



## DIGA - Digital Innovations for Growth Academy

***Going Digital in the Small Firm – Is it all about technology!!!***



**Note:**

This paper is an intellectual output of the Erasmus+ Strategic Partnership Project Digital Innovations for Growth Academy (DIGA) [2014-1-UK01-KA202-001780]. It presents research and analysis to inform the development of the DIGA training programme to enhance the digital competencies of enterprise educators and trainers. Digital Innovations for Growth Academy operates as a Strategic Partnership from seven member states. The partners are from the social, private and public sectors. Through the testing and piloting of the programme materials the project will include 120 enterprise trainers and educators from five partner countries.

**Disclaimer:**

This publication has been produced in the frame of DIGA (Digital Innovation for Growth Academy) Project. The project has been funded with support from the European Commission, ERASMUS+ Programme. The information contained in this publication reflects only the author's views and the Commission cannot be held responsible for any use which may be made of the information contained therein. Sole responsibility lies with authors

## ***Going Digital in the Small Firm – Is it all about technology!!***

### **Introduction and Context - Digital Technologies for the small firm challenges and opportunities**

Digital literacy consists of the ability to access digital media and ICT, to understand and critically evaluate different aspects of digital media contents and to communicate effectively in a variety of contexts. The proliferation of digital technology, specifically information and communications technologies (ICT), and their application to e-commerce, e-business and e-marketing have had a significant impact on business of all sizes at a global level (Lansiti and Lakhani, 2014). For small to medium enterprises (SMEs) the spread of digital technologies whilst possessing the potential to provide significant business opportunities, it produces many challenges and can be a poor investment if not implemented and managed effectively as a core component of their business strategy and not as a separate task where technology is wedged on a piecemeal basis in the small firm. In order to create a more seamless and integrated digital strategy in the small firm it is necessary to unearth the challenges which deter the adoption of digital and examine these in the context of the many positive opportunities that exist for small firms from the use of digital. This research addresses these two areas, the challenges and opportunities associated with adopting and using digital as a means of identifying how small firms can be assisted in the 'go digital' journey for their enterprise. The paper will in the first instance identify the challenges encountered by entrepreneurs and owner-managers in adopting digital/ICT followed by a discussion on the many opportunities that digital can return to the small firm. The voice of the entrepreneur and owner-manager is presented from the results of a survey completed with 239 entrepreneurs and owner-managers across six countries. The paper concludes with some suggestions on what can be done to assist entrepreneurs and owner-managers more effectively and seamlessly navigate their 'go digital' journey.

### **Going Digital – the Challenges and barriers for the small firm**

Whilst the business adoption of ICT and digital is improving, evidence suggests that there is still a substantial 'digital divide' between small and large firms (Stimulating innovation through smart use of ICT, 2013). While only about 40% of small companies use e-business solutions, 80% of the large enterprises do. Among large companies, e-business is increasingly becoming an integral part of their day-to-day business. In order to raise the level of adoption of digital technologies in the small firm it is necessary to identify what are the challenges to their adoption to ensure remedial actions address the real and practical needs of the SME sector. Most SMEs cannot afford to employ digital specialists and thus their respective e-business and digital strategies depend on the interest, understanding and digital skills of the entrepreneur and owner-manager.

Challenges to the adoption of digital technologies in the SME resonate internally and externally and it is important to identify if they are personally embedded in the owner-manager and staff and/or linked with digital skills deficiencies. In relation to digital technology a lack of the inter-operability between different ICT systems used for data exchange, information dissemination and sharing and marketing which are more readily developed for the larger firm context are deterrents for the owner-manager (EU, 2013). This requires an understanding of the appropriate digital hardware and software and its

potential functionality and suitability for the small firm at its various stages of progression. That said, investment in the most up to date digital technologies will not automatically generate positive results, if there is a lack of understanding of what the technology should be used for, what results it should achieve and how it can be best used beyond a single function (typically marketing).

Common findings across research studies such as the Digital Agenda for Europe: A Europe 2020, European Commission 2010; Doing business in the Digital Age, 2013) is the realisation that entrepreneurs and owner-managers need to become more capable and competent in measuring digital and social media performance. To do this entrepreneurs and owner-managers need to be assisted in overcoming the digital challenges they encounter and be facilitated in availing of the many digital opportunities which exist.

Similar research studies (Parida 2010 Parida et al,2010); Digital Agenda for Europe: A Europe, 2020, European Commission, 2010; Doing business in the Digital Age, 2013), highlight that the limited use of integrated use of digital by small firms is primarily due to three reasons: first, owner-managers don't fully appreciate the contribution that digital systems can make to their businesses; secondly, they often lack the skills to assess, implement and fully exploit digital, and thirdly, the perceived high costs of investment required to implement digital in the small firm. In addition to and perhaps as a consequence of the dominant role of the owner-manager as the primary decision maker and resource allocator in the firm, they can further impact on the level of digital adopted in the firm (Fillis et al., 2004; Beckinsale et al., 2006). The lack of understanding of digital resonates in the language of digital which is often technically focussed and is constantly evolving and renders it problematic for the owner-manager to understand its application. Connected to the lack of familiarity of digital language are the difficulties in identifying the benefits or the return on investment or how to work out the real added value that digital can return beyond the marketing function. These two aforementioned have consequences for the measurement or evaluation of digital across and within business functions. These barriers align with those highlighted by respondents in the e-Business Enterprise Learning for Women (e-BEL). The results emphasised that the primary internal challenges to the adoption of ICT related to cost and budget constraints; followed by 'lack of ICT knowledge or its benefits by the owner-manager'. The barriers were discussed in the context of more strategic and entrepreneur related issues, in particular digital skills shortage by the entrepreneur and their employees which resulted in the inability to manage and harness data effectively. Interestingly, cost and lack of a sufficient budget for digital was not viewed as central barrier across all country respondents. External to the firm, the characteristics of the industry sector, the competitive landscape, customer behaviour and access to and cost of digital technology act as barriers to the successful adoption of digital in the small firm.

The lack of resources are often cited as a reason for not adopting digital, that said it is important to understand that it is not only financial resources, but a lack of owner-manager time as small companies do not have a dedicated ICT/digital department. The inability or unwillingness of the owner-manager to invest any time and money into digital can be masked in factors such as a lack of appreciation of the business wise benefits of digital and insufficient digital skills and competencies to source this detail resulting in the decision on the relevance of investing in digital. This leads to a challenge of the terminology applied freely to digital which is ever evolving and technical in nature. In order to obtain full

capacity from the array of digital technologies for business owner-managers must understand what they want the technology to do and where it can be used to best advantage which necessitates a comprehension of the many opportunities digital presents for the small and medium enterprise.

### **Digital Opportunities for the Small Firm**

It is without a doubt that the adoption of digital technologies has many and varied benefits contributing to the small firm's profitability and productivity and growth perspectives. Digital technology has potential for reshaping the traditional business strategy as modular, distributed, cross-functional, and global business processes that enable business transactions to be carried out across boundaries of time, distance, and function (Ettlie and Pavlou, 2006; Kohli and Grover, 2008; Rai et al., 2012). Evidence suggests that with the aid of technology, SMEs can go global more speedily and at a younger age as it enables firms to work together in a seamless, global operation, despite being separated by time zones and geography (Delouite, 2014; Tanuri, 2010). Aligned with this is the fact European SMEs grow two to three times faster when they are empowered by digital technologies (Delouite, 2014). More generally at the strategic business level digital technologies enable the formation of different forms of dynamic capabilities suitable for turbulent environments (Pavlou and El Sawy, 2006, 2010; Bharadwaj et. al, 2013) which are core to the survival and growth of any small firm. The results from the e-Business Enterprise Learning for Women (EBEL) project in 2012 resonates with the aforementioned authors as the core driver for the adoption of ICT was 'to improve communication with customers' followed by the desire to improve communication with suppliers. Another important motivating factor was the need to develop more effective promotional material. Extending the interaction and collaboration with customers and suppliers engagement in e-business activities enhances procurement, production and sales processes as well as logistics services supporting a more globally interconnected business.

The rapid growth of social commerce is mainly due to the rapid diffusion of social media tools and channels such as Facebook and Twitter. Indeed, these tools can radically transform traditional firm processes by providing a better customer shopping experience in real-time (Fisher, 2011; Zhou et al., 2011) and a better channel for attracting and retaining online customers (IBM, 2009). Facebook can allow firms to 'harness social capital' in a context where retailers are eager to tap into the tremendous word-of-mouth potential of digital technologies (Olso, 2011; Roberts, 2012). In the context of business-to-business (B2B) commerce, firms can use social media tools such as Facebook and LinkedIn to communicate with customers and suppliers, build relationships and trust, and identify prospective business partners in terms of B2B selling (Michaelidou et.al., 2011).

The integrated e-marketplace provides a favourable environment that includes lower operating and marketing costs, better opportunities to promote products/services and enrich the overall marketing communications mix (Khong et al 2010; Sashi,2012). For example by reducing search costs by facilitating comparison of price, products and services (Kandampully, 2003; Bakos, 1998; Kaplan and Sawhney, 2000); improving production and supply capability (Barua et al. 1997; Albrecht et al.2005); improving personalisation and customisation of product offerings (Bakos, 1998); enhancing relationships with customers (Bharadwa et al.2013) reducing marketing costs as compared to traditional marketing media (Tanuri, 2010; Sashi, 2012).

Given the many cross functional benefits (both financial and non-financial) of digital technologies they should be viewed as an organisational-wide strategy perspective which are aligned with overall firm objectives to enable and facilitate the creation of a competitive differential advantage and concrete revenue related outputs.

To date, research would suggest that many SMEs are not using digital solutions and that digital integration remains a challenge for owner-managers in order to raise its full potential. The results of the literature reviewed guided the design of a survey for entrepreneurs and owner-managers to elicit first hand current digital practices in small firms and in particular what challenges they encounter and the opportunities that exist if these challenges are overcome. The key findings are presented in the next section.

### **What the entrepreneurs say – key learnings**

Central to the DIGA project was obtain a holistic understanding of the needs of the entrepreneurs and owner-managers in relation to digital technology. To achieve this objective an empirical research study was undertaken with a sample of entrepreneurs and owner-managers to determine their challenges and perceived opportunities that exist through the effective adoption of digital technologies. The multi country study (United Kingdom; Ireland; Slovenia; Spain; Lithuania; Bulgaria and Finland) incorporated the administration of an email survey consisting of a semi structured questionnaire to a sample of entrepreneurs. The semi-structured questionnaires explored how entrepreneurs and owner-managers engaged with digital technology, their digital practices, the challenges they encountered in using digital technologies, and if they considered they had digital technology (hardware) and or digital skills gaps and suggestions on how small firms can be assisted in embarking or enhancing their ‘go digital’ journey

The surveys were distributed through Survey monkey ([www.surveymonkey.com](http://www.surveymonkey.com)) and 239 responses were obtained and the profile of respondents by country is presented in Table 1.0.

Table 1.0 Breakdown of Respondents

<b>Partner</b>	<b>Entrepreneurs</b>
<b>(UK) The Women’s Organisation</b>	85
<b>(Ireland) University of Limerick</b>	36
<b>(Slovenia) EIM, HRDC – Economic Institute of Maribor, Human Resource Development Centre</b>	28
<b>(Spain) Inercia Digital</b>	38
<b>Social Innovation Fund (Lithuania)</b>	40
<b>(Bulgaria) Bulgarian Centre for Women in Technology</b>	12
<b>Total</b>	<b>239</b>

The majority of respondents, 56.9%, were in operation for more than one year, with 36.8% of those being in business in excess of four years and a further 20.1 % operating between 1 and 3 years. The average age cohort of the respondent is between 33 and 45 years and this varied slightly by country where the average age of the entrepreneur in the UK was 40 years; Bulgaria was 36 years; Slovenia was 45 years; Ireland was 39 years and in Spain the average age was between 40 and 45 year. Moving on to the profile of the enterprise, data showed that the majority of firms were categorised as micro (employing up to 10 persons)

as was the case in the UK, Ireland and Bulgaria where the vast majority comprised of micro firms with many employing less than five persons. The Slovenian sample saw a more mixed cohort in terms of employee numbers where some firms employed over 20 employees and a few employing over 100 persons.

The respondent firms across the survey and within each country predominately operated in the service sector and in the main in general retail (22%) followed closely by firms offering education and training services (20%). The depth of response on the service sector allows for assembling more comprehensive understanding of the issues relating to this broadening and increasingly important economic growth sector in all countries and moreover the use of digital technology is more pervasive and critical to the successful growth of small service firms.

The survey results when framed within the context of the profile of the respondent firm as described in the previous section provide important insights and learnings on the digital practices in the small and medium as presented in the following points:

- ***The language of Digital*** – respondents provided their ideas and narratives on their understanding of Digital which demonstrated the vagueness of what digital is about and what it could achieve in an entrepreneurial context; it highlighted the level of knowledge, or lack of understanding of the emerging digital tools and technologies. Essentially, there is an acceptance that it is an inevitable aspect of business but not sure what aspects are most relevant for them. This is in alignment with the literature and from our research is a critical barrier underpinning the perception, interest and motivation to adopt digital in the small firm. If objectives are not in place then there will not be a solid or rationalised basis of what digital technologies are required and how the benefits can be measured or evaluated.
- ***General Level of digital adoption*** - Essentially usage and adoption of digital technology emerged at two levels, marketing and promotion and secondly at operational level. The former dealt with responding to customer queries which was highly rated across all countries, online selling, which is a positive trend; seeking new customers which is more dominant in the UK and Irish responses; and email marketing which again is strongly rated in Ireland, UK and Lithuania. Operationally, online banking and back office administration tasks such as payment of invoices and spreadsheet generation for operations are being completed via digital technology, which is positive to see, and these functions were more evident in UK, Slovenia and Lithuania. These results demonstrate a positive commitment to digital technology albeit with a bias towards more general marketing functions and at a task driven level. This piecemeal approach will result in lack of focussed resources – financial and or non-financial resources.
- ***Objectives for Digital*** - Across the sample the majority of respondents indicated that they did not have specific goals for digital media bar one exception where, in the UK 57% indicated they had specific targeted offline objectives. This finding is added value to current research studies as many have not asked these questions. The added value emerges and is perhaps linked to or a cause of poor and underutilisation of digital or its measurement. Without objectives there is no foundation or rationale for the digital strategies it creates and decisions it makes to implement those strategies. This issue is a key finding and one of added value to the literature and research which in some instances do not address if objectives for digital are devised

and if so how they align with and support overall firm objectives and furthermore if objectives for digital are lacking then what gives direction to digital activities engaged in !!!

- ***Specific Digital tools applied*** – Responses showed that 69% of respondents had developed a website for their enterprise and in the absence of a website many respondents were using Facebook, LinkedIn and or Twitter as their primary landing page or source of contact and interaction with their customers. Popular social media sites used –showed similar trends across all country responses where Facebook and Twitter were the most frequently used tools. Twitter was more popular amongst firms in the UK, while in Ireland, Slovenia, Bulgaria, Lithuania, Spain LinkedIn came second to Facebook as the most frequently used tool. Consistent across all firms was the low level of adoption of blogs, slide share and wikis etc. This suggested low level of usage highlights untapped potential that should be examined by entrepreneurs at any stage of business start-up and growth. Respondents were not capitalising on the potential capabilities of their websites, and in particular the leveraging all promotional, e-business; e-commerce; selling and researching functionalities and capabilities that a website can return to the small firm. This finding supports the literature and (Khong et al 2010; Sashi, C.M. 2012 Bharadwaj, et al.2013) discouraging to see that this is still the case despite the efforts of policy to digitalise small firms
- ***Integration of digital across functions*** – the findings in this survey support the literature and research that social and digital tools are applied independently and for individual tasks completed without a real consideration as to what is their purpose as part of the broader firm strategy or business plan. The lack of objectives will render measurement and monitoring of digital and social media difficult. The respondents suggest that they integrate online and offline media, for instance this was the case for 57% in the UK; 58% in Ireland; 58% for Bulgaria and 68% in Spain. In contrast, 52% of respondents in Lithuanian and 67% of respondents in Slovenia indicated that they did not integrate online and offline media
- ***Measuring the return or benefits of digital*** - The vast majority of respondents indicated that they did not measure the benefits or impact of digital tools adopted in their enterprise. Indeed there was an overall low response rate to this question in each country which in itself infers that it is a topic not highly engaged with by respondents which is a concern and barrier to the sustained implementation of digital technologies endorsing the findings of the literature and policy documents and is also an area under researched given its importance and the level of results emerging from this survey.
- ***Challenges adopting digital*** - challenges relate to a lack of people, insufficient digital skills and the scarcity of the entrepreneur's time to develop digital content and to maintain digital platforms. These concerns are compounded by the lack of knowledge about digital technology, exposure to information overload and their ability to keep up to date with social and digital media advancements. In relation to the more technical concerns, issues of security of information, payments, control of information, manipulation of information etc. were mentioned. These need to be addressed and alleviated for the entrepreneur to provide greater reassurance of the safety of internal and external information contained on their site and in particular in

relation to payment and in the establishment of ecommerce sites which was an area in need of development cited by a number of respondents.

- **Opportunities of digital** - a number of respondents in each country suggested that they 'were unsure' did not know' what digital tools would dominate their business over the next few years or what opportunities they would deliver. Consequentially, the results demonstrate somewhat narrow interpretation as to the emerging technologies and their likely impact or benefits that they could potentially deliver to their enterprise. This is an important learning from the results as it has influence on the need to increase the baseline level of knowledge and understanding of the applications of emerging technologies in the small firm context and how to leverage their potential. The phrases used to describe the influential technologies centre on individual tools and platforms and are dominated by single world and multiple repetitions such as Twitter; LinkedIn; Facebook emerging as very popular as with the terminology and descriptions adopted when describing concerns and trends but were applied in a very general and non-firm specific context. To a lesser extent the cloud, mobile technologies, blogs, were mentioned as tools that would dominate.

In summary, entrepreneurs and owner-managers need to transition their business activities to a 'go digital' mode of behaviour with digital technologies becoming an essential component of modern business. In order to move the entrepreneur and owner-manager to the 'go digital' mind-set and mode of behaviour they need to develop associated e-leadership competencies and capabilities to enable the productive use of digital technologies across and between business functions and understand *why, how, when* and *where* to apply the relevant technologies to gain a competitive advantage.

#### **To conclude – it's not all about digital technology**

This research without doubt, suggests that going digital is not all about the technology and that investment in technology will be wasted if owners of small businesses lack the capability to make the most of the tools at their disposal. There is an ever increasing array of digital tools and technologies available which can confuse the owner-manager and as a result the technology becomes the core focus in an abstract non focused manner if clear objectives for digital do not exist. It is not the technology per se that should be the primary focus, rather research demonstrates that it is the central role users play in creating, rather than simply consuming, the content that technologies contain that is critical.

Given this it is fundamentally important that owner-managers are equipped not just with 'digital technology resources' only but more importantly relevant digital or e-leadership skills and competencies to devise a digital media strategy. The following are some suggestions to guide how this might be achieved.

#### **Where to – building the foundation to go digital**

Some messages for the owner-manager embarking on the go Digital journey

- Successful digital adoption is not just about tools and technology but tactics and strategy. This involves generating digital objectives and goals, time frame and timelines for their digital strategy in line with and supporting overall enterprise objectives.

- Entrepreneurs and owner-managers need to adopt an integrated perspective to digital technology and view it as a process of interlinked and integrated activities align and support the achievement of overall business objectives and strategies.
- The ambition for digital must be supported and enabled by the owner-manager who will transfer, engage and equip their employees across all functions and age groups commit to the adoption of digital technologies – a ‘top down’ approach to implementation
- The strength of digital technologies — social, mobile, analytics and cloud — do not lie in the technologies individually. Instead, it stems from how companies integrate them to transform their businesses and how they work.
- The acquisition of the key competencies and skills necessitates that the digital trainer is suitably knowledgeable about the entrepreneurial mind-set and the digital requirements of the business from inception to growth and expansion and with appropriate knowledge of the ‘what’ or ‘how’, ‘when’ and ‘where’ of digital technologies as they apply to the needs of the various stages of start-up and growth of the enterprise and the necessity for an integrated digital strategy as opposed to understanding what digital tools exist independently.

Therefore, the focus should be on the user not the technology as technology is the enabler or the conduit engaging the company with the customer and vice-a-versa.

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