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## VICTORIAN SMES' PERCEPTIONS TOWARDS IT STRATEGY FRAMEWORKS USE, BENEFITS AND BARRIERS: IMPLICATIONS FOR E-BUSINESS

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### ABSTRACT

IT strategy development frameworks are crucial for adopting innovative IT and e-business solutions for SMEs. However, empirical studies on the use of such frameworks and benefit/barriers experienced by SMEs from the use of these frameworks are limited. We thus report the findings of a survey among a group of SMEs operating in Victoria. We find that only three frameworks are occasionally used by the surveyed SMEs. The implications of these findings for both IT and e-business contexts are discussed.

**Keywords:** IT strategy, e-business, SMEs, IT strategy development frameworks

### INTRODUCTION

Worldwide, Small and Medium-Sized Enterprises (SMEs) play a significant role in strengthening national economies. They contribute enormously by offering new jobs, introducing technological improvements, increasing competitiveness, and providing more options of the services and products [16]. In Australia too, SMEs play an important role as they constitute the largest portion of the employment sector with around 3.6 million jobs and represent 95% of the total number of Australian businesses [6]. Victoria represents an important state of Australia, which according to Business Victoria (2011), had 482,883 SMEs in 2007. These represent 25% of the national total and 96% of businesses in the state.

Despite significant contributions of SMEs worldwide (including Australia), they encounter many challenges which demand for innovative IT and e-business solutions. Information Technology strategies (which also encompass e-business plans and vision) can help SMEs to improve their efficiency and competitive capabilities [3] [25] by better planning and managing the adoption and use of IT and e-business solutions. We however argue that IT/ e-business solutions and infrastructure need to be strategically managed to ensure that they provide meaningful benefits to SMEs. According to Blili and Raymond [4], effective management of IT can be greatly facilitated by developing an appropriate IT strategy following some formal approaches and frameworks. Little however is known about: (a) those IT strategy frameworks which are used by SMEs for both IT and e-business applications context; (b) how frequently SMEs use these

frameworks; and (c) the benefits and barriers they experience in using these frameworks. In addition, it is not clearly known whether SMEs' level of use of these frameworks varies depending on their size and the industry sector in which they operate. This is particularly true for Victoria whose economy is shaped by SMEs to a considerable extent. We believe that an examination of the role of organisation size and sector type on the SMEs use of IT strategy frameworks may provide IT researchers and SME management with an opportunity to improve their understanding on whether existing IT frameworks (which are primarily targeted at large organisations) need to be adapted by addressing the unique characteristics of various industries and organisation size. We have thus initiated this study (which involves developing a rigorous survey instrument that was distributed among 480 SMEs located in Victoria) in order to address the above mentioned concerns. Based on the survey responses, we have found that none of the popular IT/strategy frameworks are intensively used by the surveyed SMEs and that only three such frameworks including Critical Success Factors (CSF), Transaction Cost Economics (TCE) and Balanced Scorecard are occasionally used. Although the surveyed SMEs have acknowledged the experience of several benefits, a number of barriers are also experienced by them. Furthermore, there is evidence of the existence of significant differences in some selected benefits and barriers between manufacturing and non-manufacturing SMEs. The implications of these findings for both IT and e-business contexts are discussed.

### BACKGROUND LITERATURE

**IT Theoretical Foundation:** Our review of the IT strategy development practices reported in the existing literature indicates the presence of a wide range of frameworks, most of which were initially developed for the large organisation context. However, several scholars e.g. [4] [20] [30], have adapted, developed and/or amalgamated some of these frameworks to suit the SME situation. These frameworks, which can be applied for e-business strategy as well, can be classified into three categories: awareness frameworks, opportunity frameworks and positioning frameworks [10]. Awareness frameworks aim to demonstrate how organisations can use IT for strategic advantage and to assist them in evaluating the impact of IT their business. This category has three subsets. In contrast,

opportunity frameworks aim at clarifying the opportunities and business objectives and specify how organisations can use IT strategically. These frameworks are more instrumental and practical than awareness frameworks. There are four subsets of this category. Finally, positioning frameworks aim to assist top management to determine the significance and characteristics of existing IT resources. They help executives to better understand IT and how it can be managed in their organisations. This category includes three subsets: scaling frameworks, spatial frameworks and temporal frameworks. Using this taxonomy, we have categorised a set of IT strategy frameworks which we have identified from the literature. This is shown in Table 1. We have included in this table many more recent frameworks which were not initially identified by [10]. However, we have only included those frameworks which are known to suit SMEs. We observe that most of the frameworks fall into the systems analysis

frameworks and business strategy frameworks categories. We also note that the suitability of some IT frameworks (in Table 1) was examined by [21] for the UK SME context. According to them, the awareness frameworks are of value for SMEs because they encourage and enable SMEs to understand their environment. These frameworks help SMEs to set their business goals effectively and to decide the changes required to achieve these goals. In the opportunity frameworks, the systems analysis frameworks and business strategy frameworks are very useful for SMEs. On the other hand, application search methods and technology-fit frameworks are less useful for SMEs because they depend on extracting information from a business strategy, which may not always exist for many SMEs. The positioning frameworks are the least applicable frameworks for SMEs, except scaling frameworks, which help SMEs to identify the role of information systems [21].

Table 1. IT strategy frameworks for SMEs based on [10] taxonomy

	Classification	Examples of Frameworks
Awareness Frameworks	Refocusing Frameworks	Strategic Opportunities Framework,
	Impact Frameworks	Porter's Generic Strategies
	Scoping Frameworks	Information Intensity Matrix, 3D Model of IS Success
Opportunity Frameworks	Systems Analysis Frameworks	Porter's Value Chain, PESTEL, Soft Systems Methodology, Strategic Options Development and Analysis
	Application Search Methods	Customer Resource Life Cycle
	Business Strategy Frameworks	Five-Forces Model, CSF, MIT90, TCE, Balanced Scorecard
Positioning Frameworks	Scaling Frameworks	Strategic Information Systems Grid
	Spatial Frameworks	Sector Information Management Grid
	Temporal Frameworks	Stages of Growth Models

**IT Strategy Benefits and Barriers:** When an organisation successfully uses IT strategy frameworks (Table 1), they can expect to experience a range of benefits. According to Earl [10], facilitating the alignment of IT strategy with the organisation's objectives can be considered one of the most important benefits of developing IT strategy. Levy et al. [22] argue that innovative firms usually have a strong integration between their IT strategies and business strategies, and the lack of alignment between business and IT strategies happens where firms do not recognize the role of IT in achieving a business strategy. Developing IT strategy can also provide enormous assistance for organisations to gain competitive advantages. This is particularly true for SMEs which face economic and competitive challenges [3] [17]. Enhancing organisational efficiency is a significant goal for many organisations, and by having an adequate IT strategy this goal can be achieved [23]. It has been reported that successful introduction of IT strategy helps SMEs improve their efficiency in such aspects as providing faster deliveries, enabling quick response, offering a better customer service and better decision making [3], and helping SMEs to

increase resources' utilisation and "delivery on time" [26]. IT strategy development also allows organisations to have better IT governance and to establish the required IT architectures and policies [27] [10]. Furthermore, developing an IT strategy can improve the organisation's performance such as growth of sales; availability of financial resources; profitability for the long term; and customers satisfaction [29] and enhance the organisation's ability to be innovative [21]. SMEs, according to [4], are more innovative than large organisations because of their flexibility and willingness to adopt any new approach. Moreover, the rapid change of technology can be considered as a motivator for SMEs to develop an effective IT strategy to avoid the risk of technological obsolescence [4] [31] and to overcome the most significant problem in SMEs contexts which is resources limitations [17].

The benefits (mentioned above) are often counter-balanced by barriers which SMEs face in developing IT strategy. We argue that SMEs are unable to effectively plan, control and implement their IT strategy when these barriers are not adequately addressed. Our view is in line with the opinions expressed by [4]. Based on our review of the

relevant literature, we have identified several barriers. According to Ballantine et al. [2] and Kyope [18], absence of a clear business strategy is a major barrier to developing IT strategy for many of SMEs. SMEs usually have an implicit business strategy in their owners' minds and that is reflected on IT planning. IT planning in SMEs is focused on improving the effectiveness and efficiency of activities more than competitiveness. This focus appears as an attempt to enhance the basic administrative and transaction processes [20]. Another barrier is the limited financial and human resources which leads SMEs to use IT for operational purposes but not much for strategic purposes [17]. Vulnerability of the organisation in relation to competitive forces such as the power of customers and suppliers is another barrier, as SMEs are highly directed by the power of their key customers and suppliers [2] [4]. Lack of relevant IT experience and limited expectations of IT could hinder the development of IT strategy for SMEs [2] [17] [18]. Finally, as a result of the insufficient human and financial resources and the influence of the competitive environment, SMEs usually adopt a focus on immediate day-to-day operations and have a lack of time and other resources to develop IT strategy for long term.

**Gap in the literature:** We acknowledge the contribution of the scholars who have examined various types of IT strategy frameworks, their suitability for SMEs context, and how SMEs can expect to receive benefits and encounter hurdles. However, to the best of our knowledge, few empirical studies have been undertaken for the Australian context (an exception is the work of [26] which was done a decade ago). In particular, we do not know to what extent the IT strategy frameworks (which are also consulted for e-business adoption and use) are currently used by SMEs operating in Victoria and what benefits/barriers are experienced by them. Hence, there is a need to explore these issues including examining the role of SME size and industry type on the use, benefits and barriers.

#### RESEARCH OBJECTIVES AND HYPOTHESES

Given the literature gaps identified earlier, our research sought to explore the current situation of Victorian SMEs in relation to their level of use of IT strategy frameworks and their level of experience of perceived benefits and barriers to IT strategy development. It also aimed to determine whether there were any significant differences in the perceptions towards IT strategy frameworks' use, benefits and barriers between SMEs according to their size and industry sector.

The term 'SME' includes both small and medium-sized enterprises. For the purposes of the research, it is important to define what constitutes a 'small

enterprise' and a 'medium-sized enterprise', as these definitions vary by country. The Australian Bureau of Statistics' [1] definition of small enterprise is one that has 1-20 employees; and a medium-sized enterprise is one that has 21-200 employees. In contrast, according to the European Union's [11] definition of SMEs, small enterprises are organisations with less than 50 employees and medium-sized enterprises have 50-250 employees. The current research initially adopted the ABS definitions of small and medium-sized enterprises.

In small enterprises, due to limited resources, expertise and understanding about how to develop and utilise IT strategy, we can expect the presence of a low level of use and appreciation of benefits and barriers. Furthermore, the degree of focus on daily business operations is likely to be greater in small enterprises as opposed to that of medium-sized enterprises. This in turn could discourage small enterprises from spending time developing IT strategies. It has been reported in the literature that the pressures yielding from globalisation and the sharp advance in technology allows small organisations, which have higher flexibility than larger organisations, to respond more effectively to these pressures [12] [13]. This argument is in line with [4] who believe that SMEs, in general, are more innovative than large organisations due to the flexibility and ease of adopting any new technology/approach. Based on this argument, we can expect a significant difference in the level of use and perception towards benefits and barriers associated with IT strategies between small and medium-sized enterprises. Thus, the following three hypotheses were proposed:

- H1:** The level of use of IT strategy frameworks significantly differs between small and medium-sized enterprises.
- H2:** The level of perceived benefits from developing IT strategy significantly differs between small and medium-sized enterprises.
- H3:** The level of encountered barriers to developing IT strategy significantly differs between small and medium-sized enterprises.

The business sector in which organisations are operating can be a significant factor for their level of IT use and acceptance [14]. Furthermore, Premkumar, and Roberts [28] argue that the organisations that operate in a competitive sector will have different motivations and issues about adopting any innovation, and specifically, belonging to a high technological competitive sector will require more advanced technologies and higher amount of investment in IT compared to a lower competitive sector. Thus, we argue that the degree of competition and uncertainty is likely to be greater in

the manufacturing sector as opposed to other sectors. Moreover, the amount of investment necessary to support operations tends to be higher in the manufacturing sector. This in turn may suggest that management of manufacturing companies would be more willing to pay attention to the development of IT strategy to better align them with their business strategy. They are also more likely to appreciate the benefits and barriers to developing IT strategy. These lines of argument are in broad agreement with those suggested by [17] [19]. Therefore, the following three hypotheses were proposed:

- H4:** The level of use of IT strategy frameworks significantly differs between manufacturing and non-manufacturing SMEs.
- H5:** The level of perceived benefits of developing IT strategy significantly differs between manufacturing and non-manufacturing SMEs.
- H6:** The level of encountered barriers to developing IT strategy significantly differs between manufacturing and non-manufacturing SMEs.

#### RESEARCH APPROACH

We adopted an exploratory survey research approach to address our research objectives. This was because we sought to explore a current situation of IT strategy among Victorian SMEs. Our research was also designed to be a theory-building exercise because we aimed at building theoretical propositions on relationships linking organisational size and industry type with IT strategy development and the perceived benefits and encountered barriers. Therefore, according to [9] [34], an exploratory survey was quite appropriate for our purpose.

The survey instrument used in our study was developed using a rigorous three-stage process. Stage I involved a review of the relevant literature on IT strategy development in the SME context to identify a range of IT strategy development frameworks, perceived benefits and barriers. An initial survey instrument was developed from the literature review. Stage II involved the participation of three Australian academic staff (as domain experts) whose teaching experience involved IT strategy to review the content and structure of the instrument. Stage III involved the participation of three PhD students from an Australian university whose area of current research involved examining IT strategy in SMEs. These students helped us further refine our instrument by identifying those items which were difficult to understand. The refined instrument included three variables: the degree of use of participating SMEs with IT strategy development; and the degree of perceived benefits

and of barriers with developing IT strategy. The first variable was measured on 5-point scale (where 5 meant 'intensively used', 4 'usually used', 3 'somewhat used', 2 'not used at all' and 1 'unknown'). The benefits and barriers were also measured on a 5-point scale ranging from 1 'strongly disagree' to 5 'strongly agree'. In addition, a qualitative analysis of respondents' free comments was also incorporated at the end of each variable used in the survey questionnaire. This assisted us, to some extent, in exploring and interpreting the quantitative findings [9].

The contact details of the targeted SMEs were obtained through the Australian Compass Database, accessed via the State Library of Victoria. From this database, we were able to extract a sample restricted by geographic area (Victoria) and size of the enterprise. Data was collected through a postal survey. The targeted population was IT managers or members of senior management who were generally responsible for the IT function in SMEs. From this population, we selected a random sample of 480 Victorian SMEs. The unit of analysis was the senior managers of the SMEs which suggests a good quality of data source [33]. Questionnaires were distributed to these SMEs. Of the 480 questionnaires circulated, 65 were "returned to sender" due to change of address. Hence, the net sample size was thus reduced to 415. Thirty-four questionnaires were filled in and returned, yielding a response rate of 8.2%. At a first glance, although this can appear to be disappointing, but some scholars such as [15] state that there is a debate about what is a reasonable and acceptable response rate in social research. They argue that response rate for the mail survey is related to the demographics of the sample. Moreover, many IT researchers usually face a problem of low response rate. For example, the response rate in [32] study of executive information system users was about 10% and was still considered an acceptable rate. In Australia, [24] conducted a mail survey to study IT investment and had 7% response rate. According to them, the low response for a postal survey is not a surprise and is quite common in the IT area. Due to small size of collected data, the assumptions about normality and equality in variants cannot be assumed and hence, non-parametric analysis was applied using SPSS software.

#### EMPIRICAL FINDINGS AND DISCUSSION

A brief profile of the survey respondents and the SMEs they represented is shown in Table 2. A slight dominance of manufacturing organisations is observed in our sample. To our surprise, we did not find any organisation which was small in size according to the Australian Bureau of Statistics (ABS) definition.

Table 2. Characteristics of Responding Organizations

Characteristics	Frequency	Percent	Characteristics	Frequency	Percent
Job Title			Industry Sector		
IT manager	19	55.9	Manufacturing	23	67.6
Director	9	26.5	Non-Manufacturing	11	32.4
Finance Manager	6	17.6	Service (4)		
Number of Employees			Construction (3)		
> 20	0	0	Retail (2)		
20–50	6	17.6	ICT vendor (2)		
51–200	28	82.4			

A summary of how the surveyed SMEs are using IT strategy development frameworks is shown in Table 3. The findings indicate that none of the IT strategy development frameworks (identified in the background literature section) are intensively used by the surveyed SMEs. One qualitative question asked the respondents to add any further comments about IT/strategy development in their SMEs. Some of the respondents acknowledged that these frameworks are well recognised in the academic discipline but are less known in the SME context under these terms and names. Furthermore, some respondents reported that these frameworks could be more applicable for large organisations rather than SMEs. These views expressed by some survey respondents shed insight into the limited use of IT strategy development frameworks among the SMEs. Table 3 further indicates that as opposed to awareness and positioning frameworks, opportunity frameworks tend to be the most popular frameworks, although they are occasionally used by SMEs. In particular, the subset of business strategy frameworks and application search methods seem to be known to SMEs. The popularity of business strategy frameworks is consistent with the observations of [21]. However, unlike their finding, awareness frameworks were not being used by our responding SMEs.

As indicated earlier, all the surveyed organisations were from medium-sized enterprises, according to Australian (ABS) definition of SMEs. As such, it was not possible to make direct comparisons between small enterprises and medium-sized enterprises regarding their use of IT strategy frameworks. Thus, drawing on the [11] definition, a comparison was made between small organisations (fewer than 50 employees) and medium organisations (between 50 and 250 employees) to find out the influence of organisation size on the use of three frameworks which were found to be used by the surveyed SMEs. The results of the Mann-Whitney test indicate that organisations with fewer than 50 employees use significantly less such frameworks as the TCE (Mann-Whitney  $U=41.5$ , Wilcoxon  $W=62.5$ ,  $Z=-1.99$ ,  $p=0.046$ ) and CSF methods (Mann-Whitney  $U=43.0$ , Wilcoxon  $W=64.0$ ,  $Z=-1.90$ ,  $p=0.05$ ) than do

organisations with more than 50 employees. Regarding industry sector, no significant difference was observed between manufacturing and non-manufacturing SMEs. Hence, hypothesis H1 was accepted but hypothesis H4 was rejected.

Table 3. Degree of Use of IT Strategy Development Frameworks

Subset	Framework	Mean rating
Business Strategy Frameworks	Balanced Scorecard	2.55
	CSF	2.97
	TCE	3.00

The perceived benefits of developing IT strategy by the surveyed SMEs are summarised in Table 4. A broad agreement with all the key benefits identified from the literature is observed. The top three benefits were: (a) IT strategy enables achievement of organisational efficiency; (b) IT strategy facilitates alignment between business and IT strategies; and (c) IT strategy improves organisational performance. In contrast, enhancing organisation innovation and overcoming the resource limitation were ranked the least important benefits for these SMEs.

Table 4. IT Strategy Perceived Benefits

Perceived Benefits	Mean Rating
Enables achievement of organisational efficiency	4.40
Facilitates alignment between business and IT strategies	4.20
Improves organisational performance	4.11
Provides a competitive advantage	3.88
Helps avoid the risk of technological obsolescence	3.79
Enhances IT governance	3.70
Helps overcome resource limitations	3.76
Enhances organisational innovation	3.61

The top three benefits are consistent with the view of [4] who argued that SMEs use IT to help SMEs

improve administrative work. In particular, the significance of organisational efficiency for SMEs is supported by [3] findings. They found that efficiency received a high priority in terms of on-time delivery, better decision-making, improved supply chain management, enhanced customer satisfaction, lower cost and reduced paperwork.

To examine the influence of industry sector on the level of perceived benefits of developing IT strategy, a comparison was made between the manufacturing and non-manufacturing industry sectors. The results suggest that in general, as opposed to manufacturing SMEs, non-manufacturing SMEs perceived greater benefits. In particular, non-manufacturing SMEs perceived greater intensity of benefits with: (a) alignment between business and IT strategies (Mann-Whitney  $U=62.5$ , Wilcoxon  $W=338.5$ ,  $Z=-2.53$ ,  $p=0.011$ ); and (b) obtaining competitive advantage (Mann-Whitney  $U=77.5$ , Wilcoxon  $W=353.5$ ,  $Z=-1.92$ ,  $p=0.05$ ). The observation that non-manufacturing companies expected greater alignment between IT strategy and business strategy than manufacturing companies is surprising given the prevailing evidence about the existence of a high level of IT strategy alignment in the manufacturing SMEs [7]. One possible explanation could be that the collaboration between business and IT/IS senior management in non-manufacturing SMEs is greater than in manufacturing SMEs. However, further investigations are required to examine this view. The significance of gaining a competitive advantage for non-manufacturing organisations could be due to the high degree of competition in this industry sector (due to the emergence of many dot.com companies) compared to the manufacturing industry. We argue that unlike manufacturing sector organisations, the non-manufacturing sector does not require extensive resources, which in turn attracts many new entrants. Nevertheless, in-depth study is needed to further examine this finding. In contrast, no significant difference was found between small enterprises and medium enterprises regarding their level of perceived benefits. In other words, organisation size was not found to have an influence on the perceptions of the participating SMEs towards benefits of developing IT strategy. Hence, hypothesis H2 was rejected and hypothesis H5 was accepted.

The results, as presented in Table 5, indicate that the surveyed SMEs agreed with most of the barriers hindering their IT strategy development reported in the literature. Vulnerability regarding competitive forces such as the power of major customers and suppliers was the only barrier which was not considered to be important by the responding SMEs. The most important barrier was the SMEs' resource limitations. This was followed by two barriers that each received approximately the same mean score: SMEs' lack of time (mean score: 3.73) and their focus on day-to-day operations (mean score: 3.70).

The lack of relevant IT experience and absence of a clear business strategy were the next most important. The findings show that the limited and insufficient resources of the responding SMEs was considered as the most significant obstacle which hinders developing IT strategy. This observation is consistent with the findings of [2]. However, the finding is different from what has been reported by [3], who found that the most significant problem for SMEs was the absence of a clear business strategy. In our study, this barrier appeared to be less encountered by the responding SMEs. Other major barriers for the surveyed SMEs were lack of time and primary focus on day-to-day operations. These two barriers could be a result of limited resources. The lack of financial and human resources could increase the workload of employees and managers and that could lead to lack of time and focus on responses to immediate daily demands.

Table 5. Barriers to IT Strategy Development

Encountered Barriers	Mean Rating
Limited financial and human resources	4.0
Lack of time	3.73
Focus on day-to-day operations	3.70
Lack of relevant IT experience	3.38
Absence of a clear business strategy	3.20
Vulnerability of SMEs regarding competitive forces	2.91

To evaluate the influence of organisational size on the extent to which SMEs encounter these barriers, a comparison was made between small enterprises and medium-sized enterprises. The results indicate that small organisations are significantly hindered by a lack of relevant IT experience (Mann-Whitney  $U=41.5$ , Wilcoxon  $W=447.5$ ,  $Z=-2.01$ ,  $p=0.044$ ), lack of time (Mann-Whitney  $U=32.0$ , Wilcoxon  $W=438.0$ ,  $Z=-2.46$ ,  $p=0.014$ ), and focus on day-to-day operations (Mann-Whitney  $U=34.5$ , Wilcoxon  $W=440.5$ ,  $Z=-2.35$ ,  $p=0.019$ ) more than the medium-sized organisations. The other barriers have the same level of significance for both categories of organisations. Another comparison was made to evaluate the industry sector influence, but no such significant difference was found between manufacturing and non-manufacturing organisations. Thus, hypothesis H3 was supported and H6 was not supported.

## CONCLUSION

E-business is a major component of SMEs' IT strategy. Hence, understanding e-business vision and plans would demand investigating how IT strategies are developed by SMEs. Towards addressing this goal, we have reported the current status of the use of IT strategy among a surveyed sample of Victorian

SMEs. We have further presented their perceptions towards benefits and barriers towards using such IT strategy frameworks. We found that SMEs do not intensively use IT strategy development frameworks cited in the literature, and that only three such frameworks including CSF, TCE and Balanced Scorecard were occasionally used by these SMEs. The SMEs agreed on a range of identified IT benefits including achieving organisational efficiency, facilitating alignment between business and IT strategies and improving organisational performance. Despite such benefits, the surveyed SMEs encountered most of the IT strategy development barriers reported in the literature, however they suffered most significantly from their resource limitations, lack of time and their focus on day-to-day operations. We further observed a mixed influence of organisation size and industry type on the extent SMEs use IT strategy frameworks and perceived benefits/barriers from such use. Hence, the controversy about the role of organisation size and industry type was not fully resolved. Despite this, we still believe that our findings bear implications for e-business adoption by SMEs. One implication is that SMEs may tend to evaluate their e-business adoption decision using such economic lens such as TCE and may consider placing emphasis on the success factors using CSF approach. Second implication is that using IT strategy frameworks by SMEs may help them to have better alignment between their business goals and aims of their e-business solutions. Another implication is that resource limitations and excessive focus on daily business operations may take away SMEs' efforts into wanting to introduce innovative e-business solutions.

Although our research is useful, it suffers from some limitations which require further attention. Due to the small number of respondents and the geographic limitation to Victoria, the research findings have limited generalisability. All respondents were from medium-sized enterprises according to the Australian SME definition; therefore, these results cannot be applied to small-sized enterprises with full confidence. Further similar survey research within Australia and globally is needed to know the extent to which these findings can be generalised more broadly.

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