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“Hacking marketing”: How do firms develop marketers’ expertise and practices in a digital era?

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Abstract

Purpose – Digital technologies, digitalised consumers and the torrent of customer data have been transforming marketing practice. In discussing such trends, existing research has either focused on the skills marketers need or broad-based approaches such as agile methods but has given less consideration to just how such skills or approaches might be developed and used in marketers' day-to-day activities and in the organisation of marketing in the firm. This is what we address in this paper.

Design/methodology/approach – This paper adopts an in-depth case study approach to examine an exemplary digital enterprise in transformation of their digital marketing. The insights gathered from 25 interviews, netnography, and document analysis of the case organisation in addition to 10 interviews with independent experts.

Findings – Drawing on practice-oriented approach, we show how organisations respond to the emerging trends of digital consumers and big data by taking a ‘hacking marketing’ approach and developing novel marketing expertise at disciplinary boundaries. We put forward three sets of practices that enable and shape the hacking marketing approach. These include spanning the expertise boundary, making value measurable, and experimenting through which their adaptive, iterative, and multidisciplinary work occurs. This explains how managing digital consumers and big data is not within the realm of Information Technology (IT) functions but marketing and how marketing professionals are changing their practice and moving their disciplinary boundaries.

Originality/value – Our study contributes to the nascent discussions by unpacking how enterprises can develop new marketing expertise and practices beyond skillsets and how such practices form new hacking marketing approach which addresses the problem of the inability of the conventional marketing approach to show its value within the firm.

Practical implications – This study offers practical contributions for firms in terms of identifying new work practices and expertise that marketing specialists need in managing digital platforms, digitalised consumers and big data. Our results show that enterprises need to design and implement strong training programmes to prepare their marketing workforce in adopting experimentations of agile approach and data-driven decision making. In addition, marketing education should be changed so that programmes consider a review of their courses and include the novel marketing models and approaches into their curriculum.

Key words: Digitalised consumers, practice, expertise, digital marketing, digital organisation, occupations, hacking

1. Introduction

The rise of digital platforms, the new channels through which firms interact with their customers, and their subsequent torrent of customer data are changing ‘the practice of marketing’ (Caliskan *et al.*, 2020; Kalaighnam *et al.*, 2021). The new forms of digital technologies are embedded in consumers’ everyday practices (shopping, exercising, entertainment, etc.), acting as a prosthetic, endowing them with new capacities, and configuring them to act in particular ways (Fuentes and Sörum, 2019). Thus, the artefacts and consumers’ practices are intertwined; they not only enable various forms of consumption but enlist the consumers to certain courses of actions. Importantly, this is transforming both firms and their relationship to consumers (Fuentes *et al.*, 2017; Fuentes and Sörum, 2019).

Such embeddedness of these digital and social media technologies into consumers’ daily activities, offers firms unprecedented access to large volumes of data, creating many opportunities to offer consumers more value through enhancing their experiences (Holmlund *et al.*, 2020; Wedel and Kannan, 2016). Therefore, there have been recent calls in the literature to study changes in marketing practice and marketing practitioners’ skill and knowledge (Erevelles *et al.*, 2016; Wedel and Kannan, 2016). However, the current emphasis is to explore the types of skills marketers might need (e.g. big data analytics and coding) or broad-based approaches (e.g. marketing agility) but with less attention given to how such skills or approaches might be developed and used in marketers’ day-to-day activities (Di Gregorio *et al.*, 2019; Herhausen *et al.*, 2020) and in the organisation of marketing work in the firm. Therefore, existing research has not fully examined how new consumer trends and big data phenomenon change marketers’ expertise and practice. This is what we aim to address in this paper.

This is important because data has been increasingly playing a more central role in driving marketing actions (Rahman *et al.*, 2021). In this regard, scholars have highlighted that dealing with more endowed consumers (Granados and Gupta, 2013) and handling associated big data require new approaches in marketing (Brinker, 2016; Kalaighnam *et al.*, 2021) and new forms of training, skills and knowledge (Cetindamar Kozanoglu and Abedin, 2021; Herhausen *et al.*, 2020; Kalaighnam *et al.*, 2021). In addition, the emerging changes are not only limited to marketing skills, but , it is suggested that marketing departments are becoming closer to IT (Roy *et al.*, 2021) as they are more technology-driven with a need for technical and IT related expertise within marketing (Kalaighnam *et al.*, 2021; Nylén and Holmström, 2019). This includes the emergence of new roles and experts at various levels of marketing (Dwivedi *et al.*, 2021; Di Gregorio *et al.*, 2019) and permeating across the organisation of marketing practices (Gupta *et al.*, 2020; Kalaighnam *et al.*, 2021). However, this has

been afforded less attention in the literature. To address this gap, we put forward the following research question: ‘how do enterprises transform their marketing practices within the new emerging spaces and what expertise should be developed within marketing occupation in response to the ongoing digital transformation?’

Based on an in-depth empirical study of an exemplary digital organisation and independent expert interviews, our analysis shows that in response to a proliferation of consumer data, organisations redefine their marketing by developing new marketing expertise and work practices. These include *spanning the expertise boundary*, *making value measurable*, and *experimenting*, which together formed what our informants described as ‘hacking marketing’. We define hacking marketing, after Brinker (2016), as a cluster of novel marketing practices, characterised by their adaptive, iterative and multidisciplinary nature, aimed at managing digital consumers and their big data to offer more value to them through tailored services.

The remainder of the paper is structured as follows. In the next section, we present an overview of the background research by explaining the rise of customers big data in the digital era and their implications for enterprises and their marketing practice. Then, we explain our theoretical lens drawing on studies of occupations and practice-based approaches. Following on from discussing the research method and details of our case study, we consider the findings which explain how the firm is developing new practices and forms of expertise. Finally, once we have set out our model that makes up hacking marketing, we conclude by presenting our contributions and the implications of this new approach for digital organisations.

2. Theoretical Background

2.1. The Role of ‘digital consumers’ in Marketing Practices

Technology has always been key in marketing practice and marketing has increasingly relied on technology (Quinn *et al.*, 2016). With new technologies becoming more customer-focused (e.g., social networks, social influence, personalisation, data platforms, etc.), the ‘digital consumer’ has become central for the practice of marketers (Dwivedi *et al.*, 2021). As digitalisation has expanded (from organisational processes) to consumers’ actions and experiences, it is suggested that businesses are dealing with more endowed and empowered consumers due to the ubiquitous connectivity and capabilities afforded by digital technologies (Fuentes and Sörum, 2019; Granados and Gupta, 2013).

To address the needs of this new form of consumers, studies have suggested that firms should enhance their ‘customer engagement’ practices (Gavilanes *et al.*, 2018) and their customer relationship management approaches and strategies (Kumar *et al.*, 2016). This has brought forth the unprecedented access to a deluge of consumer/customer data by firms which has had significant implications for marketing (Holmlund *et al.*, 2020; Vollrath and Villegas, 2021; Wedel and Kannan, 2016). One of the ways that the deluge of customer data (big data) has changed marketing practice is

the advancement and adoption of analytics in marketing. As scholars have discussed (Erevelles *et al.*, 2016; Gupta *et al.*, 2020; Rahman *et al.*, 2021), there is a need for professionals with knowledge and expertise in this area to be able to successfully develop and apply marketing analytics within firms.

For instance, Di Gregorio *et al.* (2019) showed that in addition to core marketing skills, new marketing professionals need to develop their skills in digital, technical and analytical areas. This has also been highlighted by Herhausen *et al.* (2020) in arguing that marketers need to develop their technical skills specifically with regards to analysing customers data and big data analytics. Such experts (e.g., marketing analysts) play “the role of intermediaries between [traditional] marketing managers and information technology personnel, or between marketing managers and outside suppliers of data and analytics capabilities” (Wedel and Kannan, 2016, p. 116). This means for marketing professionals, for example, that they need to have some technical knowledge of working with data, data analytics, and using relevant tools. Although this knowledge would not be to the level of data scientists or IT professionals who will still be responsible for providing and maintaining the IT infrastructure, developing technical skills in marketing forms cross-functional collaborations which are becoming more essential in market-led or consumer centric firms (Kalaiganam *et al.*, 2021).

In addition, to evaluate literature discussions regarding digital marketing transformations and challenges further, we reviewed the articles in marketing's top-ranking journals (e.g., European Journal of Marketing) as well as those with highest citations for searching ‘digital marketing’ on Scopus. Table 1 presents the summary for some of these articles. As shown in the table, some of these articles are thought pieces and literature reviews that highlight challenges, issues, and opportunities on various aspects of digital marketing. For example, gathering insights from the literature, Dwivedi *et al.* (2021) highlight harnessing technologies in customer engagement behaviours to generate value for the firms. The other group of studies which were empirical focused on examining a relationship or a specific area within digital marketing. For instance, Quinn *et al.* (2016) emphasise the changing role of marketing function and practices within organisations beyond the skill development issues because they note the issues about responsibilities of emerging works, marketing function role and its strategic decisions within digitalisation phenomenon.

Insert Table 1 about here.

Despite valuable insights in the literature, there is still lack of empirical work around the emerging challenges of digital marketing in the extant discussions. In addition, there is still a paucity of research in how practices of marketing are changing with regards to increasingly powerful customers and unprecedented data availability.

2.2. New marketing approaches in a digital world

As noted above, there is an emerging discussion that the organisation of marketing function and its role in the firm need to be changed beyond the individual marketers' skillsets. In this regard, some scholars have recently suggested that marketing should adopt an agile approach (Gupta *et al.*, 2020; Kalaignanam *et al.*, 2021). Unlike the predefined and preorchestrated marketing campaigns, marketing agility, a term introduced by Kalaignanam (2021, p. 38), enable the firm "to really quickly identify any initiatives, be able and nimble to execute them, get the feedback, and refine the initiative". Originated in software development, agile approaches in marketing would assist enterprises to develop the capability to respond to external forces (such as technological advances) swiftly (Gupta *et al.*, 2020) and also to avoid siloed work and integration of data and analytics to the whole organisational processes (Rahman *et al.*, 2021; Wedel and Kannan, 2016).

Another nascent term within marketing scholarship is 'growth hacking', coined by the entrepreneur and start-up advisor, Ellis (2010), as "a process of rapid experimentation across the funnel to learn the most effective way to scale sustainable customer adoption". In this respect, a growth hacker is considered an individual whose focus is solely on growth and all their activities are carefully examined for their influence on growth (Ellis, 2010; Holiday, 2014). In growth hacking approach, marketers shift their attention from traditional brand awareness activities to a specific funnel framework to acquire and retain new customers. According to Troisi *et al.*, (2019), growth hacking techniques can be employed by organisations to harness the power of big data analytics in marketing decisions.

Despite these insightful discussions, thus far, studies have been either focused on the types of skillsets marketers might need (Erevelles *et al.*, 2016; Gupta *et al.*, 2020; Wedel and Kannan, 2016) or broad-based approaches such as marketing agility (Gupta *et al.*, 2020; Kalaignanam *et al.*, 2021) without showing how such skills or approaches are developed or utilised by marketing professionals in their practices. While acknowledging the reconfiguration of the consumers' relationships with businesses (Fuentes *et al.*, 2017; Fuentes and Sörum, 2019), the potential of these technologies for digital engagement practices (Dwivedi *et al.*, 2021), and the evolution of digital marketing (Caliskan *et al.*, 2020), they fail to address how firms respond to these new kinds of consumers, and associated big data and just how marketing practices and expertise have been (re)configured has not been fully explicated. This paper specifically addresses the gap through considering marketing practices in responding to digital consumers and unprecedented availability of their data. We examine the issues in the literature through a situated case study using a practice lens, which allows us to understand the shaping of new expertise and theorise how such expertise is formed within the marketing organisation.

2.3. *New Experts, their 'doing' and Practice Perspective*

New technologies have expanded the scope of work that needs to be addressed by different organisational departments and the roles required to meet the expectations of the digitalised consumer (Tumbas *et al.*, 2018). Furthermore, it has been suggested that with the proliferation of digital technologies, new jobs and categories of occupations emerge (Stark, 2011). Although studies have focused on how technologies can bring forth changes in existing occupations and work practices (e.g., becoming more efficient) (Bailey and Leonardi, 2015), there is still limited understanding in the role of new digital technologies in shaping new expertise and categories of work within organisations. In this regard, studies of occupations assist us in unpacking the new roles crossing the boundary between IT and marketing.

Anteby, Chan and DiBenigno (2016, p. 188) define an occupation as “a category of work that is concretely instantiated as particular jobs in particular organizations under particular job titles”. To study the emergence of new categories of occupations, they propose a ‘doing lens’ where “[o]ccupations are defined not just by how entrants become occupational members, they are also defined by what they do” (Anteby *et al.*, 2016, p. 200). They suggest to focus on ‘doing tasks’ in order to study “how occupational members—often within a single occupation—perform tasks or practices and the individual or group implications of this performance” (Anteby *et al.*, 2016, p. 201). This is an appropriate lens to explore how various categories in digital marketing is emerging because other studies in different occupational categories were also focused on the activities or work content of the occupations under study (e.g., financial analysts (Preda, 2009) or IT industry analysts (Pollock and Williams, 2015)). According to Preda (2009, p. 150), “[a]n account of the constitutions of jurisdiction should start from the *content* of this expert knowledge and its generation”.

We also find useful the practice-oriented approach which throws light on how work is done. Practice perspective is centred on the tenet that social world is continuously (re)generated through human activities and thus, scholars view practice-based lens as “a specific approach to understanding of the world” (Feldman and Orlikowski, 2011, p. 1240). According to Schatzki (2001, p. 11), practices are “embodied, materially mediated arrays of human activity centrally organized around shared practical understanding”. A practice approach “consider[s] organizations both as the site and the results of work practices; a view that connotes organizations as bundles of practices, and management as a particular form of activity aimed at ensuring that these social and material activities work more or less in the same direction” (Nicolini, 2012, p. 2). Therefore, considering both quotidian human actions and material activities, it provides a processual approach in explicating social phenomena of interest. In this regard, our use of the concept is more of ‘practice from the inside’ (Gherardi, 2009) than ‘practice from the outside’. While the latter is more concerned with the pattern of routine activities and the recursiveness of practices, the former comes from the practitioners’ perspective. Thus, based on the inside view, carrying out a practice is about knowledge of assembling human and technological

resources in a sociotechnical system and creating and maintaining the system of interactions in which each part has a certain purpose and place.

In this study, we use a practice perspective first for studying human activities and then also to be able to understand how those activities and work practices emerge and are performed. This would enable us to discern the everyday activities and routines of the marketers as focusing on their activities not only enables us to understand the shaping of new expertise (doing tasks), but we can also theorise how such expertise within organisations is formed to realise digitalised consumers (practice approach).

3. Method

3.1. Research Setting

To understand how organisations develop their digital marketing practices to manage the new form of digital consumers and big data, we have employed a case study approach (Eisenhardt, 1989; Yin, 2013). We selected this approach because of its suitability for presenting rich and detailed data about a specific context (Creswell, 2013). Comparing ‘intensive’ versus ‘extensive’ case studies, which have also been called as single and multiple designs, we decided to adopt a single case study approach, since our aim was focused on “understanding a unique case from the inside by providing a thick, holistic and contextualized description” (Eriksson and Kovalainen, 2008, p. 118) rather than comparing different cases to map similar patterns. Despite some arguments regarding the generalisability of case studies (Tsang, 2014a), our single case study approach enable us to generate insights into how digital marketing is practiced within organisations in response to more powerful digital consumers and emerging technologies, which has not studied before. Therefore, we believe the practices we describe are not idiosyncratic characteristic of our case and would be also observable in other larger digital organisations (and perhaps marketing agencies), thus, offering theoretical generalisability (Tsang, 2014b; Walsham, 1995). Accordign to Eisenhardt & Graebner (2007, p. 30), “single cases can enable the creation of more complicated theories than multiple cases, because single-case researchers can fit their theory exactly to the many details of a particular case”. Figure 1 shows the research process.

Insert Figure 1 about here.

Since case selection is a crucial step in case study approach (Stake, 1995), we centred our decision of the rationale that the case should be of “substantive significance” or “theoretical relevance” (Dubé and Paré, 2003). We chose purposive sampling for case selection because as one the most acceptable sampling strategies, it “focuses on selecting information-rich cases whose study will illuminate the questions under study” (Patton, 2015, p. 264). Our case is an exemplary digital organisation (we use the pseudonym TSE), which is a leading organisation in digital marketing transformations. We found

the exemplar technique in purposive sampling (Patton, 2015) appropriate for this research as our goal was to examine practices within digital marketing and we needed an organisation for which digital platforms and organisation of its advanced digital marketing practices was crucial. Single case study design is appropriate especially when the case is revelatory or exemplary (Eisenhardt and Graebner, 2007).

TSE is a global digital business (based in the UK) that offers travel search services for flights, hotel booking, and car hire to their users. The company has operations in Europe, Asia, and America with approximately 1000 employees. Since TSE is a digital business, they try to employ various digital and social media platforms in their marketing strategies. For example, TSE has been a success story on Facebook for its mobile application (app) downloads in using Facebook's advertising platform. TSE's presence in various social media platforms (e.g., Facebook, Twitter, Instagram, Pinterest, VKontakte (VK) and Odnoklassniki (OK) in Russia and Weibo in China) is actively managed, sustained, and developed. In addition, the company monitors emerging digital platforms and assesses their adoption and incorporation into its marketing operations.

3.2. Data Collection and Analysis

We collected data mainly from the semi-structured interviews, netnography, and document analysis. The interviews were conducted with 25 managers at TSE and 10 independent experts. The TSE interviewees were working as social media managers (eight), content managers (three), social media advertising managers (three), digital media managers (two), data analysts (one), marketing automation executives (one), and global head of influence marketing. We have also conducted follow up interviews with some of these managers. Table 2 presents the interviewees' details. The interviews were between 30 to 90 minutes with average of 65 minutes, were all audio recorded and transcribed. The interview questions were designed to ask about these managers' work activities and responsibilities at TSE, but also about their background and experiences, how they acquire new skills and how they develop their knowledge.

Insert Table 2 about here.

In addition, we carried out expert interviews (Flick, 2009) with the aim to make more sense of the interview data and, more generally, digital marketing practices. Expert interviewing is an approach to gain established and organised knowledge as well as practical knowledge of a field in which the interview has authority (2002, p 46, cited in Flick, 2009, p. 166). In expert interviews, "the interviewees are of less interest as a (whole) person than their capacities as experts for a certain field of activity" (Flick, 2009, p. 165), In this regard, we interviewed 10 experts different areas of digital marketing (social media, digital media, influencer marketing, and data analytics) to gain a better understanding of the field in general, use them as complementary resource to our case study

interviews, and a way to validate them. We followed Lincoln and Guba's (1985) purposive sampling to find experts who had national and international experience in various areas of digital marketing. We selected them according to their experience, positions, level of expertise and exposures to such practices. For instance, one of our expert interviewees was named as top 20 growth hacker in 2016 or another one was a CEO of a successful digital marketing agency.

The questions for these expert interviews were resulted from the TSE case interviews. These interviewees' details are shown in Table 3.

Insert Table 3 about here.

In addition to interviews, we used data from documents and netnography (Kozinets, 2010). Netnography data (53 hours of observations), collected from TSE's web and mobile platform and its active social media (Facebook, Twitter, Google plus, Pinterest and Instagram, in different regions), because such online sources of data has been considered 'very valuable'. The virtual observations, supplementing other data sources, were focused on the 'content' (that are created and shared on the organisation's social media profiles), the 'interactions' with the users (comments and communications with the organisation), and the distinct 'functions' of different platforms and various ways they were being used to engage the users. We carried out our observations each week over the 18-month period of data collection and we took notes about changes made in TSE platform, what content was shared on social media, or how users' comments were addressed, etc.

We also used documents - suggested as supplementary data to interviews in case studies (Yin, 2013), as they can allow more in-depth understanding of the topic, processes and events over the course of data collection. In this respect, we used documents related to the company's general information, its brand guideline document, three blog series including a consumer blog with over 50 entries, a knowledge-sharing blog with 105 entries and an engineering blog with 85 entries, LinkedIn profiles of our interviewees and 54 managers and workers in similar marketing or data related roles (73 profiles in total), slides of TSE's conference presentations from SlideShare (all publicly available). In addition, we included media articles about TSE, relevant job advertisements by the company, reports related to projects TSE did with social media or third-party marketing platforms.

The transcripts of all data (35 interviews, documents and virtual observation notes) were stored as a dataset in NVivo. We coded the data with NVivo 11 Software Package initially through open coding based on grounded theory coding principles (Glaser and Strauss, 1967) to establish the first order codes. Data collection and analysis were conducted concurrently, and our codes were developed through different iterations and the process of constant comparison. First, focusing on what our informants do in their jobs and also how they work, it became clear that their work is around building accurate images of their users, forming their marketing activities based on them, and learning how do

these. Using in vivo terms from fieldwork, we created the first order codes such as ‘multi-faceted expertise’, ‘customised data dashboards’, ‘measuring the value to users’ and ‘adjusting marketing message to the user’s state’. During the initial stages of our analysis, we compared our emerging codes and categories with insights from the literature. Since our approach was interpretive and closer to Glaserian approach of grounded theory (Glaser, 1978), we did not use the literature themes and concepts directly in the analysis, which is more of a constructive approach (Charmaz, 2006). However, As suggested by Gioia *et al.* (2012), our data analysis and collection was concurrent and with references to the literature made, we were able to see how our findings are relevant to the literature and whether there are new themes.

The second stage of analysis was focused on comparing the first order codes and categorising them, which has resulted in the emergence of the second order codes. Finding that the practices incorporated learning, explorative and experimental elements directed us in this stage, which included codes such as ‘Extending the marketing expertise’, ‘Measuring every state of customer’, and ‘Optimising marketing campaigns’.

In the third phase of coding, we further compared the emerging codes in relation to how the informants’ practices were formed around constructing the users and the links, and relationships between the second order codes were developed further. In this process, three main themes emerged as the informants’ practices, that shape their expertise within the marketing occupation, as we were able to group the second order codes into the more abstract themes of ‘spanning the expertise boundary’, ‘making value measurable’, and ‘experimenting’. Using our participants’ term, these practices form the new model of ‘hacking marketing’. Table 4 portrays the structure of data coding.

 Insert Table 4 about here.

Using various sources of primary and secondary data allowed triangulation of data which is key in case studies (Crick, 2021; Eisenhardt, 1989). This triangulation establishes the accuracy of evidence and confirms our findings’ internal validity. In addition, to ensure internal validity or credibility, we utilised several tools such as a case protocol, case database (using Excel and NVivo), and interview guide to be able to monitor data gathering and analysis and connection between these with our protocols and the emerging codes. The external validity or transferability of our findings is portrayed in the evidence that is presented as thick descriptions in section 4. For reliability check, we gathered feedback from our interviewees based on our interpretations in analysing the data. This is also to maintain objectivity by “checking preliminary findings through communicative validation” (Marton, 2013, p. 5).

In the following sections, we explain how the new practices and expertise are being formed through their work in relation to the digitalised users by explicating the ideas from our case of the exemplary digital organisation.

4. Results: creating new expertise and marketing practice

4.1. Fostering expertise across different specialism areas

In order to address the needs of the digitalised users, TSE has created compound roles, with a core specialism and knowledge of broader areas, to be capable of conducting digital marketing initiatives. These experts develop their specialism in different areas through these three dimensions: building on the core knowledge, extending the expertise, and becoming more technical.

All digital marketing experts we interviewed have a core specialism in at least one area of digital marketing, which includes social media, social media advertising, digital media, search engine optimisation (SEO), content management, and influencer marketing. For example, one social media manager explains that managing the community of users is a key part of the social media managers' job. She states that "I do spend a lot of time talking to people, so, community management is the big focus of my role... I'm kind of trying to wheedle my way into conversations when I can" (social media manager 5). This resonates with what other social media managers consider the main focus of their job.

In addition, in the case of digital media managers, the ability to conduct keyword research and work with web ads platforms constitutes the core of their practice, as explained by one digital media manager:

in terms of paid search, it's actually the whole execution of paid search campaigns from the keyword research to analysing performance to working with bid management solutions to launching mobile campaigns to working with the agencies, and managing the budgets (digital media manager 2)

Although these experts have a central specialism, they continuously change/update their specialist knowledge as 'the technologies and their features and functions change almost every day' (TSE's document).

The principal learning of business uses of social media occurred through the actual doing of it. This is particularly the case for social media advertising managers, who did not have any previous experience as the social media platforms for advertisements were emerging. One social media advertising manager explains how she develops her knowledge in this area:

you need to be a keen learner because the landscape is changing all the time, also we have a channel in the company on Slack where we would give updates...this is a field where you need to self-learn. For example, I have the experience of launching new Ads platforms on Twitter and Pinterest (Social media advertising manager 1)

As she explains, these actors should be self-learners not just in learning what new function has been released in different platforms.

In addition to building on the core knowledge, TSE has adopted new approaches to make sure all experts have the knowledge of different areas of marketing and, to use a phrase from the field, to become ‘T-shaped’. As shown in Figure 2, being T-shaped means that all experts within the company must have the core knowledge of their specialised field (depth) and develop their knowledge across other areas within the field (breadth). One of the growth strategy squad members explains:

TSE developed a training programme to upskill all individual experts in various squads, both marketers and engineers. The program covers 32 topics in engineering, marketing and data science. For examples, T-shaped marketers can run tests, analyse the results, measure the impacts and control how to enhance user experience (TSE’s documents)

Insert Figure 2 about here. (Musambi, 2017)

The ultimate goal is to minimise dependencies and bottle necks so that teams can act more swiftly and achieve higher levels of growth (in terms of attracting new users). Therefore, the T-shaped learning approach has also been applied in their graduate and internship schemes to develop such skills. One of the entry level marketers in the Latin Americas (LATAM) squad explains the experience of developing his multi-faceted expertise:

I was responsible for the affiliation accounts for Latin America...I managed to grow the sessions and ROI over 100% YoY, which led me to take control of affiliation for all LATAM markets. Then, I was given the opportunity to broaden my skills to other areas such as SEM [search engine marketing], and app marketing. (TSE’s Documents)

Being T-shaped or having multi-faceted expertise is seen to allow them to work more independently but also facilitates better communication and collaboration across different specialism areas.

According to TSE, one dimension of being a T-shaped expert is ‘the base layer knowledge’, which is about having basic knowledge of an area beyond the core area of expertise (e.g. social media). In the case of digital marketing experts, this is about knowing more about product design (software engineering and user experience) and data science, or in other words, becoming more technical. In this regard, TSE holds training days and hosts ‘knowledge shares’ to facilitate this process of learning new skills such as coding. According to one member of the Innovation and Emerging Technique squad:

Our digital marketing experts need to become more product-driven and have analytical skills. They do tests and measure the impacts of tests using key metrics instead of unreliable attribution models. Ultimately, these experts have the power to improve the users’ experience of TSE’s products (TSE’s documents)

As well as such training days and programmes, TSE continuously encourages the culture of learning so that the experts can decide in which area they need to upskill and dedicate their time. Another

initiative by TSE is the launch of a ‘programming community’ within TSE to enable digital marketers in coding and automation processes, as one of the technical managers in the central growth tribe explains:

We launched the community of programming at TSE to facilitate the learning of non-software engineers on how to code. The examples are teaching the individuals to use Python with Pandas in automating data tasks, to use APIs [Application Programming Interfaces] to extract data for their reports, or advanced analytical techniques in Excel (TSE’s documents)

In this regard, one social media advertising manager shares her experience about the necessity of learning how to code and using APIs for pulling data:

this kind of changes makes you become more and more technical with the platforms. I’m learning to code...knowing some coding can help you especially if you need to source some data or sometimes connect to APIs (social media advertising manager 1)

This was also highlighted in some of the expert interviews. For instance, one Expert explains how professionals in the field of digital marketing need to become ‘multi-disciplined’:

I think more people need to be multi-disciplined now, there is going to be rise of people who know coding and technology and just having very different skills, because companies that focus on individual departments without having the ability to have people being multi-skilled are not going to survive (Expert 5)

In other words, marketing professionals are required to have the technical knowledge of working with users’ data from various platforms independently.

4.2. Encouraging data-centred actions and decisions

At TSE, it seems the vision is that all actions and decisions are increasingly driven by data and that marketing experts, must have the capability of analysing large volumes of data, to (re)define relevant metrics, and to measure the impact on the users and the business. This goal was implemented through two dimensions: measuring every state of customer journey, and (re)defining what’s valuable.

All measurement at TSE is said to follow what is called a ‘state machine’, which is a customer data platform. Similar to how computer scientists have used state machines to model and manage complex processes (Cheng and Krishnakumar, 1996), TSE has developed its own state machine to look at the customers (users) at different stages of their journey and adapt the interaction or communication approach accordingly. Although the marketing experts at TSE measure the traditional marketing metrics (which are called ‘vanity metrics’ by TSE staff), such as size of the email subscription or unique sessions, they realised that they need to measure more ‘meaningful’ metrics to consider the different status of users based on the types of their interaction with TSE’s platforms (web or app), devices they use, their location etc. To facilitate this, they have developed the ‘state machine’. The state machine analyses the level of customers’ interaction and the type of interactions with TSE’s product (travel search engine).

According to the interviews and TSE's documents, the customers' state has been defined as the initial state of 'unaware' (users do not know about TSE), 'acquisition' (users come to TSE's platforms from various channels), 'activation' (users perform an activity on TSE's search platform or content websites), 'retention' (users visit TSE again or multiple times), 'referral' (users share their experience with their friends and refer them to TSE), and 'revenue' (users perform activities such as booking a flight that generate revenue for TSE). This enables the TSE experts to measure the key points in the users' journey (or life cycle). According to one of TSE's technical managers who leads the state machine squad:

We keep record of each user's history of interactions with TSE and since some of such interactions incur cost to TSE, while others lead to revenue, we are able to calculate the 'user/customer life-time value' (CLV). Also, we are able to run predictive analytics for each category of users and predict their future CLV (TSE's documents)

Therefore, this future prediction of CLV allows the marketing experts to optimise their acquisition, activation and retention activities to shift the users to the states that are more valuable. Before the introduction of the state machine, some of the social media experts experienced some issues in terms of measurements. As one social media advertising manager explains: "back then, our technological struggle for social media was tracking and measuring ROI in a more effective way. The attribution model we used didn't allow this to happen" (social media advertising manager 2).

Thus, apparently the state machine provides a unique dataset, through which the marketing experts are able to follow the timeline of each user's activity, personalise the communication, improve the users experience, and create a more value to the users. One social media manager explains:

we don't just think about acquiring the user, we think about how we can be relevant and add value to them which then adds value to us...So, some of the values to the business can be measured in how many users have been bringing through, what they did on the site, how much revenue they bring, etc. (social media manager 8)

This is also highlighted by one of the digital media managers stating in a blog post (TSE's documents) that, although a lot of digital marketing metrics such as 'post reach', 'engagement rates' and 'click through rates' are prevalent, those do not necessarily lead to a business result (revenue). Therefore, the marketing experts at TSE are continuously (re)evaluating how they can measure the value that they are presenting to the users and for the business. This occurs through continuous feedback loops throughout the user journey. Therefore, researching what adds value to the users and the business is a norm at TSE. In this regard, these experts change the metrics they measure in order to find out what is valued by TSE's users. However, this is a challenging process as a social media manager explains:

I think the challenges are around the platforms changing the way they prioritise content, so algorithms. Challenges will always be attributing value to the activities that we do on social, tying together all the data from the organic activity to kind of what the users are doing, so we have a data challenge (social media manager 8)

As mentioned in the above quote, the challenge in finding out what is valuable for the users is related to platforms' algorithms and how they prioritise content for the users. Therefore, the various measurements, the redefining of the metrics, and this rethinking of criteria etc. reveal how these new experts attempt to show the value of their expertise to the organisation. Working in this highly unstable setting (due to platform characteristics and user practices), these experts are ongoingly trying to find new ways of measuring the outcome of their work for the users and for the organisation.

4.3. Promoting the build-test-learn approach

The way that marketing teams operate at TSE is based on agile and lean approaches and growth hacking techniques, which together have been developed as a unique approach for the business of TSE. Growth hacking is the use of unconventional marketing approaches to rapidly acquire large numbers of customers (Ellis, 2010). Because as one Expert explains, "one cannot break through using pre-defined strategies and must experiment and learn". He asserts that "there is always a marketing PlayBook but 'hacking' means finding a way to break through, and you can't really break through a marketing playbook, they are bound with the predefined strategies that they do" (Expert 2). Therefore, the pre-set rules of conventional marketing models cannot be used in the dynamic context of digital technologies.

According to one senior product manager (TSE documents), the marketing campaign management follows the build-measure-learn principles of 'lean start up' (Figure 3), which works as a process of: generating a campaign idea, creating a hypothesis of what the idea would lead to, setting up measurement metrics, building the minimum viable product (that is the campaign itself), launching the campaign to a group of users for test, analysing the results for a certain time period, pivoting the idea until it is scalable, or learning from the results if the outcome is not positive. Through this process, the marketing experts are seemingly enabled to optimise the campaigns for best results and create rapid learning cycles.

Insert Figure 3 about here.

Operating in a fast-changing landscape, TSE seems to have moved away from a conventional linear process of campaign management to an iterative agile process to enable the time and resources spent on campaign activities to deliver better results for the users (customer experience) and for the business (sustainable growth). The underpinning of the whole process is 'data'. Data, that is generated by the users, is analysed and used to build campaign ideas and hypotheses, which form the basis of the campaign experiments. One social media manager explains the process:

Quite a lot of the work done around experimentation structure is to create those campaigns. So, it goes from basic analysis of who would be the target audience, why this hypothesis, why the data supports your hypothesis, then what is a test, and then analysing the results (social media manager 7)

According to TSE's managers, such iterations are developed to test and validate the ideas, the target users, the execution methods, and the digital channels. Notwithstanding the significance of this for the large-scale marketing campaigns (to prevent large waste of resources in the case of campaign failure), it became embedded in other activities that the digital marketing experts do, such as assessing what type of content performs better on what platforms.

One of the underlying goals of experimentations at TSE was to create quick learning cycles. One social media manager explains the importance of continuous experimentation for social media particularly because of those platforms' algorithms:

Experimentation is part of our day-to-day work at [TSE] and social media is one of the areas that we are continuously testing new things. To hack the platforms' algorithms, our strategy is to continue experimenting and therefore, to change things over (TSE's documents)

Given the complexity of social media platforms because of their algorithms and how it plays a role in the way each user might see and interact with TSE's content, any learning from the experiments is important. Although conducting experiments is part of the digital marketing experts' job, the pace of experiments and the insights gained is crucial. One of the growth directors explains the process after building the hypothesis about how users would behave regarding a change:

The hypothesis moves through the scaling platform that is called 'Growth Factory' at [TSE]. In this process, the aim is to make sure that the experiment would move to the status of 'success' or 'fail forward'. Therefore, we would be able to learn fast regardless of what the result of the experiment would be. We believe the faster we learn, the faster we grow (TSE's documents)

One of the senior growth managers also asserts that 'failing forward' and 'learning' is part of TSE's cultural values. One of the digital media managers comments that when the result of an experiment does not meet or excel the initial metrics, they consider it a case of failing forward, because it fosters the culture of continuous experimentation (to test other possible ways).

5. Discussion

In this study, we took a practice-oriented approach to investigate how firms develop new practices and expertise in marketing. We find that enterprises develop new expertise around the three work practices of *spanning the expertise boundary*, *making value measurable*, and *experimenting*, which together constitute a novel 'hacking marketing' approach. We define hacking marketing, after Brinker (2016), as a cluster of novel marketing practices, characterised by their adaptive, iterative and multidisciplinary nature, aimed at managing digital consumers and their big data to offer more value to them through tailored services. We explain the various elements of this model of marketing and how it is practiced.

5.1. Three practices of hacking marketing

Spanning the expertise boundary. Our study shows that firms' response to digitalised consumers is to foster new hybrid experts. In this regard, the new occupational expertise was formed around the field

of digital marketing in the areas of social media, social media advertising, digital media, SEO, content management, marketing automation, and influencer marketing.

Due to the increasing pressure from customers' expectations (Fuentes and Sörum, 2019), the digital marketing experts were expected to have knowledge of different areas of marketing and to work closely together. Moreover, such experts were also encouraged to develop their skills in other specialisms such as data science and continuously broaden their knowledge as technologies developed and changed. As Tumbas, Berente and vom Brocke (2018) and Kalaignanam et al. (2021) have highlighted, this is because digital efforts require links between different functions such as IT and marketing. Therefore, our paper shows that this gave rise to new categories of occupational experts with a fusion of skills and knowledge in marketing and data science.

This discussion has given rise to the notion of 'T-shaped' professionals who have broad knowledge in different areas and in-depth knowledge of one specific domain (Conley *et al.*, 2017). There is less development on the notion of T-shaped marketers within marketing literature, but according to research by Smart Insights (a marketing training platform), a T-shaped marketer is "a marketer that has broad knowledge covering a wide range of digital tactics with in-depth knowledge in 1 or 2 specific areas" (Chaffey and Smith, 2015, p. 24). As we have shown, adopting a hacking marketing approach requires marketers to become T-shaped.

Making value measurable. The second dimension of new organisational expertise was based on the analysis of large volumes of consumer data (big data) generated through digital platforms. Extant literature has highlighted the growing significance of measuring the outcomes of activities in relation to digitalised users (Hoffman and Fodor, 2010; Katsikeas *et al.*, 2016; Kumar *et al.*, 2013).

Discussions around measurements of marketing activities have increased regarding social media work (Luo *et al.*, 2013; Viale *et al.*, 2017). Our study offers insights concerning this central capability, since our field work showed data analytics is centralised as the underlying rationale of work practices related to digital technologies. This is key in digital organisations as it creates more intimacy as well as a consistent customer experience (Micheaux and Bosio, 2019; Vollrath and Villegas, 2021).

Unlike traditional marketing experts, the digital marketing experts we studied were able to measure the value for customers in each stage of their journey and lifetime by monitoring and analysing large volumes of data from social media and other digital platforms (Viale *et al.*, 2017). The measurements of value for customers correspond to the overall value for the business.

Similar to the emergence of expertise in other fields (see Pollock and Williams (2015) in the case of IT industry analysts or Preda (2009) regarding financial analysts), these digital marketing experts make 'value' measurable. In other words, they can demonstrate the value of their practices and expertise, and in doing so have become 'value measurement experts'. This is because they are constantly working with data, and through the measurements reflecting on what they are doing, what

they are measuring, and how they are defining metrics. Through such reflections, digital marketing experts move between what platforms enable them to measure and what they innovate in bringing together different means of measurements (e.g., integrating various data sources) and measuring what they think represents value, and not what is defined by platforms. This addresses the long-standing problem of marketing in proving its value (Katsikeas *et al.*, 2016; Verhoef and Leeflang, 2009).

Experimenting. The third practice that has become routine for the new digital marketing experts is experimenting, which is about testing their initiatives, optimising their approaches for the highest value creation for users, and learning from fast iterations.

One rationale behind the experimentations, often taking up much of these experts' work, was to handle the more endowed users (e.g., users with enhanced needs and expectations). Due to the rise of more empowered consumers, digital marketing experts' work hinges on experimenting as part of their work practices. Through the practice of experimentation, digital marketing experts manage to implement new projects - in small scale - to collect real-time data from users and analyse the performance of their projects.

This echoes other researchers' findings that organisations should maintain flexibility in uncertain conditions of digital transformations (Kalaighnam *et al.*, 2021). For instance, Ferreira, Fernandes and Ferreira (2018, p. 7) argue that "companies currently operate in environments of great uncertainty and complexity, the ability to adapt to a variety of contingencies is fundamental". Such adaptations can happen through rapid experimentation cycles, as we explained through the empirical field data, which is aligned with what Kalaighnam *et al.* (2021) describe as 'marketing agility' that dynamically facilitates learning.

Together, the above constitute the new emerging hacking marketing model (Figure 4) that form the new practices of marketing experts. In addition, it's not only the individual marketers' expertise but also the collaborations of these T-shaped experts in teams (squads in our field organisation) that enable managing digital consumers. It is through such multi-disciplinary interactions that they are able to work in the rapidly changing environment of digital platforms, digital consumers and big data. This responds to the literature that the importance of such multi-disciplinary interactions and boundary work has recently been highlighted (Kalaighnam *et al.*, 2021; Wedel and Kannan, 2016).

Insert Figure 4 about here.

6. Conclusion

6.1. Theoretical contributions

This paper addresses a key concern regarding how new expertise is formed in marketing through practices of the new hacking marketing model. Our study goes beyond previous work, which focuses

on the new skills and capabilities for marketing experts (Dwivedi *et al.*, 2021; Di Gregorio *et al.*, 2019). Instead, we a) offer a nuanced discussion of how hacking marketing enacts digitalised consumers and b) address the problem of the inability of conventional marketing approaches to show its value in the organisation (Hanssens and Pauwels, 2016; Verhoef and Leeflang, 2009). This paper explicates that dealing with digital consumers is not just about the application of pre-given sets of techniques (e.g., focus groups) but rather they are about how organisations build new roles and new areas of marketing occupation that continuously and dynamically constitute the consumer.

Our study also contributes to the recent discussions of marketing agility. According to Kalaignanam *et al.* (2021, p. 36), marketing agility is about rapid iterations between “making sense of the market and executing marketing decisions to adapt to the market”. In contrast to the marketing agility perspective which focuses on market adaptations based on iterative tests, our hacking marketing model offers a more holistic approach comprising not only iterative processes and experimentations of agile marketing and growth hacking (Ellis, 2010; Holiday, 2014), but also making value measurable based on data-driven decision making and spanning marketing experts’ knowledge.

Another contribution is to the calls to study how to develop skills and knowledge that marketers need in the digital world (Gupta *et al.*, 2020; Rahman *et al.*, 2021; Wedel and Kannan, 2016). Our study showed that digital marketers are required to have hybrid expertise specialising in both marketing and technical areas such as data science or to become T-shaped (Conley *et al.*, 2017). This is because working in digitalised world requires knowledge in different areas to be able to work independently that facilitate the rapid iterations of experimenting. This is aligned with the discussions in the literature. For example, according to Gupta *et al.* (2020, p. 32), firms need to develop their human resources (in marketing) as ‘the most critical resource’ to be ready to “deal with entrusted environmental forces such as changing nature of firm–customer interactions” and “social media dynamic, technological and marketplace disruptions”. Kalaignanam *et al.* (2021, p. 52) also point out that “in addition to training marketing employees for technological skills”, they need to be exposed to “tools, concepts, language, and artefacts of other disciplines and expand their thought worlds for better sensemaking”. Although our study support these discussions, it has extended these arguments by flagging how such new skillsets or knowledge of marketing experts are constructed through their daily practices bringing forth a new model of marketing organisation.

Finally, our study contributes to the nascent discussions that marketing and IT are getting more coconnected (Roy *et al.*, 2021). As we showed managing digital platforms and their users, unlike traditional forms of IT, is no longer just within the realm of IT functions and functions such as marketing are playing a more important role (Wedel and Kannan, 2016). This is in line with Kalaignanam *et al.*’s (2021) assertion that the responsibilities of customer-oriented digital technologies are shared between IT and marketing and collaborative relationship between IT and marketing can lead to better outcomes.

6.2. Practical Implications of Hacking Marketing

This study offers practical contributions for firms in terms of identifying new work practices and expertise that marketing specialists need in managing digital platforms, digitalised consumers and big data. In this respect, marketing is entering a new era where we are seeing the growth of specific new approaches and practices to address the needs of digital organisations/digitalised consumers as we have shown that firms need marketing experts specialising in various areas (e.g., social media, influencer marketing, digital media, etc.) collaborating together to achieve sustainable growth for the firm. In addition, our results showed that firms need to design and implement strong training programmes to prepare their marketing workforce in adopting experimentations of agile approach and data-driven decision making. These trainings aim to create T-shaped marketers and should expose marketing experts not only to various areas of marketing but more increasingly to technical fields such as data science. The hacking marketing model allows us to construct a more accurate view of the user/customers through specific segmentation (e.g., building customers' persona, customers' journey, and predicting their lifetime value). Therefore, firms would be able to provide customised offerings leading to better experiences and creating more value. Although our findings are more relevant to larger organisations or start-ups aiming to scale up, we think that even smaller businesses or those operating in emerging countries, should be generally becoming more customer-centred and tech-savvy to follow hacking marketing approach.

In addition, hacking marketing and the implementation of new practices is perhaps not possible without other organisational arrangements. One of the trends that has been emphasised in the research by analyst firms such as Gartner is the importance of understanding customer trends (Pemberton, 2018; Slaats, 2013), such as the use of multiple channels of interactions concurrently. As digital platforms and channels are co-related, T-shaped marketers are required to work collaboratively with each other and with IT (e.g., data scientists). This should be facilitated by the firm through team-based organisational structures and new internal processes and norms. Therefore, this would present implications for IT departments as they need to become more aware of business operations and marketing practices (e.g., user acquisition) to provide marketing department with necessary tools (e.g., data analytics dashboards) and collaborate them in projects and campaigns.

Our paper also has important implications for marketing educators. This study showed that marketing education should be revitalised. Marketing programmes within business schools should consider a review of their courses and including the novel marketing models and approaches into their curriculum. This is specifically important as the focus of existing curriculum on digital marketing is on web analytics and fundamentals of social media marketing. However, our study showed that firms need marketing workforce who have broader knowledge of their field and more technical skills to be able to work with platforms' APIs and data independently.

6.3. Limitations and areas for future research

Although our findings are based on a single case, other studies (e.g. Brinker, 2016) suggest that this new hacking marketing approach is becoming more prevalent. Therefore, we need a deeper understanding of its continued development. First, future work might focus on other work practices that constitute hacking marketing. Second, in addressing the limitation of this study, scholars can focus on the relationships between the practices of hacking marketing and what conditions might contribute to the success of the approach. For example, in internalising experimentations of hacking marketing based on agile methods, there is a lot of emphasis on the organisational structure and culture (Kalaiganam *et al.*, 2021). Therefore, one important area of research can be examining the requirements of organisational context in developing marketing expertise and adopting the new practices of hacking marketing.

In addition, further research is needed to investigate whether this approach might be different across organisational contexts and sectors. Such studies could also explore not only how marketing practices are similar or different, but also compare the responses of digitalised consumers. Therefore, one area can be investigating the outcome of such practices by focusing on the revenue, profitability, customers' loyalty and satisfaction, and their referral behaviour. Regarding this, further research is needed to study which expertise and practices lead to higher profitability for the firms to invest on.

Finally, one important area for future research is the leadership of new hacking marketing approach. There is nascent discussions (Kalaiganam *et al.*, 2021; Roy *et al.*, 2021) that dealing with the new digital platforms and digitalised consumers is beyond the jurisdiction of either CMOs or CIOs but in between and in some firms the responsibility of CDOs. According to Kalaiganam *et al.* (2021, p. 51), there are interdependencies between CIOs and CMOs and "while the CIO manages the technology that enables the collection, integration, security, and access to the firm's data, the CMO typically manages the marketing-related data analysis, interpretation, and program development". Therefore, future research can explore how these two leadership roles complement or contradict each other and what strategies firms should follow to create constructive collaborations and reduce jurisdictional tensions between such roles.

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