

Digital technology and marketing management capability: achieving growth in SMEs

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Abstract

Purpose – The purpose of this study is to evaluate the relationships between digital technology, tangible/intangible assets and marketing capabilities to gain more insight into the factors related to small- and medium-sized enterprises' (SMEs') growth in the UK. Based on the resource-advantage theory, this research addresses the question "to what extent does digital technology influence marketing capability which leads to companies' growth?"

Design/methodology/approach – Data were gathered through 21 in-depth interviews with managers from different multinational organizations and six focus groups with employees.

Findings – The study identifies the two key components of digital technology as information quality and service convenience. In addition, the relationships between digital technology, tangible/intangible assets and marketing capabilities perform the significant role of facilitator of a company's growth.

Research limitations/implications – The focus on UK SMEs limits the generalizability of the results. Further studies should be conducted in other sectors and country settings to examine the associations identified in the current study.

Originality/value – This study identifies the main impacts of digital technology on intellectual/physical assets. While managers and employees have specified that marketing capability is significant for organizations, there are a few other areas of concern with regard to consequences related to a company's growth, competence and core competence, particularly in an SME's setting.

Keywords Digital technology, Competencies, Information quality, Design innovation, Marketing capabilities

Paper type Research paper



Introduction

Core competence has been a useful tool for organizational strategists since it first appeared in the 1960s. It was defined by Andrews (1971, p. 46) as "what the company can do particularly well", and an earlier paper by Ansoff (1965, p. 105) called it a "common thread". Ansoff (1965, p. 105) described business competencies as "a relationship between present and future product markets which would enable outsiders to perceive where the firm is heading, and the inside management to give it guidance". A significant study of core competence was carried

out by Prahalad and Hamel (1990, p. 82), who characterized it as the core system that “provides nourishment, sustenance, and stability”.

The experiential study of marketing capabilities is also been given increased attention in the academic literature (Blesa and Ripolles, 2008; Ribeiro *et al.*, 2009; Tsai and Shih, 2004; Vorhies and Morgan, 2005; Weerawardena, 2003). Marketing capabilities use a substantial and optimistic view of customers’ satisfaction, which eventually indicates a superior organizational performance in terms of sales, profit and competence (Santos-Vijande *et al.*, 2012).

The aim of this paper is greater understanding of digital technology and its influence on design innovation management capability, which leads to a company’s growth. Moreover, this study highlights how information quality and its antecedents (information about integrated promotion, product pricing and transactions) in co-operation with service convenience and its antecedents (integrated information access, order fulfilment and customer service) provide a greater understanding of the influence of digital technology on design and innovation. Resource-advantage theory will be adopted to examine the relationship between information quality, service convenience, digital technology, tangible/intangible assets, marketing capability and core competencies. This research evaluates the relationships between these constructs to gain more insight and clarification of the factors related to core competence.

This paper contributes to the growing literature on digital technology and devices which provide insight into innovation. As claimed by Dewett (2003), technologies provide workers with access to original information by permitting them to link up with peer repositories and with information experts. Digital technology contributes to innovation and management capability, which leads to the growth of small- and medium-sized enterprises (SMEs).

The literature of technology adoption delivers an understanding of how informed government policies could help SMEs to achieve both growth and innovation (Blackburn, 2016). An SME’s ability to learn and acquire knowledge prepares it for further steps of growth, which ultimately determines whether the SME is able to progress to the next stage of development (Blackburn, 2016). In particular, this learning aptitude links to knowledge of management capabilities and technology. According to Fruhling and Siau (2007), the human capital accessible within the organization is likely to be a fundamental factor in effective innovation. Consequently, management strengths should be focused on nurturing and exploiting these strategic resources (Wernerfelt, 1984).

This paper is structured as follows. The current study outlines the theoretical background of information quality, service convenience, digital technology, tangible/intangible assets, marketing capability and core competence and its relationship between the dynamics. Afterwards, the author clarifies research methods. Next, the method is outlined and the results from our analysis are presented. Finally, the research contributions and limitations are summarized along with suggestions for future research.

Literature review

Digital technology

Digital technology is progressively implemented by firms to respond positively to customer needs and, at the same time, improve customer-side operations. It supports the interests of consumers and businesses and, at the same time, helps drive sales and increase efficiencies by reducing costs. Information quality can be transferred through digital technology (Watson, 2006). Organizations are strongly focused on the use of digital technology to enhance the quality of information provided to their customers (Foroudi *et al.*, 2016). In general, technological innovation can be understood as the employment of a product with

enhanced performance appearances so as to distribute new or enhanced services to the customer (Oh and Teo, 2010; Gorla *et al.*, 2010). High quality information transmitted in an appropriate way has a huge impact on customer behavior and marketing (Oh and Teo, 2010). Information quality consists of integrated promotion, which includes consistency in branding to support customers; integrated product and pricing information that guarantees reliability in product images and prices through retail channels; and integrated information transaction, which is the collection of a customer's on-line transactions held by retailers to provide personalized information and services (Oh and Teo, 2010).

Service convenience refers to consumers' interest in conserving time and effort. Oh *et al.* (2012, p. 42) state that "processes of integrated information access, integrated order fulfilment, and integrated customer service" play an essential part in achieving service convenience. Integrated information access in on-line stores allows the customer to obtain information related to the product, its availability and locations (Ray *et al.*, 2005; Tallon, 2010). Integrated order fulfillment allows seamless order fulfillment to the customers by providing product availability, easy and quick purchase and prompt delivery. Integrated, support, and products purchased on-line can also be exchanged or returned to the stores (Banker *et al.*, 2006).

Digital technologies play a significant part in almost every organization (Setia *et al.*, 2013) and have enabled co-operation among firms, information storage and analysis and improved customer service performance (Ray *et al.*, 2005). They have had an enormous impact on customer service performance (Ray *et al.*, 2005) and have enhanced the ability to accomplish service convenience (Eisenhardt and Martin, 2000; Pavlou and El Sawy, 2006; Teece *et al.*, 1997).

Tangible/intangible assets and marketing capability

Marketing capability requires the use of digital technology (Teece, 2007), as digital technology determines the organizational capability to research customers, competitors and the broader market environment (Day, 1994). Marketing capability can be implemented by utilizing a variety of processes, including sustaining relationships with customers and suppliers, as well as participating in professional associations and using best practices. These processes require a high level of use of the tangible/intangible assets of a firm. The assets of a firm itself are defined with a wide variety of meanings. Grant states that "assets are inputs into the production process - they are the basic unit of analysis", where a capability is identified as the capacity for a team of resources to perform some task or activity (Hafeez *et al.*, 2006). Marketing capability processes generate inputs for the requirements of reconfigured operational capabilities (Eisenhardt and Martin, 2000).

Method and analysis

This paper uses qualitative data collection and analysis to uncover patterns, themes and categories to make judgments about "what is really significant and meaningful in the data" (Patton, 1990, p. 406). This study conducted 21 in-depth interviews with top managers in the UK from different SMEs and six focus groups with a total of 35 people (21 male and 14 female) (see Table I). These data helped the author to generate a deeper understanding about the research (Palmer and Gallagher, 2007; Yin, 1984), discover new evidence, reveal new dimensions of the problem and secure vivid, accurate inclusive accounts that are based on personal experience (Foroudi *et al.*, 2016). A conducive and comfortable environment was provided for each interview (Malhotra *et al.*, 2000). On average, an interview lasted 1.5 h, and all interviews were recorded by two recorders and

Interview date	Interview position	Interview approximate length (min)
12.10.2015	Top Executive	54
15.10.2015		38
22.01.2016		96
30.08.2016		26
01.09.2016		64
08.08.2016		32
15.03.2016		48
12.10.2015	Communication and Design Manager	121
08.08.2016		54
22.08.2016		75
15.03.2016	Managing Director	45
14.12.2015		35
15.10.2015	Design Strategy Manager	75
15.10.2015	Marketing Manager	26
02.07.2016		47
26.05.2016	Risk Assurance Director	55
27.05.2016	Senior Business Advisor	40
31.05.2016	Senior Manager	30
08.08.2016		64
22.08.2016		24
30.08.2016		65

Notes: *Topics discussed:* the understanding of core competence; the factors that influence core competence; their experience of what they understand the tangible/intangible assets and their influence on core competence; discussion of digital technology and whether it influences competence; and discussion of marketing capability and the main perceived impacts on core competence

Source: *The Researcher*

Table I.
In-depth interviews
with managers

transcribed verbatim, which ensured the reliability of the data (Andriopoulos and Lewis, 2009).

The research aim was to understand to what extent digital technology influences marketing capability, which leads to development of core competence and the SME's growth. This study followed Foroudi *et al.*'s (2014, 2016) recommendation to conduct in-depth interviews using a semi-structured technique by developing a qualitative protocol and designing direct questions to discover essential motivation, beliefs, attitudes and feelings about the topic. The interviews were conducted face-to-face between October 2015 and September 2016.

To assess the qualitative results and improve the validity and reliability of the study, triangulation was used in two stages based on Creswell and Miller's (2000) suggestions. We developed codes by addressing the problem areas, research questions and key constructs (Palmer and Gallagher, 2007). Then, we used QSR NVivo software for data administration, data storage and retrieval. NVivo is appropriate software to assist in the interpretation of the text and inter-relationships between codes. In addition, the data were examined to derive the nodes, which influence the inter-relationships of the thematic ideas, the nodes (themes) were reviewed for consistency and an iterative process was followed throughout the data analysis.

Subsequently, the transcripts of the interviews were analyzed. Significant statements which were directly associated with the research question were identified. By identifying a significant word, the results obtained by means of the open questions were scanned and linked directly to the research question to develop a theory.

Results and discussion

The literature review revealed that concepts of core competence and its dynamics are not clearly defined. To address the gap, a conceptual framework was developed that includes key research constructs (Figure 1) based on the literature and qualitative study. Generating an employee-level conceptual framework developed from the resource-advantage theory demonstrates that:

- There are relationships between information quality, service convenience, digital technology, tangible/intangible assets, marketing capability and company growth.
- There are connections between other theoretically acknowledged variables.

One research question is addressed:

RQ1. To what extent does digital technology influence marketing capability, which leads to a company’s growth?

The findings from the study suggest that tangible/intangible assets and digital technology influenced marketing capabilities, and that marketing capabilities influenced the SMEs’ growth and development of their core competencies. Every entrepreneur had a unique perception, but the majority claimed that the SME was an increasingly important phenomenon. Innovations and knowledge may lead to the utilization of new or improved products or processes. The managers of these SMEs have confirmed that to be successful in meeting adversity, one should possess a good knowledge of all the business functions. The manager who masters these elements can be successful in future developments.

This paper evaluates the relationships between the constructs to gain more insight and clarification of the factors related to core competence in UK SMEs. Nevertheless, this study

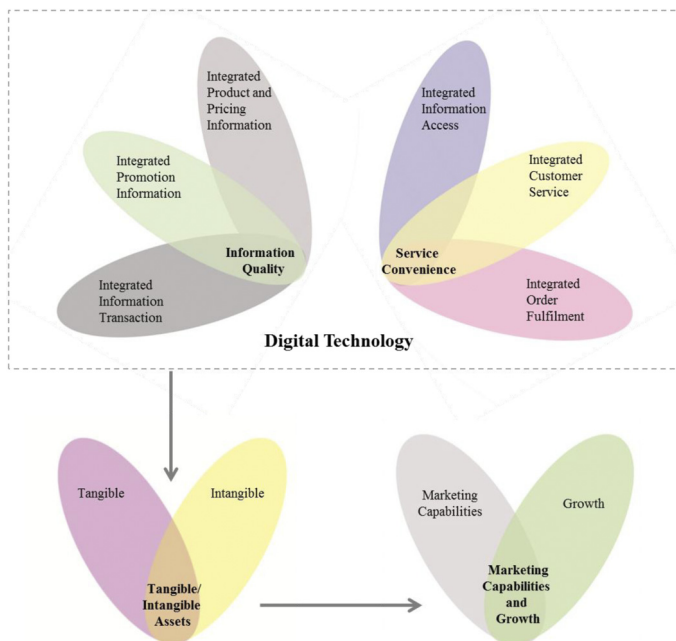


Figure 1. Framework of digital technology, tangible/intangible assets, marketing capability and competencies

is one of the first to empirically confirm the assumption made by researchers (Mahoney and Pandian, 1992) that it is an understanding of digital technology, tangible/intangible assets and its influence on marketing capability which leads to core competence. This would result in insights that might make a substantial addition to the present knowledge and support future research in this field (Hafeez *et al.*, 2016). To identify the core competencies of a firm, it is essential to examine the features of its components (Dierickx and Cool, 1989).

Moreover, this paper highlights how information quality and its antecedents (information concerning integrated promotion and product pricing and transactions) in conjunction with service convenience and its antecedents (integrated information access, order fulfilment, customer service) provides a greater understanding of digital technology, which influences tangible/intangible assets, marketing capability and competence. Using data from interviews in UK SMEs, this paper attempts to scrutinize the relationship between information quality, service convenience, tangible/intangible assets, digital technology, marketing capability, competence and core competencies.

Business concept was defined by interviewees as a perception of how to manage and carry out an economic activity; it involves assumptions and behavioral rules. A business concept innovation reconceives or breaks with widely accepted ideas and behaviors about how a business should be, changing the perception of how to run the business. To answer the question “how did you action your business concept into reality?”, the following comments illustrate the managers’ assessments:

There it was the X on gum tree. I made some notes at home about what I will be discussing and then I straight away talk to owner of business, and I manage to complete deal but the business concept did not finish there.

I was working in catering industry for 10 years. After gaining so much experience and being passionate about the products and customer service I have decide to open my own business. I put all my heart into it and always give 100 per cent. My customers are my guests and I treat everyone as a special.

Innovation gives rise to a new or significantly improved mental model relating to a business, which leads to substantial modifications in a firm’s methods and general knowledge. This, in turn, makes it possible for catering companies, for example, to develop their own innovations where knowledge and technologies are applied in a new way. Moreover, business concepts help SMEs to achieve competitiveness. Likewise, service and product characteristics will differ among firms with different business concepts. The managers should try to invent a new business concept which will help them devise ways to grow their company.

Competitive advantage is fulfilling an unmet consumer need in a market segment (Hinterhuber, 2013). Burns (2011) believes that innovation and opportunity are key to gaining competitive advantage. A business needs to innovate with its products and services to gain competitive advantage in the market. Innovation can maintain and improve competitive advantage and also extend the business’s life. Managers must first identify their competencies that give them competitive advantage over other similar companies in the same market place. Moreover, managers stated that sources of advantage were *quality good product and high quality product and the best customer service*.

If a company does not develop new technologies or new scientific knowledge, then where can their innovations come from? The answer to this question requires recognizing the existence of non-technological knowledge. In SMEs, this knowledge is specific to the company. In other words, it is knowledge accumulated from the learning process of each business process. Every firm, in every industry, gains specific knowledge from its activities (Aldebert *et al.*, 2011), which comes from the firm’s market, organization, production,

delivery process, etc. Such innovation changes dramatically as business and products are conceived, creating a pattern about how and what knowledge, or other firm resources, must be used (Gupta *et al.*, 2016). For example, a catering SME could introduce a side-line of delivery options for local businesses and organizations. Furthermore, these catering SMEs could host a small special event in their premises such as art days or cultural music nights. Bringing cultural themes into their businesses could be a good way to attract new customers given that they have small marketing budgets.

Digital marketing leveraging social media channels provides SMEs with a new innovative way to interact with customers, providing an alternative, cost-effective and attractive proposition. The competitive environment reflects how businesses compete and function within an environment. In a place where there is a demand for a particular product, it is likely that there will be more sellers with similar products. Interviews included the question, "do you think your products are competitive taking the current demand into consideration?" The following quotations reflect the answers:

Maybe some people will be attracted. But if it's different, and you don't want that sort of customer really, in general, who get attracted with the price. That is foolish doing that anyway.

My customers are mainly local people. They love the products and the atmosphere in the place. Also we adapt our menu to customer's needs related to allergies, special products intolerance and level of spices. In my culture we tend to eat very spice, but of course not everyone can take it the same level, so we have to take this also into our considerations.

SMEs have direct and indirect competitors. They are surrounded by many competitors who sell similar products at lower prices. In turn, they offer different kinds of benefits to their customers. For example, a restaurant offers discounts to students while another does not charge corkage so that their customers can bring their own alcohol without incurring an extra charge. Indirect competitors such as local supermarkets offer a substitute by selling ready meals. However, the food is the best quality, as it is not only tasty but also healthy, and their meals are unique. To gain new customers and keep existing customers happy, one of the shops offers on-line take-out ordering through its website. Because of the locations, the demand for their product is always very high. The owners should concentrate on an individual product to ensure that they are being competitive all the time and improve growth.

Growth and development can be summarized as business owners wanting to increase their market share by expanding the business. This can be in the form of increasing floor space, marketing initiatives and employing further employees to build on current successes and exploit opportunities. To understand the entrepreneurs' growth and development to date, interviewees stated:

I invested fifteen thousand pounds into my business, I broke even at the end of my 6 months.

I opened my retail outlet 24 years ago, due to my hard work and my passion my business is making more money every year.

Currently, one of the business owners is an example of an entrepreneur bringing his idea forward and implementing it, which resulted in employment opportunities for local residents. Although the business has been running for only six-eight months, it is estimated to be worth four times more than its purchase price. Taking into consideration such a short period of time and current value of the business, it can be assumed that the value of this business by the end of its financial year will increase, even though they face so many challenges in managing the business.

According to Daft and Marcic (2004), challenge management reflects difficulties and problems managers and owners can face in running and managing their business on a daily

basis. SME owners face many challenges in globalized markets. However, the greatest problem is how to effectively manage the all-encompassing functions of a business without causing conflicts within these functions. One question was, "what do you consider to be the most challenging aspect about being a manager in business today?", which elicited responses such as:

I believe losing interest in business, would be a challenge. So, I have to keep working very hard and then doing lots of money and success. So that might keep me focused. If I lost money, you've got to focus. If you did not, you lost interest. You just think you are just wasting your time or just. That's dangerous.

I have to keep control on staff at all the times, they are very important part of my business but I have to ensure that they work as hard as I do, so finding the right people it is very difficult.

Owners of small businesses confront many challenges in managing their business. These involve understanding financial responsibilities, creating products which suit customers and recruiting employees with the appropriate skills set. However, the biggest challenge that they face is business regulations and taxes. Therefore, they need to understand the content of regulation for the industry and how it impacts their businesses. They need to develop the skills necessary to deal with it. In our sample, two companies also experienced difficulty in finding appropriate staff who understood and supported their business objectives. For small businesses, it is personalities and skills which matter. To be successful in meeting adversity, the owners of SMEs should possess a conceptual knowledge of all business functions by designing strategies for future growth and development.

Strategies for future growth and development involve developing a structural model which contains all the required tools. This model prepares a business to grow and develop. Strategy contains elements such as product, timing, methods, economic and business case and differentiation. Strategic planning is the process of guidance for development. Strategy must be consistent, measurable and flexible. Strategic objectives are the key for future growth and development for SMEs. However, to achieve success, the owners must be committed to the business, value employees, promote the business, have plans to expand and be skilled in all aspects of the organization. This study was concerned with what the business owner can do which will make a difference to the future growth and development of the business. This can be explained by the comment of managers:

Lisa is my employee. But I consider her as my colleague. We must concentrate there, and as long as the business is getting bigger and bigger. She needs to be into it and then, looking forward to do it for a long time. If she just stood there, I say, no, she's wasting her time. You know, she's getting some profit. But whenever she's ready, we can open another coffee shop for her. For example, we are moving across the road which is three times bigger when this is settled down. Yeah, after Christmas, we will just operate it from there.

It is nothing more that hard work, you have to stay focused and be passionate about what you do. I am very happy with my current size of the business and I am not planning to expand it, but I have only one wish, I would like to keep this in my family and I am hoping that my daughter will be able to take over the business.

There are different strategies which can lead to the growth and development of a business. The owners have strategies to expand the business and ensure long-term success. They understand and value their employees, as they believe they are key for future growth and development. After all, they possess a great understanding of all business functions, but they are not focused on expanding the business. The majority of interviewees were satisfied with the current size of the business. Their strategy was based on hard work to keep their customers happy so that these customers will keep coming back. They focus on their

products and services to provide the highest standard at all times. The majority have a lot of experience in their industry, which helps them to build an effective strategy. Three owners are planning to move their businesses nearby to premises which are three times bigger than the present ones.

Antecedents of digital technology

This study supports the assertion that information quality and service convenience are linked to digital technology. In relation to information quality, interviewees observe that information quality including integrated promotion information, integrated product and pricing information and integrated information transaction is linked to digital technology. In addition, the data analysis suggest that service convenience, including integrated information access, integrated order fulfillment and integrated customer service, are linked to digital technology. A director of one of the SME accountancy firms explained that:

Digital technology is a key enabler in the way our firm interacts with clients and communicates about competitive advantage. Technology aspects have been embedded in the work environment to enhance the internal quality and methodology. For example, the firm uses an integrated global ERP system to manage and support a paperless working environment, with analytical capability which provides visualization of big data, using the volume of financial information gathered during projects. All this integrates seamlessly, to enhance the overall quality of service provided to our clients.

SMEs in the UK can be defined in terms of employment, asset value and sales (Rostamkalaei and Freel, 2016). However, Jasra *et al.*'s (2011) definition of SMEs is made more specific by determining what they represent in terms of numbers of employees and their capability.

Digital technology and marketing capability

In relation to digital technology, this study found that the use of digital technology was positively related to tangible/intangible assets, and their results show that the frequent engagement of tangible/intangible assets is positively linked to customer relationship capabilities. Furthermore, the relationship between tangible/intangible assets and corporate brand identity capabilities shows that frequent engagement of tangible/intangible assets is positively linked to corporate brand identity capabilities, which support the hypotheses. In addition, frequent engagement of tangible/intangible assets is positively linked to customer relationship capabilities and social media/communication capabilities. The results indicate a strong relationship between marketing capabilities and competence from the employees' viewpoint of an organization's core competence. The data demonstrate that the employee's view of information quality, service convenience, digital technology and tangible/intangible assets and marketing capabilities facilitates the relationship between competence and organizational core competence. Accordingly, the relationships between the employee's view of information quality and digital technology; service convenience and digital technology; digital technology and tangible/intangible assets; tangible/intangible assets and marketing capabilities were related.

The outcomes suggest that all dynamics, including information quality, service convenience, digital technology, tangible/intangible assets and marketing capabilities, perform a significant role as a facilitator between the competence and core competence. This illustrates the concept of employee-based core competence, defined as organizational routines manifested in business activities and processes that bring assets together and enable them to be deployed advantageously (Hamel and Prahalad, 1990; Drejer, 2000).

Irrespective of the nature of the business they are in, or the competition they face, management should consistently observe the efficiency and appropriateness of the

competence in respect to the organizational core competence. A global firms' core competence was conceptualized as consisting of both internal and competitive dimensions. The competences perceived by the employees are encouragingly linked to organizational core competences.

Constructed upon the examination of the gap acknowledged by academics and practitioners (Hafeez *et al.*, 2002), this study has conducted a systematic investigation of the factors which influence organizational core competence. The results show that core competence in relation to the research model comprises six factors: information quality, service convenience, digital technology, tangible/intangible assets, marketing capabilities and competence. Information quality is abstracted in relation to its dynamics involving integrated promotion information, integrated product and pricing information and integrated information transaction, which deliver stability in branding to support customers and distinguish the firm from its competitors (Oh and Teo, 2010). Service convenience, including its components "processes of integrated information access, integrated order fulfilment, and integrated customer service" (Oh and Teo, 2010, p. 42), compose consumer perceptions of the services offered by the organization and its benefits.

Digital technology adopted by the organization enhances the ability to respond positively to customer needs and, at the same time, improves customer-side operations. Digital technology focuses on the consumers and businesses and, at the same time, helps drive sales and increase efficiencies by reducing costs. Assets are resource endowments that a firm has accrued over time and that can be deployed for forming a competitive advantage (Amit and Schoemaker, 1993; Day, 1994; Fahy, 2000; Grant, 1991). Marketing capabilities successfully deployed build greater customer value and enhance the ability to deliver a competitive advantage (Fahy, 2000; Kay, 1993; Williams, 1992).

Digital technology enhances learning and is one of the most critical elements of design innovation. Innovation design focuses on developing new products and market segments, and it plays an important role in the marketing department where constant interaction and exchange of information with customers is fed back to the design department. In the product design department, management capability strongly focuses on developing new products and market segments by monitoring market trends and seeking market opportunities (Foroudi *et al.*, 2016).

According to scholars (Gupta and Wilemon, 1990; Foroudi *et al.*, 2016), the effective relationships among design activities and marketing can generate product innovation. In addition, innovation is of crucial importance for fast-growing SMEs (Coad and Rao, 2008). SMEs that carry out product innovations will achieve greater growth rates than those that do not (Gupta *et al.*, 2016). Firms with better internal management capability will be able to innovate, relative to firms with lesser internal capability.

Marketing capability, company's growth and competencies

This study also reveals certain characteristics of the core competence by showing how the organizational core competence is developed, measured and managed. Strategies to construct organizational core competence are reviewed in relation to both company tangible/intangible assets and marketing capabilities. The view of organizational core competence of employee-based outlooks is reviewed by demonstrating the effects of digital technology on marketing capabilities and tangible/intangible assets with the aim of building organizational core competence.

The results show mediation and direct effect between the firm's tangible/intangible assets and its marketing capabilities. An optimistic approach toward market-sensing, corporate brand identity, customer relationship and social media/communication

capabilities is evidence of earlier proficiencies, and notes from the accountancy firm about organizational core competence facilitate the relationship between tangible/intangible assets and marketing capabilities. The findings indicate that the four dynamics (market-sensing, corporate brand identity, customer relationship and social media/communication capabilities) can be driven by the tangible/intangible assets. One consultancy, accountancy-based firm that underscores the significance of marketing capabilities adapted by tangible/intangible assets in developing the competence which leads to core competence stated that:

With the rapid advancement in technology, the firm's capabilities to promote its services have significantly changed. In addition, to use the tradition marketing methods such as personal brochures, articles, we now use a variety of on-line methods to promote thought leadership, new innovative ideas and concepts. For example, the social media in the form of tweets, blogging is used frequently to promote the recent trends in the market. The firm is using apps to target specific customers, engaging and collating valuable information, which provides valuable information in developing our future marketing capabilities.

In addition, one participant added:

The of customer relationship management (CRM) technology helps us gather and share all data relating to customer services, product, offerings and pricing. The global database is accessed by all professionals across the network firm; this provides detailed analysis and information on customer behaviors, key relationships and sale management process.

This quotation demonstrates the effect on employees' outlooks of core competence and its dynamic marketing capabilities and company tangible/intangible assets, which mark an enormous impact on organizational core competence. Furthermore, [Hunt and Morgan \(1995, p. 7\)](#) emphasize that "a comparative advantage in assets can transform into a competitive advantage in the marketplace and superior financial performance [...]". These statements indicate that throughout the development and leveraging of firm assets, the firm determines a set of capabilities, including marketing capabilities that allow the organization to accomplish greater levels of firm performance. An effective marketing capability positively influences firm performance consistently across functional environments ([Hunt and Morgan, 1995](#)). It is generally accepted that firms utilize their marketing capabilities through their assets to communicate on behalf of the firm and boost the firm's performance and competence.

Design innovation can be defined as an implementation of new ideas or behavior within an organization ([Helfat et al., 2009](#)). Design innovation in association with management capabilities enables SMEs to grow. Management capabilities highlight the importance of the learning process that is an essential part of innovation ([Pittaway and Rose, 2006](#)). Specific managerial activities or skills optimize the design process. The growth of SMEs has attracted notable attention from organizations and entrepreneurship research. This attention is essential in entrepreneurship studies, as well as managers and policy makers. Growth is vital to SMEs. When deciding their growth strategy, SMEs face big decisions on how to expand and improve their product markets through innovation.

Interviewees defined corporate brand identity as "the set of meanings by which a company allows itself to be known and through which it allows people to describe, remember and relate to it", which is consistent with the views put forward by previous studies ([Topalian, 1984](#); [Olins, 1989](#); [Markwick and Fill, 1997](#)). Corporate brand identity encompasses several qualities of a company, such as business strategy, corporate culture, behavior and corporate design, all of which cooperate with each other and result in differentiating one firm from another. Corporate brand identity allows assets to be more

equitably valued and facilitates the company's access to capital markets (Beatty and Ritter, 1986).

In addition, customer relationship capabilities were highlighted by participants as a significant element to attain superior performance. Bowersox *et al.* (2002, p. 42) defined customer relationship capability as "the competency of building lasting distinctiveness with customers of choice", which includes "identifying the long-term requirements, expectations, and preferences of current and/or potential customers and markets, and focusing on creating customer value" (p. 31). Four capabilities must occur to accomplish customer-relationship capabilities: segmental focus, relevancy, responsiveness and flexibility (Bowersox *et al.*, 2002).

Marketing capabilities should influence competence. Equally, the greater number of respondents in this sample suggested that marketing capabilities deliver enormous effect on a company's competence, which leads to organizational core competence. In line with Hunt and Morgan (1995), marketing capabilities are a resultant from the assets a firm possesses and are a dominant driver of firm performance and competence. Consequently, marketing capabilities assist as a facilitator between tangible/intangible assets and firm performance, and assets will also influence directly firm performance or competence. Therefore, marketing capabilities fully facilitate the impact of assets on firm performance and competence. The entire sample agreed that information quality and service convenience influenced digital technology, that digital technology is positively linked to tangible/intangible assets and that marketing capabilities in association with the firm's assets influenced competence. This result suggests that effectively utilized digital technology influences the marketing capabilities, which, in turn, influence competence. Likewise, digital technology has an enormous impact on marketing capabilities which lead to core competence. This assessment is clarified by the following statement from a director of a consultancy and accountancy firm:

Every aspect of a marketing campaign within the firm is used to collate valuable information about our customer's issues, challenges etc. These campaigns act as useful tools to inform the leadership of the gaps in the core competency within the firm and areas which require more investment. For example, over the last 10 years the firm has significantly invested in developing the cyber capabilities, this is as a direct result of market trends, challenges/issues faced by our clients, the need for which was established through various marketing campaign, research etc.

Conclusion

The aim of this research is to address the gaps in previous studies regarding:

- the relationships between information quality, service convenience, digital technology, tangible/intangible assets, marketing capability, competence and core competences; and
- the relationships between other theoretically acknowledged variables.

The results demonstrated a strong relationship between the variables.

Digital technology has an enormous impact on marketing capabilities, which leads to the development of core competences in UK firms. Moreover, it suggests further avenues of theoretical and managerial research to boost the understanding and supervision of core competences in UK firms.

The advantages of innovation in terms of growth have been recognized for SMEs. Information quality combined with service convenience is related to improved performance. Digital technology is an effective way to transform information to innovate. Greater management capabilities and technological developments offer opportunities to SMEs to

achieve growth and innovation, which can be delivered through greater resources, and help SMEs to attract and retain more customers (Gupta *et al.*, 2016).

Innovation policies in a developed country, such as the UK, promote the adoption of technologies and good practices by SMEs. Although policy makers should try to increase innovation performance in SMEs by providing relevant training in the use of technology. In addition, better access to higher education, can enables entrepreneurs to gain knowledge of design innovation. Such informed policies could lead to the growth of SMEs given that this kind of a firm represents a big part of the economy.

Based on the review of the related literature and qualitative analysis, the research framework is presented in Figure 1.

Research implications

The current commentary builds on the growing body of research on the subject of core competence. With deeper engagement in competence issues, firms exploit digital technology more frequently by utilizing company assets and enhancing the ability to attain core competence. The authors suggest a combined conceptualization that combines digital technology and marketing capability at the center of the firm's strategy to generate competence and core competence.

The greatest contribution of the present research is to increase comprehension by investigating employees' valuations of the impact of digital technology and marketing capabilities on firms' financial competence. Numerous academicians indicate that digital technology, tangible/intangible assets and marketing capabilities are associated with core competence; however, they have not investigated this correlation. Nevertheless, the present study offers a corroborated framework which shows the relationships among the dynamics of a core competence. It discusses the gaps in current knowledge and answers earlier demands for research from the viewpoint of marketers (Foroudi *et al.*, 2014). The creation of a unique model for core competence is a fundamental requirement of the current investigation. The major task is, in this view, the conduct of (multi-disciplinary) studies into interactions, which can be transformed into outcomes with practical applicability (Palmer and Bejou, 2006). This study aims to clarify, with a more holistic method, the relationships between information quality, service convenience, digital technology, tangible/intangible assets, marketing capabilities, competence and core competence in the judgement of employees within the financial sector.

The results of this study deliver assistance for strategic "decision makers" who demand to comprehend the broad connections between a core competence and features of its components (i.e. information quality, service convenience, digital technology, tangible/intangible assets, marketing capabilities and competence) from the employee's perspective and its effect on an organizational competence.

Additional potential contributions can be discerned as this investigation related to the managers and decision makers approaches (Sedera and Gable, 2010). A firm requires lifecycle-wide knowledge for devising a strategy. The innovative uses made of firms' tangible/intangible assets have naturally sought to increase the exploration of digital technology and exploitation of marketing capabilities (Levinthal and March, 1993). The present study establishes the significance of all the dynamics of competence with each component delivering a distinct and significant contribution to organizational core competence. It is hoped that this research will aid managers to successfully and efficiently develop their organization-related competence, thus improving levels of competitive advantage and firm success (Sedera and Gable, 2010).

We propose that to attain a competitive advantage, firms must possess a full understanding of what establishes a core competence, which is influenced by three central features, specifically: digital technology, tangible/intangible assets and marketing capabilities. These findings acknowledge the relative weighting of the dynamic hypotheses that influence core competence. Consequently, the present study has substantial implications for managers and strategic decision makers when forming or adjusting core competence.

Limitations and future research directions

The present competence, which addresses the problems of creating competitive advantage and firms' success. Nonetheless, these outcomes must be interpreted in the light of this study's limitations associated with the method of sampling/analysis used, as well as its measurement (Foroudi *et al.*, 2014). The present study was undertaken in a particular background and location, whereas in another location and another industry segment, the outcomes could have been different. Though the authors have based their findings on qualitative research and earlier studies of different samples, the individual characteristics of core competence that we have identified might prove to be different. Hence, it is suggested that a further study is conducted to confirm these findings in different sectors so as to assess the generalizability of the result.

Additional limitations of the present study include the number and type of employees, and using a larger sample would improve the reliability of the results (Churchill, 1999). Future studies must repeat this investigation with more sectors and a larger number of employees. Furthermore, in relation to the exploration strategy, the qualitative investigation was aimed at managers and academicians, though managers and academicians' outlooks are not identical.

This study examined the relationships between information quality, service convenience, digital technology, tangible/intangible assets, marketing capabilities, competence and core competence, as observed by employees. Possibly, a future analysis might generate dissimilar outcomes from similar research scales and hypotheses. Though this research engaged mixed methods, a wider investigation could expand our knowledge of the implications of the competence.

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