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SME Innovation & Differentiation as a Business Strategic Priority – Leveraging the SME IT-Capability Maturity Framework

## **Abstract**

In a globalized business landscape characterised by complex and evolving operational environments, "standing out from the crowd" is an important factor in effectively competing on the global stage. Despite greater resource constraints, Small and Medium sized enterprises (SMEs) are recognised for their agility and flexibility comparative to larger firms, and thus may be better positioned to achieve a distinctive edge through exploiting innovation and differentiation-related business opportunities.

Innovation, which is regarded as pivotal to business longevity, is critical to SMEs for multiple reasons. Ability to innovate, however, is dependent on several internal and external factors, one of which is the ability to leverage Information Technology to support the SMEs' innovation capability. As technology in itself is not sufficient to acquire a competitive edge in today's dynamic markets, "how can SMEs derive continuous and sustainable value from ICT in order to meet their innovation needs and drive innovation and differentiation"?

The answer lies in the SMEs' adoption of a capability mindset, which recognises that sustainable competitive advantage is dependent not on technology itself, but rather on the creation of distinct and inimitable IT capabilities that differentiate a company from its competitors. This white paper introduces the SME IT Capability Maturity Framework (SME IT-CMF) as a key tool to support SMEs in leveraging their IT as an enabler of business innovation opportunities.

KEYWORDS: innovation, IT capability, SME, SME competitiveness, SME IT-CMF

#### **Introduction**

Effectively competing in a business landscape characterised by dynamic market forces is an ongoing challenge for companies of all sizes and sector origins, but particularly so for Small and Medium Sized Enterprises (SMEs) given their greater resource constraints. However, SMEs' criticality to global economies means that their ability to survive and thrive is a key driving force of all nations' economic recovery and stability. SMEs face similar economic trends and forces as their large enterprise counterparts. Such trends and challenges shaping the current business landscape include, for example, economic uncertainty and recovery, increasing global competition, greater supply chain complexity, and changing customer demands (Oxford Economics, 2013a). Despite the need to contend with such issues, the perennial objective of many SMEs remains that of business growth. A recent survey of over 530 SME senior managers across France, Germany, Japan, the United Kingdom, and the United States identified growing sales and earnings (53%), improving efficiency (47%), and developing new products and services (42%) as their top three business priorities for 2013 (Economist Intelligence Unit, 2012). Global expansion and new market penetration are central to SME business growth initiatives; in a recent Oxford Economics survey 34% of respondents emphasised global expansion and 33% of respondents emphasised new market penetration as key areas of focus (Oxford Economics, 2013a).

The hyper-competitive landscape in which SMEs must compete with well-established larger firms, international competitors, and companies with superior technological capabilities requires SMEs to continue to search for new sources of competitive advantage. Thriving, and indeed surviving, in this business landscape necessitates SMEs to strategically focus on a number of areas to ensure their business growth priorities are realised. One area of focus is the need to innovate and differentiate, as in an intensifying competitive environment, new ideas and more innovative approaches are demanded to stimulate a competitive edge. Innovation and differentiation are regarded as "keys to reaching empowered customers and rising markets that define the new global economy; the winners will be those who stand out in a world of competitors" (Oxford Economics, 2013a).

### A Focus on Innovation as a Strategic Business Enabler

Innovation is pivotal to business longevity and enables a company to position itself as distinct from its competitors. In an Oxford Economics survey of over 2100 SME executives across 21 countries, greater

than 51% of respondents regarded innovation, cost reduction, and efficiencies as critical initiatives to support their future growth, while "creating a culture of innovation" was regarded by 34% of respondents as central to an SME's transformation capability (Oxford Economics, 2013b). The inherent characteristics of SMEs make innovation a conducive possibility - simpler organisational structures, lower levels of bureaucracy and formality in processes/procedures, more rapid decision-making processes, and enhanced flexibility and agility all facilitate exploitation of innovative opportunities (Limburg, 2012).

Innovation is critical to SMEs for multiple reasons; probably none more so than the fact that increased innovation is correlated with enhanced business results. Innovation supports SMEs in developing customer-centric business models, in increasing proximity to customers, in satisfying their regularly changing requirements, in improving customer relationships, and in enhancing sales (Oxford Economics, 2013b; Schneider and Veugelers, 2008; Ecorys, 2012). Further, as globalization intensifies, global supply and value chains become the norm, and demonstrating innovative capability can be an important factor for an SME in establishing itself as a preferred supplier of a larger enterprise. The importance of SMEs as supply chain partners is increasingly recognised as a key supply chain strategy of larger firms - Gartner outlines that larger "companies must reassess IT procurement to enable them do business with smaller firms, if they wish to ride the innovation curve" (Saran, 2013). In fact, in a recent Gartner CIO survey of 2000 senior IT executives, only 19% felt they had the appropriate skill balance internally to support innovation, and consequently 45% were partnering with newer, smaller companies for products and services (Saran, 2013). Coinnovation with partners, facilitated by collaboration activities, supports SME growth (Oxford Economics, 2013d).

Despite innovation's importance, comparative to the United States, young European innovative enterprises have a reported lower innovative capacity. Further, SMEs' innovative capacity varies according to their industry sector and the operational business environment – this innovative capacity needs to be fostered and enhanced to ensure such European firms can successfully compete on a global scale (Ecorys, 2012). SMEs' ability to innovate is dependent on several internal and external factors – one of critical concern is their ability to leverage

Information Technology to support their innovation capability.

# Leveraging Information Technology (IT) as a Foundation and Driver of Innovation Opportunities

Positioning itself as an innovative company requires an SME to recognise the vital role played by technology in the innovation journey. In the aforementioned Oxford Economics survey, 59% of respondents regarded technology as a key differentiating factor; 63% regarded technology as a key enabler of future success; 32% recognised the challenges posed by competitors with superior technology capabilities; while for 57%, technology was at "the heart of their business transformation efforts" (Oxford Economics, 2013b; 2013d).

For several decades, Information Technology has helped deliver or facilitate business benefits, including improved decision-making, flexibility, and productivity; internal operations efficiency; enhanced information management; lower cost business transactions; improved supply chain management and greater interconnections with business partners. However it is the evolutions in ICT over the past decade, including for example cloud, digitization, mobile computing and social media that have given rise to dynamic business environment changes and created opportunities for more agile and innovative firms to gain a dominant position against well known, established firms (McLaughlin, 2012b). The previous section clearly outlined the importance of innovation for SMEs in an increasingly complex and global supply chain. Technology, through online business networks and platforms, plays a facilitating role in integrating and collaborating with global customers, suppliers and partners, and IT and the IT infrastructure is critical in enabling partnership success. The fact that 52% of respondent SMEs regularly collaborate through online networks and platforms with other companies to support innovation and growth, suggests that technology not only supports direct innovation benefits but enables SMEs to tap into additional innovation sources (Oxford Economics, 2013b).

Survey findings indicate SME recognition that they must establish a solid technology foundation as a requirement to grow and sustain global growth. "The extent to which SMEs can identify the right technologies to meet their specific innovation needs and then effectively apply those technologies will determine just how innovative – and thus successful – they can be in a fast changing global marketplace" (Oxford Economics, 2013b).

# Enhancing IT Capability – Adopting the SME IT-CMF

Given the importance of innovation and the recognition of the pivotal role played by technology, a key question becomes "how can SMEs ensure that their IT meets their innovation needs and drives innovation and differentiation"? Given the long-standing recognition that sustainable competitive advantage is dependent not on technology itself, but rather on the creation of distinct and inimitable IT capabilities that differentiate a company from its competitors (Limburg, 2012), the importance of adopting a capability mindset is paramount. A capability mindset requires organizations to develop an understanding of "what organizational abilities can, and should be developed to support and build a unique and sustainable competitive advantage... [and] effectively respond to (as yet undefined) external challenges", (McLaughlin, 2012). The maturity of these capabilities determines the pace with which an SME proactively senses and responds to changing market forces.

Ensuring IT is positioned appropriately to support and drive innovation involves firstly understanding how sophisticated existing IT capabilities are and maturing those core IT capabilities that are priority in the innovation journey. Maturing an SME's IT capabilities from the existing "as is" to the desired "to be" position is facilitated by the SME IT-Capability Maturity Framework (SME IT-CMF), developed by IVI researchers and SME industry practitioners. The SME IT-CMF provides companies with a clear and descriptive overview of the IT-related capabilities that shape performance in today's business landscape; specifically it focuses on 10 IT capabilities that reflect the top IT-related challenges/priorities faced by SMEs (see Table 1).

**Table 1: SME IT-CMF Critical Capabilities** 

Critical Capability	Overview
Funding and Financing	Funding and Financing (FF) is the capability to understand how IT is funded, to determine the amount required and the sources of funding for IT, to allocate financial resources to IT, and to establish a balance between capital and operational expenditure.
Strategic Planning	Strategic Planning (SP) is the capability to formulate a long-term vision and translate it into a strategic plan that clearly sets the direction for IT, in order to enable and support the business strategy.
Business Planning	Business Planning (BP) is the capability to consolidate, document and publish tactical objectives, operational services to be provided, and the financial and non-financial resources and constraints that will apply to the IT function for the coming planning period.
Business Process Management	Business Process Management (BPM) is the capability to identify, design, document, monitor, optimize, and assist in the execution of a company's processes.
Risk Management	Risk Management (RM) is the capability to assess, monitor and manage the exposure to, and the potential impact of, IT-related risks.
Sourcing	Sourcing (SRC) is the capability to evaluate, select, and integrate providers of IT services according to a defined strategy and model, with the aim of optimizing the delivery of business value.
User Experience Design	User Experience Design (UED) is the capability to consider users throughout all phases of the design and development process. This involves capturing and understanding end-user interaction requirements, understanding how users interact with technology, and using this understanding to design IT systems to meet user and business goals.
Solutions Delivery	Solutions Delivery (SD) is the capability to specify, design, implement, validate and deploy IT solutions that address the company's business requirements.
Service Provisioning	Service Provisioning (SRP) is the capability to execute IT services to satisfy business requirements. Services comprise a combination of people, processes and technology and are typically defined in Service Level Agreements (SLAs). From a customer perspective, SRP acts as a single point of contact for day-to-day operational services.
Relationship Asset Management	Relationship Asset Management (RAM) is the capability to analyse, plan, and enhance the relationship between the IT department and the business.

Maturing any number of these capabilities can support an SME in adopting more distinctive and innovative approaches enabled by IT, comparative to its competitors. For example, maturing the IT Strategic Planning (SP) and IT Business Planning (BP) capabilities facilitate SMEs in establishing a more focused, long-term direction for IT in supporting business innovation priorities, while driving this direction with more tactical initiatives to support innovation objective realization. Improving the maturity of the Business Process Management (BPM) capability may result in changes being implemented in the SME's business processes, which may consequently support more agile approaches in the business operational environment. Similarly, SMEs may emphasise improved capability to develop IT solutions that meet business demands (Solutions Delivery (SD) capability) and provide the types of IT services required to support business innovation (Service Provisioning (SRP) capability). Further, improving IT capabilities such as IT Sourcing (SRC) and IT Risk Management (RM) can grow the SME's reputation as a trusted supply chain partner with which to collaborate in the support of innovation and growth.

The SME IT-CMF encompasses two types of capability assessments: 1) a High-Level Assessment which provides an overall snapshot or "rapid health check" of current IT maturity across all ten capabilities; and 2) Critical Capability <u>Deep Dive Assessments</u>, which provide a granular and focused view of a specific IT capability. By determining the current and target maturity levels for the areas assessed, and identifying the relative importance of these areas to supporting and driving innovation, the company as a whole can strategically prioritize the development of its unique, inimitable capabilities to support its business innovation objectives. The output from an SME IT-CMF assessment also presents an improvement roadmap to support transition from the existing "as is" to the desired "to be" maturity. For each area, this roadmap outlines a series of "next maturity level" practices, enabling companies to incrementally improve towards the desired target. Further, a series of value-oriented outcomes that result from the implementation of these practices are presented, as well as a series of key metrics enabling companies to monitor and track their progress over time.

#### Conclusion

In the words of Bill Gates "never before in history has innovation offered promise of so much to so many in so short a time". Innovation and differentiation support SME's ability to thrive in today's dynamic business landscape. As outlined by Uden (2007), "the only way to remain competitive in business today is to be constantly and fully alive to new ideas, new practices, and new opportunities". Because innovation can essentially be a "game changer", given the rapid pace of technological change it is not surprising that IT is a key influencing factor in a company's innovation journey. For many SMEs technology has become a key differentiating criterion in business transformation and in enabling future success. Hence, evolving technological advances can play a critical role not only in ensuring the "SME business" keeps pace with market dynamics, but also in enabling an SME to adopt more innovative and distinctive approaches in the business operational environment.

Effectively positioning IT to enable business innovation should therefore be a pivotal concern for SMEs, and this positioning can be enhanced through adopting a capability-centric mindset. The SME IT-CMF, introduced in this white paper, provides a powerful tool for companies to improve IT capability and ultimately drive and enhance dynamic business innovation opportunities.

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In her current role, Dr. Marian Carcary is project manager for the development of the SME IT-Capability Maturity Framework (SME IT-CMF). Marian also works on European Commission funded research, including the development of a European Framework for ICT Professionalism, and more recently the impact of globalization on the demand for and supply of e-skills. She works as lead researcher on the Risk Management (RM), People Asset Management (PAM), and Capability Assessment Management (CAM) Critical Capabilities of the IT-CMF. Marian's research interests centre on areas such as Design Science, Information Security Management, Cloud Computing and drivers and challenges surrounding the realization of business value by SMEs. She has an MSc in Information Technology, focused on the topic of ERP, and a PhD focused on ICT investment evaluation, both of which were funded by the Irish Research Council. Marian can be contacted at marian.carcary@nuim.ie

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