Digital Capability – How to Understand, Measure, Improve and Get Value from it

Abstract

This executive briefing describes the need for organisations to improve their *digital capability* and proposes the development of a *digital capability* assessment process that will contribute to increased business value.

Every organisation that has an Internet connection has an inherent *digital capability*. There is however a huge variation in the ways that organisations use this capability.

Organisations that understand this opportunity and learn to measure and improve their own *digital capability* are likely to find themselves in a better position to compete in the digital economy.

However, many organisations need help in order to gain a more comprehensive understanding at decision-making level of what *digital capability* is and how it can add value to their business.

A dedicated process for measuring an organisation's *digital capability* is therefore essential. However a reputable process that enables this to happen does not currently exist.

As well as developing a process, there is also a need to convince organisations of the value of *digital capability*. Lack of awareness, unresponsive corporate culture and a generation gap at management level are among the reasons cited for the low adoption of digital technology in many organisations.

A *digital capability* assessment process will help organisations of all types and sizes to get more value from the Internet. The immediate challenge is to complete the development of the process and begin delivering it to an engaged audience as soon as possible.

KEYWORDS: Digital capability, digital transformation, organisations, SMEs, Internet, broadband, cloud, social media, mobile, smartphones, online, value, system, process, measure, assessment, competitiveness, customers, strategy, productivity, maturity, IT-CMF, enterprise-wide

Introduction

With the majority of organisations now online, changes brought about by digital technologies are becoming inevitable across *all* business functions, not just in marketing. Business structures, systems, processes and, especially, human capabilities all need to evolve in order to reflect and exploit this opportunity.

Organisations are having difficulty analysing the opportunities and challenges created by the Internet. Therefore, they are getting less value from their digital investments than they should be. Helping organisations to understand, measure, and improve their *digital capability* is fundamental to addressing this difficulty.

All organisations, particularly those who are not digital natives but who now find themselves competing in a digital economy, need a new type of support to help them gain a competitive edge – a tool that helps them use digital technology to deliver value to their business.

This tool or "*decision-assistance programme*" is primarily based on understanding, measuring and improving an organisation's *digital capability*. The Innovation Value Institute (IVI) refers to its response to this need as the Digital Capability Framework (DCF).

For the purposes of this executive briefing, the term "digital" relates to a range of internally- and externally-facing business deliverables including, but not limited to, infrastructure (broadband, the Internet, the cloud), content (digital media, social media, mobile apps), channels (Intranets, websites, smartphones), services (digital marketing, digital advertising) and e-business applications (e-marketing, e-commerce, e-CRM and e-SCM).

Understanding Digital Capability

Organisations tend to fall into one of the following four categories:

1) No broadband connection.
2) Poor quality broadband connection.
3) Good quality broadband connection, but with underdeveloped or poorly performing digital strategy.
4) Good quality broadband connection, with fully developed and highly effective digital strategy.

Digital capability is a measure of a company's potential to get business value from the Internet once connectivity issues have been resolved. Therefore, it primarily addresses the needs of organisations in category 3 above.

Digital capability focuses on two complementary activities that will help organisations to "work smarter" and become more profitable; namely, reshaping customer value propositions and transforming operating models using digital technologies for greater customer interaction and collaboration [1].

In a progressively digital environment, business functions will need to reflect a new focus on customer service, thereby requiring more open communication internally as well as externally. In turn, this will change relationships between employers and employees, as well as between employees and customers.

Business structures, systems, processes and, especially, human capabilities will need to evolve in order to reflect and exploit these relationship changes. Such digitally-driven changes imply significant organisational redesign and will require equally significant planning processes. Achieving this will require a thorough understanding of the organisation's *digital capability*.

A new class of organisation is emerging – one that intensively uses collaborative web technologies to connect the internal efforts of employees and to extend the organisation's reach to customers, partners, and suppliers. The implications of this development are far-reaching: in many industries, new competitive battle lines may form between organisations that use the web in sophisticated ways and organisations that feel uncomfortable with new, web-inspired management styles or that simply cannot execute their business at a sufficiently high level [2].

An organisation with a strong IT capability does not necessarily have an equally strong *digital capability*. Concerns about the openness of the Internet and issues around ownership of the digital strategy often contribute to this disparity. For a variety of reasons – including lack of awareness, corporate culture, a generation gap at management level, or incorrect advice – the enterprise-wide deployment of digital technology and processes is often less extensive and less effective than it could be.

Consequently, at decision-making level it is necessary to have a more comprehensive understanding of what digital is, and how it can add value to business and help organisations to more effectively exploit their digital potential. Searches carried out at European level by the National Standards Authority of Ireland (NSAI) found no evidence of a process that supports such a comprehensive understanding. Therefore, a verifiable assessment tool that is based on *digital capability* competency levels, as enshrined in the DCF, could provide a viable response to this need.

The DCF is intended to help organisations measure and improve their *digital capability* on an enterprise-wide basis. It can also help organisations align their people, processes and technology in order to meet the challenges of the digital economy. Ultimately, the DCF helps organisations decide how much digital transformation is appropriate for their business – focusing at all times on the business value it will add.

Measuring Digital Capability

Organisations frequently experience difficulty analysing the opportunities and challenges presented by the Internet. Consequently, many organisations are getting less value from their digital investments than they should be.

Before dealing with the subject of how to measure *digital capability* itself, it is worth reviewing some related measurements, which have already been collated, that support the need for *digital capability* to be addressed.

Firstly, figures recently published by AMAS [3] show just how few organisations have been taking full advantage of the digital opportunity. For example, in Ireland, only 26% of organisations that have broadband are doing business online (see Figure 1). Secondly, many chief executives have ambitious digital aspirations that their organisations are simply not equipped to implement. Thirdly, up to now there have been no specialised advisers to tell chief executives what to do in such situations.

Figure 1: How Irish Businesses use the Internet
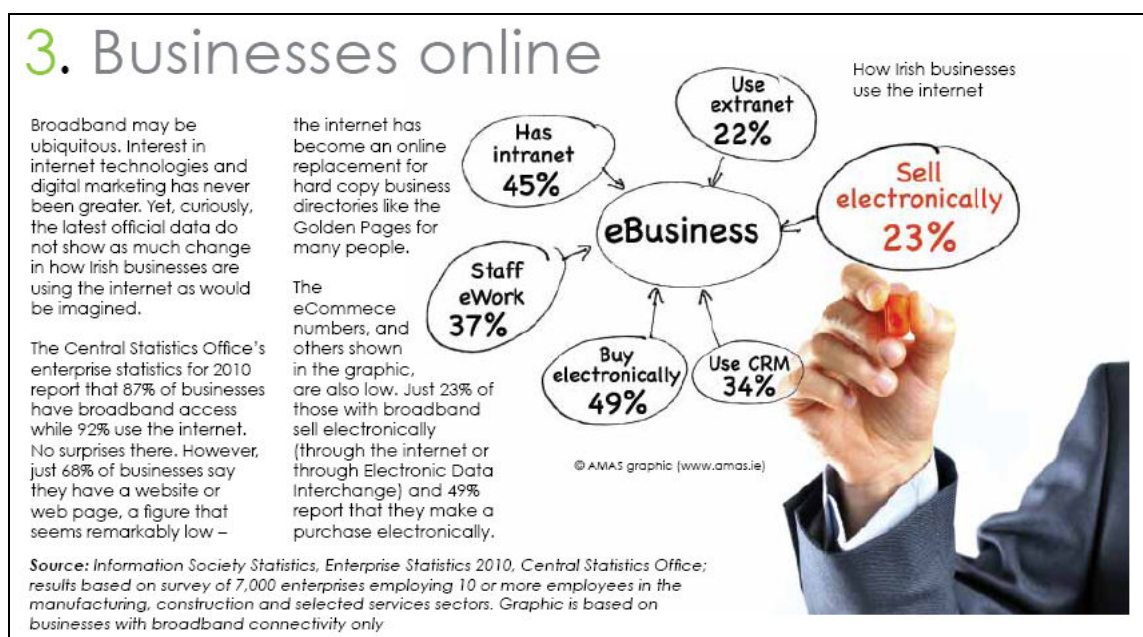
A recent UK study by Blue Latitude [4] revealed that 36% of organisations surveyed have no digital strategy at all; while 45% of organisations have no process for harnessing digital knowledge. The study also found that 56% of organisations have trouble hiring staff with digital skills. This increasingly occurs because traditional recruitment practices do not attract digitally savvy candidates.

In addition to the above, a pilot *digital capability* assessment recently carried out by IVI provided indications that organisations are missing out on potential productivity gains because they are unaware of the latent *digital capability* within their workforce. This would indicate that in some cases the digital aspirations of the organisations are lagging behind those of their employees.

IVI intends to measure *digital capability* using the same exacting techniques as for the other 33 core processes within its flagship IT-CMF. Using these techniques, top executives and practitioners will be able

to adopt a number of interrelated strategies and associated maturity curves to help manage and deliver greater value from their digital investments.

Essentially, *digital capability* provides a measure of the value that internal and external processes (which are based on digital technology) add to an organisation on an enterprise-wide basis, across all areas ranging from staff productivity to the quality of the customer experience. As well as having a *current digital capability*, organisations also have a *future digital capability* (called their *digital potential*).

If *digital capability* and *digital potential* are regarded as start and end points, the journey in between is the *digital transformation* that the organisation needs to undergo. *Digital capability* is periodically reviewed along the way, with progress rewarded on the basis of increasing competency levels – ranging from one to five. The *digital capability* maturity levels and the Capability Building Blocks (CBBs) are shown in Figure 2.

More detailed descriptions of the different maturity levels have been developed for each of the 10 CBBs but are not reproduced here. For example, a strong maturity level might be awarded for Strategy and Planning on the condition that:

"The company has identified digital transformation opportunities and is thoroughly committed to transformation in the sector. Digital channels are positioned clearly within a fully integrated strategy that has allocated sufficient, ring-fenced resources to ensure successful delivery and communicated the plan effectively throughout the organisation."

Figure 2: Digital Capability Maturity Levels and Capability Building Blocks

Focus	
Digital Capability focuses on five categories comprising ten capability building blocks (CBB). These CBBs structure and build the basis for maturity.	

Category	Capability Building Blocks
Strategy and Planning	Business Alignment
	Business Agility
Business and Leadership	Value Proposition
	Digital Vision
Process Management	Digital Processes
	Benefits Realisation
Technical Capability	Technology Impact
	Technology Assessment
People and Culture	Networking and collaboration
	Customer journey and experience

Maturity

High	5	Digital is at the heart of the operational strategy, adding value throughout the business, "go-digital" culture is strong
	4	Processes across the enterprise are being converted to digital, tangible benefits and efficiencies being achieved
	3	Digital ICT is valued as a business tool, specific targets and reporting are in place, champions are emerging
	2	Limited resources are allocated to supporting a basic customer-facing digital presence, basic expertise in place
Low	1	No digital strategy, no resources in place, no targets set or metrics used, no understanding of best practice

(Maturity levels — High to Low)

Improving Digital Capability

A growing number of organisations need help to increase their *digital capability* on an enterprise-wide basis. Like water and electricity, broadband has become a utility that no organisation can do without, but broadband itself does not deliver *digital capability* – it is merely an enabler of *digital capability*. Meanwhile, digital devices including smartphones are propagating exponentially and are creating an insatiable demand for digital content. To increase their *digital capability*, organisations must learn to increasingly engage with these digital devices and, even more importantly, with the staff and customers who are already using them.

However, increasing *digital capability* is not just about marketing – it is an enterprise-wide undertaking. Organisations are increasingly undergoing digital transformations that go well beyond the domain of marketing. Increasing *digital capability* can provide tangible benefits in every area of the organisation; for example:

- The senior management team can visualise and quantify how digital transformation will make the business more cost-effective, more productive and more competitive.

- Finance departments can learn how digital technologies such as cloud computing can significantly reduce not only IT costs but also administrative costs.

- Procurement departments can develop a better understanding of the digital landscape in order to source the best procurement solutions.

- HR departments can start recruiting in ways that make the organisation more attractive to digitally savvy candidates.

- Marketing departments can decide which communication channels are best to exploit – web, social media, mobile, or perhaps a multi-channel approach.

- Sales departments can improve the customer experience and increase sales by using e-commerce, social media and digital marketing.

- Customer service departments can harvest customer-generated content (such as feedback from online user forums) and integrate it with e-CRM systems.

- Research departments can leverage web analytics software that makes customer profiling increasingly more powerful and accurate.

One of the first steps in increasing *digital capability* is to raise awareness. Some organisations have aspirations to go digital to some extent, some organisations are not yet in a position to make an informed decision, and some organisations remain unconvinced. Convincing organisations to increase their *digital capability* involves a number of stages.

- The first stage is motivation – why do it? Influencing factors include current level of *digital capability*, appropriateness to the business, and pressure to upgrade from clients and peers in the sector.
- Once an informed decision is made, the second challenge is how to do it? Some organisations favour techniques such as peer learning, but it is preferable if a professional *digital capability* assessment takes place at this stage.
- The third and final challenge is how to measure value from increased *digital capability*? Continuous assessment of *digital capability* is the preferable method for measuring and maintaining its impact on the organisation.

Getting Value from Digital Capability

To understand how *digital capability* is adding value, organisations should consider digital in the context of delivering better staff performance, better customer service and better quality products. Initiatives can then be assessed for their ability to deliver better financial performance.

As previously indicated, digital is already having a beneficial impact on most departments within organisations – but for maximum value the transformation should take place on an end-to-end, enterprise-wide basis.

Digital capability can help organisations to undertake their own digital transformations, rethinking what customers value most and creating operating models that take advantage of what is newly possible for competitive differentiation.

Increasing an organisation's *digital capability* can add value that results in more effective business processes, career development opportunities, training requirements and opportunities, job creation, and reduced costs; as well as increased levels of professionalism, productivity, competitiveness and, ultimately, profits.

The value proposition for organisations that decide to increase their *digital capability* can be summarised as follows:

- It can address a need that an increasing number of organisations have but that is not being catered for currently.
- It will make such organisations aware of their *digital capability* and its value to their business.

- It will help to increase the capacity of such organisations to do business online.
- It will help make the business processes of such organisations more efficient.
- It will help make such organisations more cost-effective.
- In conjunction with effective up-skilling and training, it will make the workforces of such organisations more effective.
- It can open up new business opportunities at home and abroad for such organisations.
- It can enable such organisations to engage more effectively with the digital economy.

A wide range of organisations can derive value from increasing their *digital capability*. High-inertia, traditional industries will eventually have a significant impact on the digital economy as they gradually play digital catch-up. Such industries (which include insurance, transport and manufacturing) continue to provide substantial employment and make significant contributions to economies.

At the same time, digitally-enabled small and medium enterprises (SMEs) are likely to grow much faster than their analogue counterparts, thereby creating a significant jobs surplus. Digital service specialists, including web developers and digital agencies, stand to benefit indirectly from the increased demand for their services that will come from digitally-enabled large organisations and SMEs.

The digital ecosystems that may emerge as a result of alliances between large traditional industries, digitally-enabled SMEs and digital service specialists have the potential to generate considerable economic benefits and increase the collective digital competency of not only important business sectors but eventually of entire countries.

The DCF also has the potential to add value at European level. IVI is a stakeholder in the European Commission's Digital Agenda for Europe and recently presented the DCF at the Digital Agenda Assembly in Brussels. Reaction to IVI's contribution indicates that the DCF can help European organisations become more digitally competitive, which in turn supports the objectives of the Digital Agenda for Europe.

While IVI's primary focus must remain closer to home – completing the development of the DCF and using it to deliver value to clients on a case-by-case basis – there is also scope for IVI to enhance its own reputation and add value to its own activities by continuing to take an interest in initiatives that have critical mass potential and in initiatives that have broader implications, including the Digital Agenda for Europe.

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About IVI

The Innovation Value Institute (IVI) is a multi-disciplinary research and education establishment co-founded by the National University of Ireland Maynooth and Intel Corporation. IVI develops frameworks to assist IT and business executives to manage IT for Business Value and to deliver IT-enabled business innovation. IVI is supported by a global consortium of like-minded peers drawn from a community of public and private sector organisations, academia, analysts, professional associations, independent software vendors, and professional services organisations.

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