

The digital marketing skills gap: Developing a Digital Marketer Model for the communication industries



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ABSTRACT

Scholarly literature suggests digital marketing skills gaps in industry, but these skills gaps are not clearly identified. The research aims to specify any digital marketing skills gaps encountered by professionals working in communication industries. In-depth interviews were undertaken with 20 communication industry professionals. A focus group followed, testing the rigour of the data.

We find that a lack of specific technical skills; a need for best practice guidance on evaluation metrics, and a lack of intelligent futureproofing for dynamic technological change and development are skills gaps currently challenging the communication industry. However, the challenge of integrating digital marketing approaches with established marketing practice emerges as the key skills gap.

Emerging from the key findings, a Digital Marketer Model was developed, highlighting the key competencies and skills needed by an excellent digital marketer.

The research concludes that guidance on best practice, focusing upon evaluation metrics, futureproofing and strategic integration, needs to be developed for the communication industry. The Digital Marketing Model should be subject to further testing in industry and academia. Suggestions for further research are discussed.

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1. Introduction

Evolving technologies continually present new opportunities and challenges for industry practitioners, education and academic research (Buzzard, Crittenden, Crittenden, & McCarty, 2011; Hamill, Tagg, Stevenson, & Vescovi, 2010; Kaplan & Haenlein, 2010; Weiss, 2011). Business communication has been revolutionised with social networking sites such as Facebook and Twitter commonly utilised as credible business tools (Levy & Birkner, 2011). The widespread adoption of digital marketing techniques, including social media, has significantly contributed to the individualisation of marketing where the providers of goods and services are increasingly communicating with individual consumers and users, gaining feedback on a one-to-one basis and providing bespoke solutions for clients (Brady, Fellenz, & Brookes, 2008; Simmons, 2008).

In the digital era, the transformation of communication channels is challenging for all industries, but particularly so for the communication and marketing industries. As Mulhern (2009, p. 86) comments, “The digitization of media represents a phase change in the history of communications”. Kung (2008) notes that changes in technology and consumer behaviour have always been the key drivers of change in media strategy. However, what is different in

the current digital environment is the “velocity, intertwinedness and therefore complexity of these elements” (Kung, 2008, p. 83). It is important to be clear about our understanding of the definition of ‘digital marketing’. The Digital Marketing Institute (DMI) refers to digital marketing as “The use of digital technologies to create an integrated, targeted and measurable communication which helps to acquire and retain customers while building deeper relationships with them” (Smith, 2007, in Wymbs, 2011, p. 94). Simply Digital Marketing (2012) defines the term thus: “Digital Marketing is a sub branch of traditional Marketing and uses modern digital channels for the placement of products e.g. downloadable music, and primarily for communicating with stakeholders e.g. customers and investors about brand, products and business progress”. Both of these definitions are useful; the first because it emphasises the importance of a strategic underpinning to any marketing approach i.e. its measurability and integration, as well as focusing upon relationships and communication. The second definition serves to remind us that as well as encompassing intelligent strategy and excellent communication, any use of digital marketing must be effective at promoting products or services. It is also useful to clarify the intended meaning of other terminology used throughout this paper. The term ‘creative industries’ is generally understood to encompass businesses such as publishing, media (such as television and radio) architecture, art craft and design, fashion, advertising, public relations, and computer games and software according to the definition by the UK Department of Media Culture and Sport (DMCS, 2001).

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The dearth of research into how communication and creative industries are using digital marketing skills provides the impetus for this research. The term ‘digital marketing skills’ is used in this research to refer to the knowledge and awareness of digital marketing and its applications in the creative industries. The research addresses this gap, and contributes to the limited literature which examines digital marketing skills gaps in the communication industry. The paper aims to enhance industry and academic knowledge of skills gaps across the communication industry and to provide an evidence-based model to aid educators and practitioners in addressing these gaps. The research strengthens links between academia and industry, by “listening to marketers’ needs” (Reibstein, Day, & Wind, 2009, p. 2). The paper is underpinned by existing literature which has explored the digital marketing skills needs of industry and academia but, uniquely, asks professionals from the communication and creative industries to pinpoint these skills shortfalls. The paper reviews current literature addressing skills gaps across industry and academia, focusing upon digital marketing skills. The methodological approach is then discussed, followed by the main findings of in-depth interviews and a focus group. These findings are discussed in the context of relevant literature. The research concludes and outlines limitations of the approach, as well as areas for further research.

2. Rationale and literature review

2.1. Addressing industry needs

This research is directly informed by consultation with experts working in this area, and aims to identify digital marketing training needs in the communication industries. Research into social media has identified the need for further academic enquiry focusing on the use of social media for marketing (Akar & Topcu, 2011; Brady et al., 2008) and for that research to address industry needs (Brady et al., 2008; Reibstein et al., 2009) thus closing the perceived gap between industry and academia, in the field of marketing. Reibstein et al. (2009) point out that some of the best work has emerged from collaboration between scholars and managers, developing ‘theories-in-use’ which are academically rigorous and also succeed in having a practical application. Reibstein however, also highlights the need for further collaboration between academia and industry. There is considerable trade comment which acknowledges a ‘digital skills gap’ within the marketing field and confirms training needs (Crush, 2011; NMA, 2007; Wood, 2011). There have been calls for research in marketing to increase relevance for current challenges and issues within industry and to address practitioner concerns (Brady et al., 2008; Reibstein et al., 2009) and skills shortages (Valos, Ewing, & Powell, 2010). Many changes in the field have evolved in response to digitisation. For example it is often simpler for marketers to experiment by testing new ideas on Facebook, thereby gleaning feedback more swiftly and in greater numbers, rather than choosing to undertake focus groups (Brynjolfsson & Schrage, 2009) or other more traditional approaches to research (Mulhern, 2009). The impact of experimentation is discussed later in the paper. Integrating digital marketing skills and technological developments into the curriculum has taken a relatively long time for academia (Reibstein et al., 2009; Wymb, 2011) and those gaps in training and skills are often addressed by attending short courses run by professional marketing bodies.

One of the biggest changes effected by the development of Web 2.0 technologies is the development of a ‘river’ of information (Day, 2011; Klingberg, 2009; Micu et al., 2011) where businesses and individuals promote their products, services, opinions, reviews and blogs, creating a wealth of information. It is arguable that

some of the skills necessary in future marketing experts will be developing the expertise to pick out the useful information that exists online. Micu et al. (2011) note that while around 80% of marketing issues are currently tackled by undertaking marketing research, in the future, the most advanced companies will have developed the technology and the people to ‘fish the river’ of information that exists (Micu et al., 2011, p. 215). As Valos et al. comment (2010, p. 363), “More decisions will be based on data-driven extrapolations and statistical heuristics than on conjecture, opinion and ‘gut-feel’”. This ‘statistical’ – ‘experimental’ continuum is explored in the current study. Micu et al. note that “in the new world, knowledge will exist before the business question is formed” (2011, p. 216). Therefore, analytical skills, technical skills and effective performance metrics become crucial (Mulhern, 2009).

Recent research by McAfee and Brynjolfsson (2012) highlights some of the difficulties associated with the interpretation of big data. They outline the barriers to effective change management which are presented by big data: failure of leadership; lack of appropriate talent management; failure to adopt new technology; poor decision making and a company culture which is not entirely open to a data-driven approach. This has parallels with the findings from the current research, which has found communication professionals focusing upon a lack of technical capability in employees and the lack of an overall digital strategy. Other recent literature examining datavores – businesses with a sophisticated approach to using online data – has found that they are more innovative than most businesses, relying on data rather than intuition to make intelligent business decisions (NESTA, 2012). The NESTA study also identifies a widespread failure to collect available online data, beyond that of website metrics. The study identifies that issues of management culture and business skills are barriers to adopting an online analysis approach, along with legacy business systems, online analytics processes, security concerns and points of business law. This is currently an extremely challenging aspect of digital marketing skills due to the dynamism of the field and the plethora of analytical and measurement tools available (Fisher, 2009). Micu et al. also note the need to develop these data mining skills in marketing personnel, in order to “explore, digest, synthesize and explain” (2011, p. 219). Therefore, communication and storytelling skills, both within the business (B2B) and with the client (B2C), will be as important as ever for marketers.

2.2. Digital marketing skills gaps in the communication and creative industries

Literature in the field reveals that there is a dearth of research examining digital marketing skills gaps in the communication industries. In their study focusing upon the use of SNS (social networking sites) by B2B (business-to-business) firms, Michaelidou and Siamagka (2011) note the lack of academic research available on this topic. Day (2011) points out the need for expert knowledge of digital marketing skills across industry and the damage that can be done if this skill set is not present (2011, p. 184). He proposes a focus upon adaptive capabilities, ensuring intelligent futureproofing, market experimentation and relationship enhancement, capitalising upon the expertise of media-savvy partners is the way forward for the effective use of digital marketing capabilities. This research probes these proposed areas of focus, establishing whether practitioners in the communication industry agree that these are the digital marketing skills which need to be mastered. Brady et al. (2008) call for further research into the necessary skills sets for dealing with contemporary marketing practices, adding, crucially that it is vital that marketing academics understand and cater to the “conceptual, theoretical and educational requirements of those practitioners” (2008, p. 112). As Brady

et al. ask for the identification and development of specific skill sets for marketing practitioners, this highlights that there is an idea within industry of the digital marketing skills that must be honed, but that there is a need for research to provide an evidence base in order to address those specific skills gaps. Indeed, [Schlee and Harich \(2010\)](#) in their study of the skills needed for contemporary marketing jobs, acknowledge that marketing graduates must possess technical skills and an awareness of Internet marketing and customer relationship management (CRM). While this is undoubtedly true, it does not detail the specific skills currently needed in this field. It is interesting to note that [Lace \(2004, in Valos et al., 2010\)](#) found that only half of the participating businesses in his UK study of advertisers felt that their integration of digital media was successful, revealing a need for skills development. [Michaelidou and Siamagka \(2011\)](#) found in their study of SNS use by B2B organisations, that Facebook, Twitter and LinkedIn were some of the most common social media used, primarily to attract new customers and cultivate relationships. However, barriers to use included the belief of employees that SNS was not important in the industry, but also not being clear as to how SNS might enhance industry effectiveness. Crucially, the research of [Michaelidou and Siamagka \(2011\)](#) also found that employees did not feel familiar with social networking and did not have the technical skills to use it.

The current research explores the ‘mindset’ of communication professionals and aims to identify, specifically, the skills gaps and challenges facing the industry. [Quinton and Fennemore \(2013\)](#) examine the use of online social networks, such as Facebook and Twitter, by charities and found that barriers to use included lack of resources and, again, lack of social media marketing skills. Similarly, [Mulhern](#) notes that while the onslaught of digital technologies poses huge challenges for communication industries, marketers lack both the mindset and the technical expertise to tackle this challenge (2009, p. 86). [Deiser and Newton \(2013\)](#), in their study of social media used by leaders at General Electric, identify several strategic challenges which leaders must adopt in order to maximise the benefits which social media might bring, acknowledging that ‘reverse-mentoring’ might be needed, in order that leaders’ digital marketing skills be brought up to date by digitally literate employees. They also note the challenge of integrating new technological skills with existing communications processes. [Jarvinen, Töllinen, Karjaluoto, and Jayawardhena \(2012\)](#) in their study of B2B adoption of social media, found that there still persists a tendency to focus upon one-directional communication methods with established digital tools, since they lack the human resources and know-how to exploit social media. It is interesting to note that a review of the current literature on digital marketing skills reveals a clear acknowledgement of skills gaps, but also a lack of detail on what these skills gaps actually are. Furthermore, there is no particular focus upon skills gaps in the marketing or communication industries.

It may be helpful to detail the kinds of digital marketing skills which are needed in industry and how those skills enhance marketing approaches. Skills such as website construction; maximising the potential of social media such as Facebook and Twitter; Search Engine Optimisation (SEO); mobile applications; customer conversion and knowledge of digital analytics for evaluating the effectiveness of digital approaches are among the most important digital marketing skills. Without these digital marketing skills, industries are at a distinct competitive disadvantage, as they lose out on the ability to connect and communicate quickly with clients (social media); they are unable to translate a website visit into a client or a purchase (customer conversion) and they may be unable to assess which digital approaches are working best for their business (analytics). Perhaps more importantly, research suggests that there is a strategy skills gap in evidence even when

these approaches are used ([Crush, 2011](#)). Therefore, there is a need for expert digital strategists to understand the complementary nature of digital marketing skills and how best to implement the tools at their disposal, especially when several digital marketing approaches are used concurrently.

Those communication professionals interviewed in the current research confirm that digital marketing skills gaps exist, confirming shortcomings in technical skills, such as those outlined above. Specifically, the current research finds gaps in SEO skills, mobile, blogs and online communication including maximising short message service (SMS) and social media tools. Other skills gaps identified include analytic skills to measure and evaluate the effectiveness of digital approaches, and the ability to use futuregazing, foresighting and futureproofing skills intelligently. However, the key concern emerging from the research is the need for personnel with strategic vision allowing them to maximise the effectiveness of digital approaches. The details of digital skills gaps are discussed in Section 4.

2.3. Addressing industry skills gaps with marketing education

There is a growing body of evidence suggesting that universities and colleges need to review their approaches to teaching marketing, in line with the latest technological and digital developments ([Wymbs, 2011](#)). This is supported by research investigating new digital technologies in the classroom which found it to be a broadly positive experience, both for students and teachers ([Buzzard et al., 2011; Lowe & Laffey, 2011; Payne, Campbell, Bal, & Piercy, 2011](#)). Marketing as a discipline is arguably shaped by the tools that are emerging (e.g. social media, mobile applications) rather than having developed these emerging technologies in order to improve marketing approaches ([Granitz & Pitt, 2011; Payne et al., 2011](#)). Therefore, while Twitter, Second Life and YouTube were designed respectively as a microblogging tool, virtual world and video sharing website, many educators are now using them to teach about marketing, both as tools and as subjects to be studied ([Granitz & Pitt, 2011](#)). The gap in marketing education is pointed out by other scholars ([Payne et al., 2011](#)) who also note that a failure to address the issues of digital marketing skills in the classroom is detrimental to graduates and impacts negatively upon their ability to manage social media campaigns. As [Granitz and Pitt \(2011\)](#) note, new technologies are affecting both the curriculum of marketing education as well as the tools used to teach that curriculum. Previous research has also found that “the culture of academic institutions can be driven by changes in the external business environment” ([Grant, Hackney, & Edgar, 2009, p. 152](#)). Of course while this paper concentrates upon digital marketing skills in the communications and creative industries, the increasing use of these skills is changing academic and industry approaches across every imaginable discipline.

As noted above, some scholars have called for a fundamental change of approach to marketing teaching in higher education, indicating that digital developments need to be central to teaching and research in marketing, rather than being viewed as an ‘add-on’ ([Wymbs, 2011](#)). This is an approach which is not just “traditional marketing on steroids” but a recognition that the “digital revolution has fundamentally changed marketing at the core” ([Wymbs, 2011, p. 95](#)). As a result, the need for digitally literate graduates is becoming more pressing. Crucially, trade commentary has also noted the gaps in digital skills ([Crush, 2011; NMA, 2007; Wood, 2011](#)) and – vitally, for the higher education sector – has pinpointed the limitations of short courses, noting that an expensive course in isolation, without a larger overall strategic plan, has significant shortcomings and lacks context. As [Crush](#) notes, “Perhaps, in reality, an overall ‘strategy gap’ is the problem, creating fertile conditions for a digital skills gap to take root” (2011, p. 34). A growing body of political,

economic and industry commentary on the impact of digital media is emerging. Government reports have recently confirmed that the digital economy is a key driver of economic development in the UK and have highlighted the pivotal role to be played by universities and colleges in order to maximise future economic opportunities (Scottish Government, 2011, p. 16). The Digital Media Advisory Group, a Scottish Enterprise body, note that “a more sophisticated understanding of the value to be derived from digital media as a growing and evolving business sector” needs to be developed (Scottish Enterprise, 2012, p. 5). The Technology Strategy Board note that digital challenges are complex and related to reducing uncertainty around standards, avoiding fragmented investment in digital technologies. They go on to highlight the need to understand “how digital technology creates new ways for people and businesses to organise and interact” (Technology Strategy Board, 2010, p. 10).

3. Methodology and conceptual framework

The dearth of literature available on the digital marketing skills of those in the communication industry informs the conceptual framework of the paper. The approach of this project was to elicit detailed, rich responses to probing on the topic of digital marketing skills, with particular emphasis on skills gaps and training needs within the scope of the communication industry. This methodological approach has allowed the specific digital marketing concerns of those working in the creative industries to emerge. These emerging issues are discussed in Section 4, thus addressing the lack of literature on digital marketing skills specific to the creative industries. A qualitative approach was taken, first using interviews, then focus groups in order to triangulate the interview findings. Semi-structured one-to-one interviews were designed with a view to using the questioning as a starting point for detailed discussion about the subject. There was scope built into the question schedule allowing interviewees to expand on particular areas of interest and to probe the possibility of drawing out “complex and subtle phenomena” (Denscombe, 2010, p. 173). Miller and Glassner (2011, p. 131, chap. 8) suggest that using interviews can “reveal evidence of the nature of the phenomena under investigation, including the contexts and situations in which it emerges”, providing real insight into social worlds and sensemaking. The overarching primary research question to be explored with interviewees, emanating from the literature review is:

What are the digital marketing skills gaps you encounter and how do they fit with your overall strategic and operational marketing approach?

More finely tuned research questions were developed having refined the conceptual framework in order to address specific gaps in scholarly knowledge and focus the scope of the research:

How is digital marketing used in your particular communication business and how do you see that developing in the next 12 months; next few years?

Can you identify any particular gaps in digital marketing competency and digital marketing skill in your own business and others you work with in the field?

What are the challenges which you need to address in the area of digital marketing?

The complete interview schedule is attached (Appendix B), as are the focus group discussion points (Appendix C) which summarise the main findings from the interviews for further discussion and testing.

The starting point for gathering research participants came from university contacts with its Public Relations Industry Advisory Group. These communication professionals were “purposefully

selected” (Creswell, 2003, p. 185) in order to ensure that they had the relevant scope of experience to enable them to answer the questions and topics being researched. For this research, participants were selected on the grounds that they were currently known to use some combination of digital marketing skills on a regular basis and for the purposes of professional communication within the creative industries. They were also judged to have sufficient experience in their field to be able to provide rich, thick data for the research. Using purposeful selection this way gives the researcher the best chance of answering the research question, as it focuses down upon specific expertise and commonality of interviewee experience. From these initial contacts, a referral sampling approach was taken. This resulted in interviewees working in a range of communication roles (referred to as I1, I2, I3 and so on) as detailed in Appendix A. A total of 20 communication professionals were interviewed, which was deemed an appropriate approach for this exploratory research. The interviews were recorded and notes were taken immediately following each interview regarding the main points emphasised by the communication professionals. Each interview was analysed and coded immediately after it was finished. When all interviews had been analysed and coded this way, a further thematic analysis of all of the resulting codes was undertaken, grouping connected themes using memos. According to Glaser (1978, in Miles & Huberman, 1994, p. 72) this is the “theorizing write-up of ideas about cods and their relationships as they strike the analyst while coding”. Thus, a pattern of themes and notes were drawn out, some commonly repeated among the communication professionals, other less common. This can be conceptualised as a ‘bricolage’ or ad-hoc approach (Kvale & Brinkmann, 2009, pp. 233, 234; Miles & Huberman, 1994), where meaning is sought by visiting and re-visiting qualitative data in a number of ways, focusing on particular points of interest and developing charts and metaphors as a method of drawing meaning from the data (Spiggle, 1994).

Following analysis of the interview data, the Digital Marketer Model (Fig. 1) emerged. The model represents the key themes which emerged repeatedly from the interview data, and it encapsulates the most important aspects of digital marketing skills. While the model underlines one or two fundamental requirements e.g. client engagement skills; corporate communication skills, it also focuses upon those digital marketing skills which communication professionals need in order to be an excellent digital marketer. The research found that these digital marketing skills are often lacking. The research revealed the need for best practice guidance and the Digital Marketer Model identifies the key skills necessary for a highly skilled digital marketer. The model is a tool to help communication professionals identify the skills they need to focus upon when hiring new employees as well as identifying the upskilling needs of current employees. Following the development of the Digital Marketer Model, a focus group consisting of six Public Relations Industry Advisory Group (PRIAG) members and seven university marketing staff took place, with a view to testing the rigour of the findings emerging from analysis of the interviews. Of the PRIAG group, three members had already participated in the research at interview stage, and two of the university focus group members were the paper authors, who acted as moderators. The university participants comprised of five members of academic staff, and two marketing practitioners within the university. Qualitative data collection often adopts multiple forms of data collection (Creswell, 2003, p. 1850). This approach has the advantage of triangulating the data and helps to confirm that the analysis of the first set of data has reached the correct conclusions. DM and social media need to be central to any marketing approach, rather than an ‘add-on’. Below is a summary list of the answers emerging from the interview questions. These are discussed below.

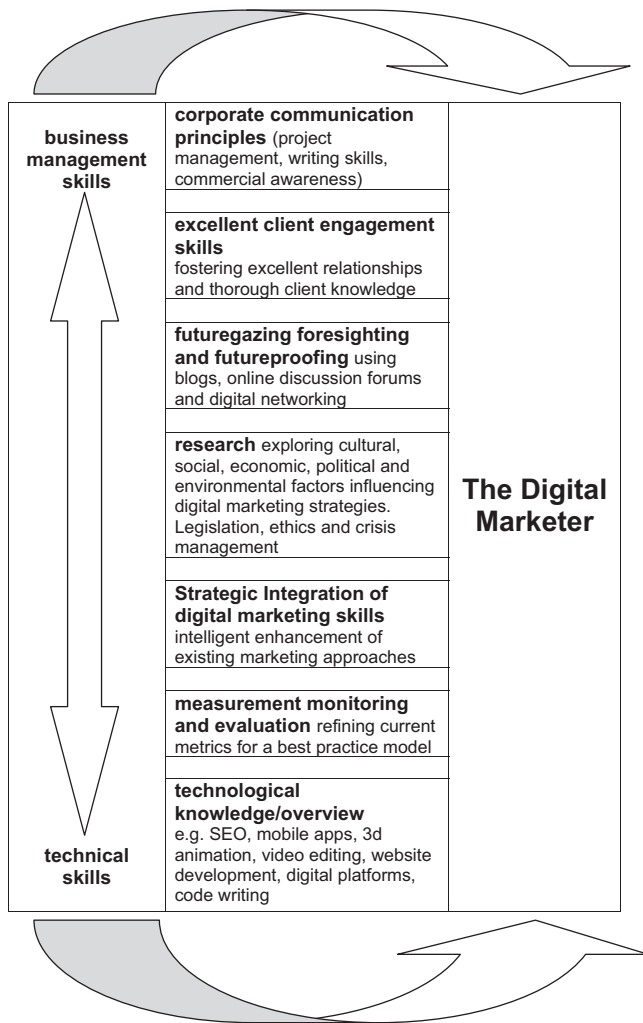


Fig. 1. Digital Marketer Model.

DM and social media need to be central to any marketing approach, rather than an 'add-on'

Delivery of DM solutions must be client-centred

DM allows clients and their customers immediacy of response

DM and social media makes it easier to engage with clients and customers

Many companies are 'trying out' social media and digital marketing approaches to see how they work

It is easier to measure effectiveness and engagement with DM and social media, compared to traditional marketing approaches

New metrics and efficacy measures need to be developed to determine effectiveness of DM and social media

Flexibility towards new technological developments is essential, as DM and social media are so dynamic

Foresighting is important in such a dynamic field

Messaging content is more important than the vehicle used

Core skills (writing, project management, productivity) are a vital foundation for DM and social media skills

Education and training needs: It can be challenging to find new employees with appropriate strategic DM and social media skills

4. Results and discussion

All of the communication professionals agreed that digital marketing was a growing part of the service they provided, predominantly due to the widespread adoption of social media such as Twitter, Facebook, LinkedIn and YouTube among the public. There was a plethora of other digital approaches used, ranging from the provision of intranet for clients; developing a bespoke TV brand for YouTube; targeted e-comms (e-mail communications sent to a distribution list advertising a specific product, service or event) and the provision of ipads with pre-programmed presentations

advertising clients' services, for use at trade fairs. These digital marketing innovations often navigated clients back to a central website, and many of the communication professionals referred to their website as the core starting point, or touchstone of their digital business. It was clear from the interview data that the ongoing development of digital technology has changed the communication industry at its heart, presenting new opportunities and challenges for communicators and their clients.

Emerging from the research is the Digital Marketer Model (Fig. 1). This model encapsulates the most important themes emerging from the research according to the review of the literature and research with the participating communication experts. The model represents those qualities which are essential for a rounded digital marketer. The key themes are discussed in the following section.

4.1. Adopting an integrated strategic approach

The most significant digital marketing skills gap emerging from the research was the difficulty communication and creative industries face in finding employees with the strategic business knowledge of digital marketing, who were then able to integrate that strategic knowledge with existing 'traditional' marketing and communication approaches, while also having a working overview of digital technology (without necessarily being a technical expert). As one business expert commented,

The guy that I would like in here to help... doesn't exist. And that guy... is a digital marketer... that's someone who can actually talk about strategy, marketing branding – all the traditional stuff, but in digital terms... who could talk to the technical side; could communicate commercially with a client... and who could then produce a digital marketing plan, for a business. That doesn't exist in the market place. There's a definite gap in the market.

I17, Creative Director, branding agency

Similarly, a Digital Solutions Architect commented, "there are not enough people around who have the breadth of knowledge to design a solution for clients' needs and sell it to them" (I11). The need for an intelligently integrated approach was also strongly espoused by the focus group, who felt that a piecemeal approach was commonly taken to digital marketing. There is evidence from previous research of a need to "complement technical knowledge with a broad understanding of business processes" (Preston, Kerr, & Cawley, 2009) i.e. closing the skills gap that exists between technical knowledge and business knowledge. This digital marketing skills gap emerged from the current research as the biggest challenge facing communication and creative industries: while technically-focused skills gaps and training needs emerged (e.g. search engine optimisation skills [SEO], mobile applications knowledge, 3d video expertise) nevertheless the biggest overall need emerging from the research was for a marketer who was able to implement and integrate digital marketing strategy with technical knowledge and a sound communication foundation. This intelligent strategy would overarch not just a digital marketing skills offering, but also traditional marketing including, for instance, print, outdoor and newspaper. Media plan integration – and related activity alignment – (Kaplan & Haenlein, 2010) was one of the key aspects of digital marketing skills with which the research participants struggled, and this was driven largely by the lack of available employees with strategic digital and technical knowledge. The need for integration of digital with existing marketing approaches has emerged previously (Hoffman & Novak, 2011) but without the appropriately skilled personnel it is possible that a haphazard approach to integration will result. This lack of strategic integration skills contributes to the tendency for many of the organisation to

adopt a ‘test and learn’ approach (Brynjolfsson & Schrage, 2009), in order to monitor how specific tools were working and consequently abandoning or widening their use (I15, Communications Officer, public sector; I16, Managing Director, digital communications). This experimental approach was being adopted both in the private sector, and the public sector. As Kung (2008, p. 89) comments, “Emergent contexts present a complex management challenge. . . They will need to embrace new strategic directions that will lead to corporate renewal, if not transformation”.

4.2. Specific technical knowledge

Technical skills gaps were identified as being a problem, an issue previously highlighted in research examining knowledge and skills requirements for modern marketing posts (Schlee & Harich, 2010) or appropriate digital skills (Digital Hub, 2008). The current research has identified challenges inherent to digital technologies (familiarity with mobile applications; SEO; developing best practice in metrics; using blogs and online discussion groups) as gaps within the marketing skillset. As Kung (2008, p. 89) points out, there is a need for “new domain-relevant skills – new fields of expertise. [Managers] will need to master new product areas that involve different types of content and different content competencies”. It is ironic that the topic of mobile digital technology was highlighted as an emerging issue for marketing a decade ago (Mort & Drennan, 2002), yet marketing practitioners are still grappling with the technology. Some attended specialist technical courses run by professional marketing bodies, although there is a body of opinion which suggests that this approach is problematic, since “the technology and content cannot be separated and treated in isolation” (Preston et al., 2009, p. 1007) and that a more holistic approach which integrates digital technology with established communication principles, is necessary (Crush, 2011).

4.3. The challenge of measurement

While much of digital marketing can be said to be measurable, with ‘inbuilt’ measuring systems such as number of web page hits, clickthrough, number of ‘likes’ on a Facebook page or followers on Twitter, the research found that more efficient measuring and evaluation processes were required for digital marketing procedures. As one public sector Communications Officer – grappling with several analytical and measurement tools – asked, “What is excellent social media evaluation?” (I19). The focus group agreed that measurement was an ongoing challenge. While there are a plethora of measurement and analysis tools available (Fisher, 2009; Woodcock, Green, & Starkey, 2011) nevertheless, there was a general sense of a haphazard approach to analysis, measuring and monitoring of digital marketing and social media, with no established sense of best practice, and no real benchmarking procedures applied. As one Business Network Systems Manager commented, they are still trying to decide what is best practice in the field of digital marketing (I14). Similarly, the Managing Director of a digital design and communications company noted, the technology is new, and with new tools and new technology there may not yet be an accepted best practice procedure (I16).

The absence of a best practice approach to digital metrics was problematic for many of the businesses analysed. One public sector organisation Communications Manager commented that they had not audited any of their digital marketing processes to date. Practitioner and industry articles have highlighted the challenge of developing useful digital marketing metrics, and how to measure the resulting return on investment (ROI) (Bughin, Shenkan, & Singer, 2009; Fisher, 2009; Raab, 2011). Practitioners recognise evaluation, monitoring and measurement to be key challenges facing their implementation of digital communication solutions (Valos et al., 2010).



Fig. 2. Futuregazing, foresighting and futureproofing.

4.4. Futuregazing, foresighting and futureproofing

The terms ‘futuregazing’, ‘futureproofing’ and ‘foresighting’ are used in the paper to convey some key issues of concern to the participants. Scholarly literature and even dictionary definitions of these terms are uncommon and are used sporadically. However, this paper uses the terms in the context of a continuum (Fig. 2) from futuregazing, through foresighting, culminating with futureproofing.

Futuregazing in this context refers to speculation about what may happen in the future, based on current and past experience. Foresighting implies a more strategic approach to viewing the future than futuregazing. Scottish Enterprise (2013) defines the activity of foresighting in a business context as the ‘evidence-based analysis of global markets and innovations to identify opportunities’. In this paper futureproofing, is used to mean the adoption of specific formalised strategic approaches in order to minimise the risks of future developments, as well as to maximise the opportunities which may occur.

A specific need identified both by the private and public sector communication professionals was for ongoing foresighting or futuregazing to take place and for the anatomy of trends to be analysed. Nevertheless, very few of the businesses examined had the staff infrastructure or skills in place to be able to do this. The need to keep an open and flexible approach to new tools was deemed to be of prime importance. The communication professionals were unwilling to invest heavily in any analytical software which might potentially be defunct in a few months. Therefore, an approach to digital marketing encompassing futureproofing was understood to be vital. The communication professionals also emphasised the need to be aware of new developments in technology, often communicated via social media by ‘early adopters’. The Freelance Digital Producer commented, “I could very usefully, spend an hour a day reading blogs, finding out about things. . . all of which would tangibly inform what I do” (I7). This comment refers to blogs covering topics such as maximising the usability of Twitter and Facebook; reviews, strategies and tips for new technology, as well as covering issues such as security and troubleshooting. So in some ways it seems that within the need for futuregazing and foresighting, is the need to adopt non-traditional methods of keeping skills and knowledge up to date, often with blogs, online forums and discussion groups. The focus group raised the issue of digital marketing legislation, including ethics, and risk with regard to employee vulnerability, as well as crisis management. They felt therefore that cultural, social, political and environmental factors which influence digital marketing strategies needed further examination and research in order to aid practitioners.

5. Conclusions

This research asks:

What are the digital marketing skills gaps you encounter and how do they fit with your overall strategic and operational marketing approach?

The research probes how communication companies are using digital marketing skills as well as the challenges which need to be addressed. While the research identified some specific technical skills gaps – an issue already identified by industry (Crush, 2011; NMA, 2007; Wood, 2011) – the main problem facing the communication industries is the lack of an integrated strategic approach

to digital marketing, leading to a piecemeal approach to the use of digital marketing techniques. These skills gaps are summarised by the Digital Marketer Model (Fig. 1). The challenge of an integrated approach to marketing is not new (Valos et al., 2010) and rapidly developing technology makes this an ongoing issue (Akar & Topcu, 2011; Brady et al., 2008). A lack of guidance on best practice leads to an experimental 'test and learn' approach to digital marketing. Evidence-based guidance on best practice would eliminate some of the risk inherent in an experimental approach. While this research specifies digital marketing skills gaps, further research should move towards the identification of best practice approaches.

There are individual challenges facing public and private sector professionals due to differing uses of social media and digital marketing: while the private sector primarily adopts digital marketing as an extra communication channel for promoting and selling products and services for clients, public sector use is primarily focused upon information sharing and encouraging user engagement. Anticipated future adoption of digital marketing skills caused much discussion among the communication professionals. This linked to a significant point of debate which was the subject of futuregazing, foresighting and futureproofing (Fig. 2). Most of the communication professionals were very clear that they needed better tools to help them anticipate and deal intelligently with ongoing developments in technology. They were all very wary of investing in such a dynamic market. The need for benchmarks and best practice models was an issue which was discussed and the communication professionals felt they needed more help and guidance with best practice approaches for futureproofing. A further skills gap emerging from the research was the challenge of measuring, monitoring and evaluation. Investment in technology demands a return on investment (ROI), but without commonly adopted benchmarks for evaluating the success of various digital technologies, business are findings this challenging (Bughin et al., 2009) and are cautious to invest. The communication professionals highlighted some more traditional marketing and communication skills, vital for business success. At times, they felt that fundamental skills gaps existed in these areas. These fundamental skills have been included on the Digital Marketer Model (Fig. 1). Although Mulhern (2009, p. 86) notes that marketers lack the mindset to tackle the challenge of digital technology, this research finds that this is clearly not the case. The communication experts who participated in the research were focused on addressing the challenges of digital marketing, head-on.

The Digital Marketer Model outlines the necessary skills and competencies encompassed by the ideal digital marketer, identified by the current research. By "listening to marketers' needs" (Reibstein et al., 2009, p. 2) and addressing an issue of relevance to industry (Brady et al., 2008) this research has developed a model which can be used to aid the selection of employees at interview, as well as a guide for skills development of current employees. The Digital Marketer Model has emerged from this exploratory project and while it has been subject to scrutiny from communication experts, future research should test it in other business fields, using digital marketing approaches, and with marketing teachers in higher education to ensure rigour and currency.

6. Limitations and ideas for future research

The current research adopted an exploratory approach, probing the use of digital marketing across a range of businesses within the communications sector i.e. both public and private sectors; organisations of differing sizes; communication experts across public relations, advertising and the creative industries. Future research might undertake a quantitative survey in order to probe the rigour of these findings across a wider tranche of the communications industry. Future research should test the Digital Marketer Model with other industry employees, outside the communication and creative industries. Plans are being developed to test the Digital Marketer Model with teachers in the field of Higher Marketing Education in order to establish whether the model is a fair representation of a rounded digital marketing specialist. There is some evidence of conservatism in the industry comments regarding new technical developments and the costs associated with experimentation and investment in new technology. Future research might explore risk aversion as a contributory factor to the digital marketing skills deficit.

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Appendix A. List of interviewees

	Job title/role	Place of work	Responsibility
Interview 1	Marketing and Communications officer	University	Internal and external marketing; reputation management, media communication, crisis handling
Interview 2	Marketing Manager	Shopping Centre	Marketing strategy and stakeholder analysis; increasing footfall; generating sales
Interview 3	Project Manager	Arts and Culture Promotion Agency	Audience development; training, consultancy, research
Interview 4	Business Manager	Multinational Communications and Public Relations Firm	B2B communications; staff development; client communications audits
Interview 5	Director	Media and Communications Agency	Public relations and media provider
Interview 6	Web Developer	Digital Communications Company	Integrated design and marketing public relations and branding agency providing traditional and digital solutions
Interview 7	Digital producer and Games maker	Freelance	Creating digital content for production houses
Interview 8	Communications Manager and Marketing Assistant	Ingredients Manufacturer	B2B communications within food industry
Interview 9	Retail Manager	Storage Shop	Team management; development of Facebook and Twitter accounts
Interview 10	Corporate Communications Manager	Public Sector	Promoting services; enhancing reputation; reaching hard-to-reach and disengaged members of the community
Interview 11	Digital Solutions Architect	Multinational Communication Agency	Work with client to design bespoke communication solution
Interview 12	Account Director	Public Relations and Communications Agency	Manage operational team; manage business accounts; identify need, design appropriate tools, monitor and evaluate

Appendix A (Continued)

	Job title/role	Place of work	Responsibility
Interview 13	Account Director	Public Relations Consultancy	Manage business accounts; work with client to provide best communications solution available
Interview 14	Systems and Resources Manager	Regional Business Support Network	Communicating with members; developing social media
Interview 15	Communications Officer and Marketing co-ordinator	Public Sector	Internal and external communications; promoting services and events
Interview 16	Managing Director	Digital Design and Communications Business	Consultancy; identifying client needs and providing appropriate solution; providing strategic in-depth digital training for clients
Interview 17	Creative Director and Digital Director	Branding Agency	Provide creative brand solutions
Interview 18	FE College Marketing Manager and Design and Advertising Manager	Further Education College	Design and write marketing materials; undertake corporate events and communications; public relations work
Interview 19	Customer Communication Manager and Communications Officer	Public Sector	Internal and external communications; media communication; encouraging public engagement
Interview 20	Corporate Communication Manager and Communication Officer	Public Sector	Internal and external communications; engaging hard-to-reach groups; dealing with government and other public sector organisations

Appendix B. Interview questions

Introductory questions

What does your organisation do?
 What is your role within the organisation?
 How long has it been trading?
 How many employees are there?
 What is the geographical area served?
 Who are your main competitors?
 What is your main target audience for customers?

Introduction of digital marketing

What stage are you at now with your digital marketing?
 What methods of digital marketing does your organisation utilise?
 What other methods does the organisation use to communicate with customers? (e.g. e-mail telephone, letter)?
 Do you feel that this is a cost-effective means of promoting your business?
 Is it successful? If so, how do you know?
 Do you undertake your digital marketing in-house or do you employ an agency to do these tasks for you, or both? If you employ agencies – why?
 What are your main priorities as a business in terms of digital media marketing:
 Now?
 Next twelve months?
 Next few years?
 What kind of software/hardware do you use for developing your digital marketing materials?
 Is this what you would expect to see in a learning environment, or are there other types you would want to use/get exposure to?

Competencies, skills and gaps

What would you identify as being the main competencies/skills of your current staff in digital media/marketing and how would you like to develop these?
 What skills do you require that are not currently present in your organisation?
 In the industry as a whole what do you see as being the skills gaps that are present and need to be addressed in the coming months/years so that organisations such as yours can fully harness and develop your digital marketing strategies?

Do you seek services from an external agency to fill any skills gaps within your own organisation?
 If so, would you wish to develop these skills internally, or would you continue to use an agency for this purpose?
 If you use an agency are you happy with the level of competencies/skills that they provide from their staff, if not, what do you think is missing or could be improved upon?
 Are there any specific types of competencies you would like to see new graduates coming into the industry already possessing?
 Are there any other competencies that you would like to have the ability to develop in current staff in the area of digital media/marketing?
 Further comments?

Appendix C. Focus group discussion points

DM and social media need to be central to any marketing approach, rather than an 'add-on'
 Delivery of DM solutions must be client-centred
 DM allows clients and their customers immediacy of response
 DM and social media makes it easier to engage with clients and customers
 Many companies are 'trying out' social media and digital marketing approaches to see how they work
 It is easier to measure effectiveness and engagement with DM and social media, compared to traditional marketing approaches
 New metrics and efficacy measures need to be developed to determine effectiveness of DM and social media
 Flexibility towards new technological developments is essential, as DM and social media are so dynamic
 Foresighting is important in such a dynamic field
 Messaging content is more important than the vehicle used
 Core skills (writing, project management, productivity) are a vital foundation for DM and social media skills
 Education and training needs: It can be challenging to find new employees with appropriate strategic DM and social media skills

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