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A spring-clean of Michael Porter's Attic: The Canadian telecommunications sector as an exemplar of refurbished generic strategy

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The Canadian telecommunications sector as an exemplar of refurbished generic strategy

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Abstract

Purpose – This paper views the phenomenon of offering/user interface complexity as having competitive strategy-related consequences. Porter's conception of generic management strategy was created in the 1980s. It is not well adapted to industries which have proliferated in the Internet age. Accordingly, the conception presented in this article offers a modified version of Porter's generic strategy framework. The new view incorporates the dimension of complexity alongside the original dimensions of "target market" and "type of advantage". The article uses an analysis of the contemporary Canadian Telco sector to prosecute its case.

Design/methodology/approach – The project uses an analysis of the stated competitive positioning orientations of firms operating in the contemporary Canadian Telecommunications sector to build a case about the changed nature of generic strategy in the digital age. It uses inductive reasoning to generalise findings about the Telco sector to other recently emerged (digital-age) industries.

Findings – A revised view of Porter's generic strategy grid is presented and defended.

Research limitations/implications – The study analyses only one sector, but draws many broad conclusions. It uses inductive reasoning which is limited by the extent to which the exemplar case (telecommunications) may be compared to other cases within the same category (other digital age industries). The study does not use an extensive analysis of strategic planning documents of individual firms; however, this is not a limitation unless and until a critique challenges the claims made about generic strategies being pursued.

Practical implications – The new conceptualisation may be used as a planning tool for digital-age firms.

Originality/value – The project is a genuinely new attempt to update Porter's view of generic strategy. It overcomes the problems which have been associated with previous attempts at such revision.

Keywords Strategy, Complexity, Digital age

Paper type Conceptual paper

1. Introduction

Internet-based technologies have influenced the emergence of distinctively post-modern or digital-age industries. For example, the telecommunications sector is vastly different now to its twentieth century predecessor which created one offering through connecting twisted-pair copper wire fixed lines through switching exchanges. The fact that there

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are genuinely new products and services and better ways of delivering more traditional offerings raises the possibility that frames of reference about competitive strategy from the 1980s – before, in particular, the widespread proliferation of the Internet – need reframing.

Despite the efforts of scholars such as Allen *et al.* (2007), the full range of competitive strategy options available to modern firms may not have been adequately delineated. This article argues that the twenty-first century telecommunications sector, in particular, has available to it generic planning choices which may be pursued in certain other modern industries and which require that industrial-age – or pre-Internet – conceptions of commercial advantage, such as those of Michael Porter, be revisited. We use Porter's strategy-grid as a jumping-off point for considering new and distinctively contemporary generic planning possibilities. Such new options arise partly because of changes brought by technology. However, their emergence has also been influenced by diminishing levels of government-imposed regulation in certain countries including, for example, Canada, Australia, New Zealand and the UK. The revised set of generic approaches may entail elements of duplicity, guile and manipulation. To prosecute our case, we analyse the approach taken by players in Canada's contemporary telecommunications industry, an archetypal digital-age sector.

The article is structured in three parts. First, theoretical foundations are provided where a two-epochs conception of recent economic history is presented: the industrial age, a period up until the 1990s when the Internet became widely available; and the digital-age, the period thereafter. Second, Porter's view of generic strategy is described and placed in a historical context. In the second section, we also focus on the modern Canadian telecommunications sector to reveal a need for an elaborated view of generic strategy. We use inductive reasoning to reveal that this industry is an exemplar case and therefore has common characteristics with other recently emerged contemporary sectors. An updated version of Porter's generic strategies is presented. In the third section, Managerial Implications and Conclusions, we consider the practical utility of an expanded view of Porter's original framework. Using this elaborated conception, we explore ways to enhance the strategic planning capabilities of digital-age firms.

2. Theoretical foundations: two eras and Porter's view of competitive strategy

Economic historians often distinguish between eras based on the way commerce is undertaken as well as the array of consumer product/service offerings that exist as a consequence of prevailing technology. Kluver (2006) and Laudon and Laudon (2012) differentiate between a post-industrial mode of commerce where the emphasis was principally on the newly emerged services sector and the digital or new-media age when information became a more important commodity and computer networks became the means by which information was shared and traded[1]. Laudon and Laudon (2012) argue that the point of demarcation between these epochs is marked by the emergence of the widespread public use of the Internet. Others have reached a similar conclusion about the timing of the change using different reasoning. For example, Kambil (1995) and Gupta (1995) argue that until the creation of the World Wide Web, commercial endeavour, although often facilitated by communications and transport-related technology, was limited by geography. They use such rationale to conclude that the

Internet, which has provided a means for expanding market parameters, has created a new era.

If the arrival of the Internet was a direct influence on the emergence of a new digital-age era, then other more protracted contextual elements can be considered as indirect influences. One of the first of these was described in the Woodward – Blauner hypothesis which represented a critique of the fragmented and routinised work methods of the industrial-age factory paradigm (Lincoln and Kalleberg, 1992; Beamish, 2010; Marsh and Mannari, 1981). This perspective was influenced by Emile Durkheim's *division of labour* thesis which proposed that class conflict is a fleeting problem that will eventually resolve itself (Ritzer and Smart, 2001; Beamish, 2010). Such a view conceives Marxist notions of employee alienation as having much to do with how capital and labour coexisted when the factory paradigm was becoming established and therefore anticipates that the early twentieth century hardships endured by the *proletariat* would be ephemeral. In particular, growing pains would occur because technology was sufficiently developed to be integrated into a strategy of mass production but not so advanced that it could make work interesting (Milgrom and Roberts, 1990). From a practical standpoint, optimism about the trajectory of modernity appears to have face validity. For example, prior to the digital age, those with responsibility for selling technology-enabled products – such as vendors within the pre-Internet consumer electronics industry – undertook tasks that were simultaneously easy to execute and uninteresting because the devices they sold required little explanation, few usage instructions and almost no costing analysis. A relevant case in point would be the comparison that could be made between selling a transistor-radio and selling a smartphone and its associated usage contracts.

For current purposes – and consistent with the view of authors such as Berners-Lee (2000) – the point of demarcation between the post-industrial and digital/post-modern eras is approximately 1992 when the World Wide Web became a public utility. Wright Mills (2000) suggests that part of the value of seeing social history through the prism of different eras is that such circumscribed epochs create *genres* of ideas or distinct intellectual traditions. In this article, using a before/after-type analysis, one such tradition is examined: scholarship about competitive business strategy.

In the 1980s, the idea of management competitive strategy became fashionable in Western business schools and within the executive ranks of the private sector (Williams, 2006). The task for those developing strategy was twofold. First, they had to find generic principles and second, they had to produce customised action plans (Mintzberg, 1992). Their goal – heavily influenced by a newly emerged so-called neo-classical world view of Western market economies – was profit maximization. Such theoretical preoccupations can be characterised as a quest to determine what firms generally, or in an overall sense, should do to be profitable. On the other hand, within enterprises themselves, executives and consultants were employed to craft and implement more specific initiatives to create shareholder wealth (Pfeffer, 1995)[2].

In the contest of ideas about generic competitive strategy, the four-quadrant blueprint offered by Michael Porter reigned supreme (Thompson and Strickland, 1998). Indeed, it became a standard for classifying how commercially orientated entities gain competitive advantage. In his original work, Porter (1979) identified four generic approaches that are defined by two axes, the target market and the type of advantage being pursued. The options arising from this template are:

- low-cost leadership, or appealing to a broad spectrum of customers based on being the overall low-cost provider of an offering;
- broad differentiation, or distinguishing an offering in a way that will appeal to the lion's share of prospective buyers;
- best-cost provider, incorporating elements of low-cost leadership and broad differentiation in such a way as to give customers the best price for a differentiated product;
- focused niching based on low-cost, or singling-out a narrow buyer segment and providing those customers a desired product at a lower cost than rivals; and
- focused niching based on differentiation, or singling-out a narrow buyer segment and giving such customers a desired product that meets their tastes and preferences better than rivals.

Under conditions where consumers manifest differing preferences, competing entities should choose a strategy that has not already been taken by a rival (Porter, 1985). For example, if one firm has established itself as a focused, low-cost leader, other players in the same sector[3] are limited to choosing one of the other three strategies, or at least are somewhat constrained to choose an approach which fits thematically under one of the non-selected generic headings (Porter, 1980).

Porter's generic strategies apply within constraints. Such context is partly defined by his Five-Forces model which posits that going-concern entities manage each of the four industry-external factors (e.g. firms in other industries offering substitute products; buyers; potential new entrants; and suppliers of key inputs) and one industry-internal factor (e.g. rivalry among competing sellers). According to Porter, the Five-Forces define the universe of influences impacting a commercial entity.

Aside from the specific impacts of Porter's circumscribed Five Forces, cultural values and priorities influence the application of his generic strategies framework. Culture, in this context, refers to shared values, assumptions, beliefs and norms linking members of a firm or work unit (Goldsmith, 1995; Bartol *et al.*, 2005). Using this perspective – or slight variants of it – culture, and in particular cultural change, becomes aligned with considerations of competitive advantage and strategy. Aside from such intra-firm preoccupations about what firms do to be competitive, there are also broader elements associated with advanced forms of capitalism which inevitably frame application of Porter's strategies. For example, his conceptualisation often becomes more potent when applied to entities operating within a deregulated and market-based private-sector environment, or at least a milieu that establishes a role for customers in determining the fate of an enterprise. (Porter, 1985, 2008). This element of context creates a multi-firm or oligopolistic and dynamic industry structure that may be evolving towards perfect competition. In such circumstances, new entities may enter an arena and existing ones may exit as a result of performance failure (Porter, 1985, 2008).

With the passage of time, Porter's conception of generic strategy has been subject to at least five lines of critique. First, certain scholars argue that it does not account for the full range of approaches that a firm could pursue. For example, Allen *et al.* (2007) have experimented with elongating the advantage dimension to include additional nominal categories such as supply chain and training. Second, there is evidence that Porter's strategies are not mutually exclusive. For example, Murray (1988) found in the case of

high-technology, capital-intensive industries such as fabrication of superconductors that some entities stand out because they are both low-cost and offer a differentiation advantage. Third, it is sometimes difficult to find examples of the application of Porter's generic strategies. This raises the prospect that his archetypes are overly simplified and/or stylised (Spender, 1993; Morrison and Roth, 1992; Miller, 1992). Fourth, Porter's conception of strategy is not sensitive to a changing industry context and/or does not specify how contestants can make transition from one approach to another (Downes, 1997). Fifth, it may be that, despite his claims about having created an omnipotent blueprint, Porter has not adequately specified the parameters of his framework. For example, some argue that his generic approaches do not work well with small firms (Alpkan and Aytekin, 2003; Lee *et al.*, 2001), in fragmented markets (Borch and Brastad, 2003) and in retail settings (Pitelis and Taylor, 1996).

A more nuanced view of strategy, and one that represents at least a partial rebuke of Porter's generic options perspective, has been developed by Prahalad and Krishnan (2008). In reflecting on what appears to be a growing emphasis on customer relations as markets within advanced economies become saturated, these authors present a case that firm-planning inevitably embodies consideration of elements, such as offering customisation. For example, they note in their $N = 1$ conceptualisation that competitive strategy cannot be understood "without focussing on the importance of the individual consumer experience" (Prahalad and Krishnan, 2008, p. 4). Aligned with this idea is their R = G conception which emphasises the role of supply chains as part-and-parcel of strategy. Such work continues the parallel efforts of qualitatively orientated scholars who have created a genre of strategy literature that has existed alongside of Porter's paradigm. A key influence on this work was Prahalad and Bettis's (1986) perspective which invokes the idea of dominant management logic, positing that firm strategy cannot be understood as merely a rational and depersonalised process but rather relies on appreciating the preferences and biases of executives who are charged with its formulation. Other *genres* offer alternative conceptualisations of the nature of strategy. For example, there are those who: emphasise collaborative approaches (Moore, 1996); focus on the purported trial and error that often forms part of plan formulation (Botten and McManus, 1999); and present approaches derived from a resource-based perspective (Juga, 1999).

In spite of critiques, attempts at revision, and the presence of other research *genres*, Porter's conception of strategy has survived into the twenty-first century as a dominant paradigm (Porter, 2011; Marcus, 2010; Njuguna and Kenyatta, 2009). It has even been suggested – based largely on interviews with Michael Porter himself – that Porter's planning grid is appropriate for analysing the circumstances of digital-age industries (Hartfield, 1997), a point contested in this article.

3. Conceptual framework: a metamorphosised industry and a reframed view of Porter

Certain digital-age industries have traceable ancestor-sectors that existed in the industrial age. Modern telecommunications providers are a case in point. Telecommunications products/services may be contrasted with their predecessor offerings because they do genuinely new tasks and use the same infrastructure to do different types of tasks. This latter point about the emergence of common infrastructure has been interpreted by philosophers such as Pitelis and Taylor (1996) and Warf (1989)

as evidence of the growing sophistication of platform technologies and an associated recognition of the importance of component modularity (Langlois, 2002; Schilling, 2000).

Another case of a pre-super-technology, industrial-age industry was the old consumer electronics sector, exemplified in the 1970s in the Western world by transistor radios and radio cassette players. During that era, there was broad consensus concerning – for example – what a radio could do. Customers would not have expected that it could take photos or act as a personal messaging service. Another feature of the industrial age was that although technology enabled certain modern functions to be carried out, the same technology was not sufficiently evolved to provide more than one function. Offerings themselves may still have been multipurpose. Using the transistor-radio example, it would have been possible to design a device that played music and took photos. Such a gadget would have been – and in some cases was – ugly and awkward. For example, a multipurpose product in the 1960s – which survived until the 1970s – was the *Westinghouse Escort Transistor Radio/Lighter/Clock/Flashlight*, the (unsightly and unwieldy) *Swiss Army Knife* of transistor radios. The aesthetic disadvantage of the era's multipurpose products mostly meant that radios stayed radios and cameras stayed cameras, a state which created conceptual alignment between the look, feel and expectations of offerings and their functions.

In the digital-age era, advances in micro-processing and miniaturization – alternatively conceptualised as elaboration of platform technologies and modularity (Langlois, 2002; Schilling, 2000) – have produced new functions such as email facilities. Another consequence of such innovation is that the same infrastructure can now be used to do different tasks. For example, it is no longer necessary to physically attach a camera to a transistor radio to create a multi-purpose product. Rather, there is a contemporary system that is sufficiently versatile to metamorphosise from a picture-taking into a music-playing device. As a consequence, from both consumer and technical perspectives, there has been a degree of convergence between the industrial-age telecommunications industry and the former consumer electronics sector. This phenomenon can be appreciated through analysing what a smartphone is and does; a modern example of using the same infrastructure/platform to execute up to hundreds of different functions; and in the process, blurring the boundary between form and function. For example, in 2012, major Canadian telecommunications providers typically offer at least 750 products/services that can be combined to create additional options (Rogers Communication, 2012). Hence, as is known to *Iphone* and *Blackberry* users, the devices offered by this industry have the potential for doing much more than making and receiving phone calls.

The two aforementioned differences that have emerged with the marrying of telecommunications and consumer electronics – capacity to do genuinely new and multiple tasks using the same infrastructure/platform – create strategy and marketing-related dissimilarity between the industrial- and digital-age eras. For example, in the digital-age new functions often entail, in the service/product ratio, more service than product (Vargo and Lursh, 2008). Furthermore, the common-infrastructure innovation has fuelled rapid growth in offering availability (Rust and Espinoza, 2006). Hence, when a customer asks for a mobile phone plan, they may have to choose from amongst hundreds of options that entail consideration of functions to be used and circumstances of use. This condition creates a modern consumer environment that is more complex than its earlier incantation. One manifestation of such enhanced

complexity is that offerings may be able to be accessed over lengthy periods and in varying degrees. For example, when purchasing an *iPhone* or a *Blackberry*, a customer who seeks primarily a telecommunications device would probably be asked how much texting they want to do. They may receive an option of having 100 text messages per month for free, between 100-500 for $4,99 or unlimited for $19,99 (Rogers Communication, 2012). They would only be able to have this discussion with a vendor if they had already agreed in principle to pay for a plan. Post-payment negotiations of this kind would centre on one aspect only of the device's functionality. Similar planning discussions would also be necessary if the customer wanted to download books or music. Such context creates a state where buying a modern telecommunications-type device will inevitably bring a consumer into contact with multiple product/service delivery cycles[4]. It also mostly requires that buyers enter into several contractual arrangements as well as relationships where they will unwittingly be brought into the orbit of firms that will attempt to sell to them (Zanelli, 2011; American Marketing Association, 2011).

It has been noted that, due mostly to technical advance and also a changed public policy orientation in certain countries[5], telecommunications has altered massively and that the industrial-/digital-age distinction provides a qualitative, or step-wise, point of demarcation in the transition. Here, it is argued that telecommunication, when considered across several decades, is a generic case of two sectors – each with its own characteristics – that exist within separate circumscribed timeframes. Because the industry is an exemplar case, inductive reasoning may be used to generalise findings about the sector to certain other new spheres of commercial endeavour (Warf, 1989). Specifically, telecommunications has in common with other new sectors the following attributes:

- in relation to its offerings, it tips the balance towards more service in the service/product mix (Albrecht, 1990; Hopkinson *et al.*, 2006);
- through broadening and extending notions such as platforms, *a la* Schilling (2000) and modularity *a la* Langlois (2002), it frees consumers from the one-infrastructure/one-function principle;
- it replenishes its offerings more regularly than in the preceding era, thus sharpening the distinction between early adopters and late-majority consumers; and
- it seems to be associated with a new type of corporate strategy, the point of this article.

Such characteristics mean that modern telecommunications can be compared to, for example, personal finance (credit card- and mortgage-related offerings); text and entertainment-based media (post-modern music, movie and print-media industries and their derivatives such as audiobooks); modular electronic offerings (for example, buying a personal computer which, in practice, is the purchase of hardware and software and their associated contracts); and Internet-based bundled offerings (for example, one-stop-shop holiday packages). Hence, to the extent that these comparisons can be made, the digital-age has brought with it genuinely new offerings and modes of delivery. As a consequence, we propose that generic strategies should be recast to suit

contemporary technological and regulatory circumstances. This section concludes by presenting and defending an updated template.

Aside from enhanced versatility, one patent consequence of digital-age technologies is that contemporary offerings are more complex than their industrial-age equivalents. Two, somewhat different, definitions of complexity are relevant here. First, complexity may refer to the number of, and interrelations between, an item's components. For example, one may say that the space-shuttle is a complex machine. Second, complexity may refer to the training and/or knowledge required to use an item. For example, one may say that flying a space shuttle is complex.

Insofar as consumerism is concerned, the notion of user-offering interface complexity (the latter kind of complexity) may be indexed indirectly through using conceptions such as Roger's (1962) view of the consumer uptake of new innovation. This framework portrays individual members of a potential market for a novel offering as converting to an actual user across a time span. The first users are referred to as innovators. The next group comprises early adopters, followed by the early majority, the late majority and, finally, the laggards. Roger's (1962) view, although originally developed as a marketing tool for industrial-age, value-added offerings such as televisions, stereos and radios, has special importance in the digital age. As noted by social commentators such as Jones *et al.* (2002) and Kulviwat *et al.* (2007), it has been used to interpret how innovation tends to divide populations into those who are technically savvy and those who are not. Such analyses reveal that – in the contemporary world – offering complexity is a salient attribute of certain industries. This does not suggest that complication and intricacy is, always and in every case, the *ordre du jour* in digital-age industries, but only that – because such attributes are possible – they are a potential strategy-related consideration. Hence, complexity, at least of the user/offering interface kind, is viewed here as a planning issue. For purposes of hypothesis testing, it is grafted on to Porter's original conception to create a third axis. The notion of grafting-on a third axis was done following the consideration of alternative ways to incorporate a generic view of complexity into Porter's original framework. For example, we entertained the possibility of extending the offering advantage axis to incorporate two more nominal categories: high complexity and low complexity. However, we rejected the resulting framework because, as will be revealed in the case of Telco firms, an entity's strategic orientation may simultaneously be, for example, to pursue differentiation and low complexity, etc. To retain this element of Porter's original conceptualisation, a "third axis" solution is offered. Figure 1 presents the cube structure that arises from such an augmentation.

The strategic space created within the cube structure in Figure 1 is road-tested here using Canada's digital-age telecommunications sector. Specifically, statements about each major player within the industry were taken from the strategy and planning sections of their respective homepages. For example, Roger's (homepage at: www.rogers.com), as the first provider of the long-term evolution network, describes itself as being at "the forefront of wireless innovation and technology". According to the cube conceptualisation, it therefore offers a complexity-related advantage, across a broad range of customers and – through its emphasis on speed of access (a desirable attribute) – a differentiation advantage. Bell Canada (homepage at: www.bell.com), pitched throughout the country to all market segments, in early 2014, described itself as having "the best price on the market – period". However, it also has a reputation for

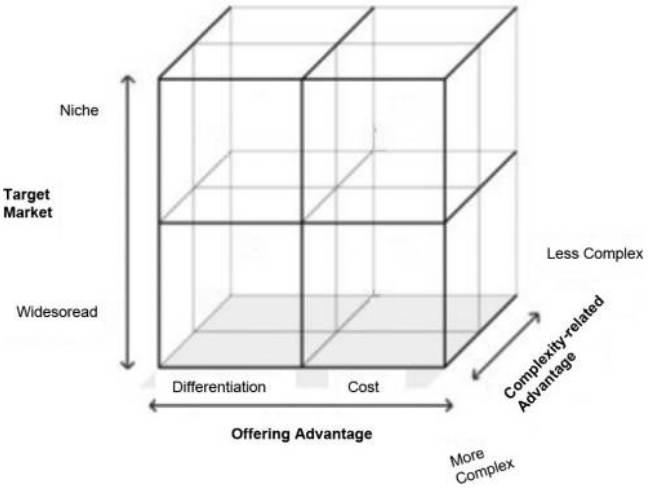

Figure 1.
Revision of Porter's framework to include the dimension of complexity

complex-costing methodologies associated with its various offerings (CBC news, 2013)[6]. Telus (homepage at: www.telus.com), the third player in the Canadian Telco industry, says on its website that "nobody likes surprises – introducing clear and simple prices – the price you see is the price you pay". Here, the emphasis is on simplicity of use – and of costing methodology. Differentiation is based on enhanced customer service. For example, they have a rule – noted on their website – that "a customer ringing a service agent who is kept on hold for more than five minutes will have a free month of wireless access". Videotron (homepage at: www.videotron.com), a cultural and geographical niche firm appealing principally to French Canadians, offers differentiation based on enhanced (and locally provided) customer service and guaranteed speed of Internet access. It pursues a complexity strategy. Its website (in French) trumpets the versatility-related advantages of bundling its various offerings and the ensuing cost-related advantages. It is not possible to have a stand-alone offering using Videotron as a provider. It is therefore also not possible to compare, for example, the cost of its Internet service with that of an alternative provider.

Virgin (homepage at: www.virginmobile.ca) pursues a low-cost, niche, non-complex provider strategy. Using mostly sexual metaphors[7], it communicates on its website that it has "cheap-no contract plans", that it is for "young people" and that it is "hassle-free". In contrast, Koodo (homepage at: www.koodomobile.com), with its slogan of "say no to billification" and claims of having the "best customer service in Canada", pursues a strategy of differentiation to a niche market through providing a non-complex offering. In 2012, Koodo won the J.D Power and Associates Award for highest customer satisfaction with stand-alone wireless service. Fido (homepage at: www.fido.ca) also pursues a non-complex advantage, but is pitched to a broad and price-sensitive market. The Fido motto is "giving low prices a good home".

The latest new entrants to the Canadian Telco sector are ChatR (homepage at: www.chatrwireless.com) (a subsidiary of Rogers) and Wind mobile (homepage at: www.windmobile.ca). These firms occupy the low-cost, niche and complexity space within the cube in Figure 2. Consistent with Porter's original conception and with the

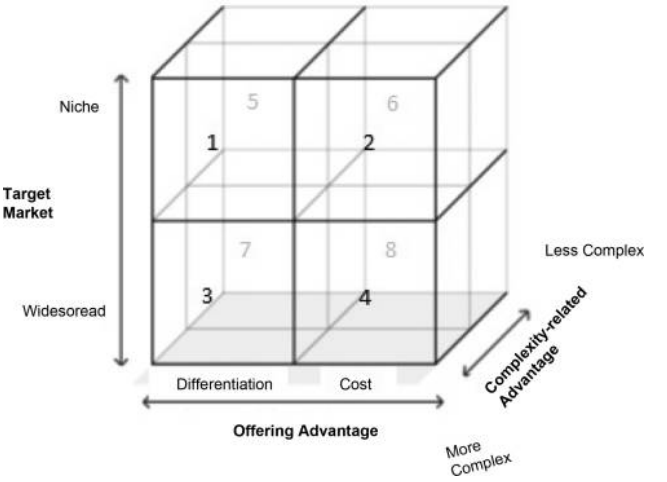

Figure 2. Competitive positioning of players within the Canadian telco sector

present paper's reframing, they appear to have positioned themselves in this way to take advantage of the unoccupied strategic terrain.

In light of these descriptions, which each appear to have face validity, the cube structure presented in Figure 1 is used to reveal the competitive orientation of each Canadian Telco player. This analysis is presented in Figure 2 which uses three dimensions to indicate the competitive space within which firms compete:

1. Videotron;
2. No major provider;
3. Rogers Wireless;
4. Bell Canada;
5. Koodo;
6. Virgin Mobile;
7. Telus Corporation; and
8. Fido.

4. Managerial implications and conclusions

The updated view of Porter's strategies presented in Figure 1 (and Figure 2) portrays something about modernity – and digital-age industries – that seems intuitive and for which there is empirical evidence; complexity and potential complexity is ever present in contemporary consumer offerings. In light of this, it is reasonable to ask about what user/offering interface complexity may mean for corporate strategy development. The point of this article has been to propose and defend one response to this question, an amended view of Porter's generic strategies. From a planning perspective, executives who are charged with choosing a course of action for their firm should be able to apply the cube framework using the same protocols that they would have adopted in the industrial age, when only two axes defined their choices. Specifically, as far as possible and other things being equal, they should avoid competing in a space that is already

occupied by another player; conceptualise the cube as consisting of eight sub-spaces that are either growing or contracting as a function of a dynamic market; and – as per the advice offered in industrial-age textbooks – continue to align sub-strategies and elements of organisational culture with an overarching commitment to a (now) stereotaxic three-dimensional orientation. Importantly, and as with Porter's original two-axis conceptualisation, they should avoid entering into a "complexity-war", defined here as a race to outdo competitors in bringing to market ever more elaborate offering bundles. Such a trap could be compared with always, and in every case, attempting to provide the lowest cost offering within an industry, a folly that was originally identified by Porter himself.

The revised strategy cube also comes with implications for consumers. For example, it raises the prospect that ever-increasing levels of technical sophistication – or, at least user/interface complexity (the second kind) – are not inevitable. Indeed, it may be that as a complex offering emerges an equivalently straightforward one will follow in its wake. These types of phenomena had their parallel in the industrial age. However, perhaps in that earlier era, the patterns seemed more intuitive; for example, it was always clear that there were perfectly adequate alternative modes of transport to a Porsche or Ferrari (niche/differentiation on Porter's original grid).

Knowledge of generic management strategy options – and the dimensions of strategy – continues to be a prerequisite for more context-specific executive planning. In the twenty-first century, there are new businesses which use Internet-derived technologies to deliver services/products which were not available during the industrial age. A case in point is the modern telecommunications industry; however, there are other such sectors. With an unprecedented pace of change and (often) less regulation of commerce, managers with planning responsibilities in new and increasingly technologically sophisticated sectors should be concerned about competitive positioning. In their quest to find contemporary planning tools, they may question whether Porter's perspective of generic strategy continues to be useful. We have argued that his original conception benefits from being updated to reflect new planning possibilities. It is in this spirit that we have proposed and defended our revised model.

Notes

1. They also refer to an earlier "industrial-age" where a manufacturing paradigm was the dominant mode of production.
2. Kipping (2002) has characterised this era as the coming of age of the management consultant.
3. Given certain constraints such as a non-expanding and saturated market.
4. To use Albrecht's (1990) vernacular.
5. The changed public policy orientation is not dealt with in this work. However, by way of summary, in countries such as Canada, Australia, New Zealand and the UK, it is noteworthy that a neoliberal-type agenda of market deregulation, government privatisation and reduction of tariffs and restrictions on overseas trade has created an environment where matters such as telecommunications are routinely dealt with in and by the private sector. Throughout most of the twentieth century, the model for service delivery in these countries was predominantly from the public sector.
6. For example, CBC on 6 November 2013, reported that consumer billing charges on Bell Canada offerings were – in the relevant six-month reference period – typically twice that

which had been quoted to customers at the point of sale ($265-540). In the same story, it was reported that consumer complaints about billing charges had doubled in the relevant reference period and that 50 per cent of industry complaints concerned Bell Canada.

7. Their slogans are "9-inches of pleasure" (a reference to wireless devices with 9-inch screens) and "play with yourself". The women working at Virgin wear sexually suggestive tee-shirts.

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