienced growth in profits over the past few years.
Success1	Our business has experienced growth in turnover over the past few years.
Success3	Our business has experienced growth in market share over the past few years.
Success4	The competitive position of our business has improved over the past few years.

Items measuring the independent variables

Item	Statement
STRATEGIC INTENT	
Vis2	Our business's vision and strategies are clear to me.
Vis3	The vision and strategies of our business often help me in setting priorities.
Risk3	Owing to the environment, our business believes that bold, wide-ranging acts are necessary to achieve the business's objectives
Hrm1	My job description clearly specifies the standards of performance on which my job is evaluated.
Inn2	Our business places a strong emphasis on new and innovative products/ services/ processes.
Proactive4	Our business continuously monitors market trends and identifies future needs of customers.
Vis1	Our business's vision/mission encourages creative and innovative behaviour.
Vis4	Our leaders take a long-term view of our business and articulate their vision to all levels in the business.

Assessment of selected organisational-based factors on perceived success

Item	Statement
RISK-TAKING	
Risk2	In general, our business has a strong inclination towards high-risk projects.
Risk5	The term "risk-taker" is considered a positive attribute for employees in our business.
Cul2	Managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.
Cul11	Our business supports many small and experimental projects, knowing that some will ultimately fail.
Risk4	Employees are often encouraged to take calculated risks concerning new ideas.
WORKPLACE AUTONOMY	
Aut1	I have enough autonomy in my job without continual supervision to do my work.
Aut2	Our business allows me to be creative and try different methods to do my job.
Aut4	Employees in our business are encouraged to manage their own work and have flexibility to resolve problems.
Aut5	I seldom have to follow the same work methods or steps while performing my major tasks from day to day.
Cul19	In our business mistakes are regarded as learning experiences.
Aut3	Employees in our business are allowed to make decisions without going through elaborate justification and approval procedures.
CUSTOMER ORIENTATION	
Cus4	Our customers are satisfied with our business's product/service offerings.
Cus6	Our customers are loyal to our business.
Cus2	Our business has a high customer retention rate.
Cus5	Employees in our business understand the needs of our customers.
Cus1	Taking care of customers is our business's top priority.
Cus3	Our business develops product/services with customers in mind.
REWARDS	
Hrm11	Employees championing successful innovative projects are rewarded beyond the standard rewarding system and receive additional compensation for their ideas and efforts.
Cul10	There are several options within our business for employees to get financial support for developing their innovative projects and ideas.
Hrm10	Our business has systems that offer both financial and non-financial rewards for entrepreneurial behaviour.
Cul9	Money is usually available to get new ideas (products, processes) off the ground.