# HOW TO ASSESS THE VALUE OF A BUSINESS MODEL PORTFOLIO?

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*[Insert Table 1 here: leading question]*

The past decade's business landscape has been shaped by the "disruptive" insurgence of new entrants across a diverse range of industries – such as Dell, Southwest Airlines, Netflix, Amazon, Spotify among others – thus bringing attention to the use of innovative "business models" as forming a new basis for competitive advantage.[1] In addition, the undisputable success of multi-sided business models – i.e., those connecting two groups of users such as Uber or Airbnb – and their leveraging a vast array of ordinary resources, has challenged many traditional strategic approaches to competitive positioning through the deployment of unique resources.[2] More recently, the locus of attention has shifted to the simultaneous employment of "dual business models"[3] as means of enhancing a firm's competitive position. A portfolio of multiple business models (two or more) offers a discrete and unique diversification opportunity that deserves attention in terms of the resources and capabilities it generates. We submit a non-intuitive way to analyze business model portfolios in light of their link to capabilities that imply strategic resources other than only financials and focus on value creation as the starting point for growth and performance.

The case for "business model diversification" as an additional and distinct type of strategic diversification[5] can be best understood by looking, for example, at Netflix's disruptive market entry, which, in employing two disparate business models (DVD-by-mail and online streaming) in tandem, enabled the company to actively compete against well-established incumbents, such as Blockbuster. [6] While Netflix' successful market penetration and growth are undisputable, particularly in the initial years, they cannot be explained by "traditional" types of corporate diversification. In essence, such traditional strategic manoeuvers aim at expanding the scope of a firm with respects to the product and/or geographical markets in which it competes, as well as the reach of vertically-related activities. Indeed, the "online streaming" business model offered the same movies as the "DVD-by-mail" business model, the latter which were provided to its US customer base through its own technological platform. Yet, it did present a different monetization system (i.e., different subscription prices), a distinct value delivery mechanism (i.e., digital vs. physical), and value-added services (i.e., tailored recommendation system). This business model diversification allowed Netflix to gain considerable market share, after which it expanded its global footprint (it now serves over 190 countries), product portfolio (TV shows), and vertically integrated (as it produces its original content).

The success of Netflix demonstrates that the joint adoption of multiple business models offers unique opportunities to overhaul competition. But such "success stories" are, more often than not, company-specific. They look at how firms employ specific business models to match their resources and capabilities to external opportunities (i.e., the growth of the Internet). Yet, taking a closer look at firms competing in

the same arena or industry (i.e., Formula 1 racing teams) has shown that a specific portfolio of business models can be associated with higher performance than for those employing different configurations. The high-performing configuration allowed firms, over a first phase, to access valuable resources, in turn leading to the development of high-level capabilities.

From a strategic standpoint, business models contribute to a firm's unique collection of resources[7] and capabilities.[8] While resources encompass all of the productive assets owned by the firm, capabilities, on the other hand, arise by combining multiple resources and embedding them into a firm's complex set of activities, tacit knowledge, and routines.[9] As such, they embody a superior lever to sustainable competitive advantage, which is thus hard to imitate. Combining and integrating one's resources to establish a unique bundle of capabilities is the key to profitability. In this light, business model portfolios are to be examined in terms of the resources and capabilities they generate, mobilize, and exploit through synergies, to boost firm's economic return.

## THE CONUNDRUMS OF BUSINESS MODEL DIVERSIFICATION

Despite the potential of business model diversification in yielding growth and performance enhancement opportunities, companies lack specific tools and frameworks to systematically assess the mutual value of each business model in their portfolio, and thus their strategic contribution to competitive advantage. Strategy scholars warn that business model diversification is a complex strategy. Often multiple business models are mutually incompatible in light of potential risks of cannibalization and resource dilution, which may ultimately erode the value of existing activities.[10]

The past decades offer numerous cases supporting this view. One of the most popular examples of business model innovation is that of Dell's, whose "direct business model" fundamentally altered the structure of the PC industry. Following its acclaimed success, many incumbents – such as IBM, Hewlett-Packard, Compaq and others – attempted to retaliate by adopting the novel business model alongside their existing ones. This straddling position led to the erosion of the incumbents' existing competitive advantages. Rather than sharing synergies across resources, the adoption of the new business model not only required a distinct set of assets (i.e., flexible fabrication lines) but also relied on disparate capabilities (i.e., Dell's distinctive competencies revolved around customer relationship management and supply-chain orchestration). Also, because the new business model implied alienating its existing customer base (i.e., by-passing distributors), these attempts ultimately created "substitution effects" and displaced earlier key capabilities. Understanding when and how business model portfolios work requires a perspective that includes capabilities because the underlying resources generated by the business models need to align and enhance capabilities that are mutually constitutive rather than substitutive.

## THE CASE FOR BUSINESS MODEL DIVERSIFICATION

But what about the firms that have successfully adopted multiple business models? The airline industry can be viewed as a laboratory for the investigation of various business model dynamics. It shows how firms such as LAN Airlines have successfully implemented additional business models, whilst others, such as Continental Airlines with Continental Lite, have failed to tap into their industry's low-cost segment. The latter case can be explained by the inherent conflicts as firms overlook the trade-offs that arise from their strategic positioning. However, the former case suggests that there may be a profitable way to capitalize on one's assets and exploit the powerful potential of complementarities. In enacting a portfolio of three business models (full-service, air-cargo, and no-frills), LAN Airlines leveraged the same resource base (i.e., maximize the use of its aircrafts) to exploit new opportunities (i.e., expansion of customer base, new routes), thus generating greater value (i.e., economies of scale, profit diversification).[11] By capitalizing on its resource complementarity, LAN created a cycle of mutually reinforcing advantages and enhancement of capabilities.

According to Michael Porter,[12] strategic diversification is about *combining* activities that efficiently relate and mutually reinforce one another – as a *system* of activities, not a mere collection of isolated ones. In this way, strategic fit across activities holds the potential to exponentially multiply the value of those assets, and support competitive advantage and superior profitability. This echoes a common definition of the business model: a *system* of interdependent organizational activities designed to create unique value for customers and appropriate such value in ways that maximize revenues.[13] But what about strategic fit *across* business models? If the fit among intra-business model activities reduces cost or increases differentiation – and is also fundamental to the sustainability of that advantage – then the existence of intra-business model portfolio complementarities suggests that there may also exist a fit between a portfolio's independent activities, and that such configurations can in fact offer unique opportunities for increased performance.

How can companies assess when diversifying into a business model portfolio will increase their overall performance? And if a company wants to streamline its activities, how to assess which business model to minimize or eventually drop? Building on former contributions (see "About the research"),[14] we have identified three key questions that executives need to consider when assessing the value of a business model portfolio, and we suggest a framework to represent and assess business model portfolio configurations in relation to resources, capabilities and performance.

*[Insert Table 2 here: Successful diversification]*

## QUESTION #1: WHAT ARE THE KEY ASPECTS TO CONSIDER WHEN EVALUATING A BUSINESS MODEL PORTFOLIO?

Because resources and capabilities are widely accepted as being strategically important, appraising the value of a business model portfolio must logically begin with the examination of the former. As such, we begin by asking: "to what extent do the business models within a portfolio mobilize the same resources?" The case of LAN Airlines shows how sharing of strategic resources across business models offers powerful opportunities for cost efficiency. Indeed, leveraging the same physical assets can enable a firm to enjoy economies of scope and eliminate redundancies, especially in capital-intensive industries. Technology-based environments – such as the Formula 1 industry – also require effective resource deployment, thus motivating firms to leverage the same technology for multiple commercial uses (i.e., technology transfer to automotive firms) – ultimately generating multiple revenue streams.

While it goes without saying that revenue diversification may directly impact a company's growth, it also offers a subtler benefit, that of risk reduction. Consider the case of bio-pharmaceutical firms. Because they operate in highly uncertain environments – where time lags between investments and returns are extremely long – players have shown to balance the risks by exploiting their existing set of resources and capabilities and cross-subsidizing the latter in multiple ways. Optimizing resource deployment across business model portfolios serves as the first stepping-stone in assessing its potential to yield superior performance. Bio-pharmaceutical firms often run multiple business models that also *provide* access to valuable assets – such as financial or knowledge resources.[15] Here arises another key question to consider: "Does enacting the portfolio always create access to valuable resources?" Where this is the case, we can say that the portfolio generates positive complementarities in it creating cross-business synergies.

Typically, firms successfully competing within the Formula 1 industry enjoy access to financial resources depending on their racing performance. But for those who employ an additional "Supply business model," whereby firms supply others Formula 1 firms with standard components, they gain access to critical telemetry data – an intangible resource which provides insights for improving racing performance. Consequently, multiple business models that generate compatible resources offer great opportunities for enhancing the performance of *core* activities.

Over and above, a business model portfolio's penultimate value lies in its potential to create unique organizational capabilities. If positive complementarities arise when a portfolio of business models mobilizes *and* generates compatible resources, then cross-capability synergies hold the potential to create unique growth and performance enhancement opportunities. This is precisely the nature of the complementarities underpinning the high-performing Formula 1 business model configuration.[16] The adoption of a specific portfolio created a virtuous cycle of mutually reinforcing dynamics: together, the business models fostered faster learning by providing access to knowledge resources, enabling the

development of human resources and cost efficiencies, which in turn created better technology-development capabilities. As such, if the answer to the question "does the portfolio of business models enhance the organization's capabilities" is yes, then we know the portfolio's synergies offers unique opportunities for increased performance and establish a hard-to-imitate competitive advantage.

## QUESTION #2: IF I HAVE TO ADD A BUSINESS MODEL, HOW CAN I PRE-ASSESS ITS VALUE?

However, as tempting as "synergetic" business model diversification may seem, such a strategic manoeuver can also be beset by certain risks. Whatever the motivations underlying managers' choice to diversify into portfolios, how can they ensure that the novel configuration of business models *will* in fact achieve the longed for synergies? The answer is quite simple: by designing a business model whose resources and capabilities are strongly embedded within the existing business model(s).

Let us begin by looking once again at the firm's resources. In designing an additional business model, managers should first and foremost aspire to devise one whose resources are strongly "related" to the ones their firms already possess – as to achieve economies of scope, greater capacity utilization, and eliminate duplication. This serves as the basis for their exploration of cross-business model linkages, and thus in crafting a robust and synergetic portfolio.

This point is especially important in light of the past decades' focus on strategic resources, stemming from the perspective that competitive advantage solely relied on the control of valuable and scarce resources. This view has motivated many organizations to invest a significant part of their efforts and capital in acquiring and safeguarding such "extraordinary assets."[17] However, not only does the ownership of specific strategic resources inherently constrain the scope of a firm's activities in and of themselves – via the limited flexibilities of an organization's resources – but exaggerated perseverance in protecting such "rare" resources can lead to organizational rigidity, and ultimately restrain a firm's propensity for innovation.[18] Business model diversification offers profitable opportunities for organizations which have, in the past, allocated a significant part of their capital in securing rare resources. Where the novel business model leverages the latter resources, whilst offering additional sources of value creation *and* capture, the basic "cost efficiency" of the additional business model is pre-secured. In this light, managers need to start by asking: how can my novel business model maximize the use of my current resource base? How can I innovate with the resources I currently possess?

Consider the Nokia case. By the early 2000s, it had succeeded in overhauling Motorola and had grown to become the global leader of mobile handset providers. Its expansion strategy was founded upon the exclusive control of strategic – and very costly – resources (i.e., in 2007, Nokia acquired the navigation database provider Navteq for $8.1 billion). However valuable the ownership of such data seemed at the

time, this in fact contributed to the rigidity of its organizational structure and an over-emphasis on financial return maximization – rather than a focus on strategic value creation. This, in turn, entailed the failure to morph and capitalize upon the dynamic opportunities offered by the new information-based world. When Apple introduced the iPhone and its disruptive business model – as an eco-system of complementary assets designed to support and enhance the end-user consumption experience – Nokia failed to recognize the shifting industry dynamics, and focused on safeguarding the value of what it thought to be an exceptional portfolio of unique resources. In 2012, Microsoft acquired Nokia for the "mere" price of $7.2 billion – even less than what it had paid to acquire Navteq five years earlier.

On the other hand, if Nokia would have fought Apple's disruptive insurgence into the smartphone market by introducing a business model that leveraged its vast array of resources, we assume it would have managed to at least stay competitively viable. A diversification move via a business model addition could have entailed for Nokia additional revenue streams – i.e., through a novel "value capture" mechanism, such as an additional commercial use of its cartographic data – and/or a novel demonstration of customer value – i.e., through an innovative "value creation" rationale, such as the pioneer integration of a basic navigation system within the Nokia smartphone.

Faced with the delicate task of designing an additional business model, managers need to critically ask themselves: do the value-chain activities required by my new business model fully integrate and exhaustively exploit my current resource base? Where the answer is yes, they can expect the portfolio not only to generate important cost efficiencies, but also to provide opportunities for risk reduction through the cross-subsidization of the portfolio's inter-related activities.

Take the iconic Amazon case. We all know of the firm's disruptive business model innovation. It started off as an online bookstore in 1995 and, more than twenty years later, has become the biggest online retailer in the world – and now enacts a portfolio of seven business models. In the making, Amazon had to significantly invest in powerful servers and in the development of a robust automated web infrastructure, with initially the sole objective of powering its website's massive traffic. Over the years, Amazon's efforts gave birth to a technological prowess and invaluable expertise in the development of web and data infrastructures, which motivated the giant to capitalize on the latter resources and capabilities, by implementing an additional business model offering a cloud-computing platform – now referred to as Amazon Web Services – to other firms who lacked such infrastructure. Today, its customer base accounts for other giants, such as Netflix[19], and now serves as the leading cloud-computing service provider.

*[Insert Table 3 here: Amazon's business models]*

The ownership of such resources proved to be not only of immense value for Amazon's core e-business activities, but also a potent profit opportunity as a stand-alone business model. Indeed, the

Amazon Web Services business model now represents the organization's biggest profit share – accounting for over 56% of its operating income[20] – and brings in more than $10 billions of yearly revenues. While the lion share of Amazon's revenues remains its core e-retailing model, the "Web Services" business model serves as a "cash cow" that endows the giant with substantial financial resources. These resources, in turn, serve to subsidize the huge capital requirements entailed by other business models – i.e., the "Prime" business model, which offers its subscribers premium services such as free expedited shipping. By financially fueling these business models and ensuring their survival, Amazon enjoys access to other critical intangible resources – i.e., "Prime" grants substantial knowledge resources, such as user consumption data, but also serves to sustain critical reputational resources.

Resources and capabilities are inextricably linked to one another – as the latter build on the former – and thus, the boundaries between the two are elusive. In reality, they are not necessarily separable. Their appraisal is not an exact science, nor does it need it to be. Going back to Amazon Web Services, one can regard this business model diversification move from the perspective of resource co-deployment, so as to create an additional revenue stream. Yet, the latter technological infrastructures and expertise are inherently inseparable from its technology development capabilities, and exemplifies how a firm's higher-level capabilities are in fact by-products of embedding resources within organizational routines.

Rather, when designing a novel business model, a disparate examination of resources and capabilities can provide managers with different lenses – and thus opportunities – to achieve the one same goal – that is, the culmination of an optimal level of intra business-model portfolio synergies. To illustrate this point, let us take a "capability perspective" to re-examine the Nokia vs. Apple case. The former's excessive perseverance in safeguarding the value of its resources inhibited the critical development of capabilities – ones that would have contributed to what is today an obsolete competitive advantage. On the other hand, not only did Apple leverage its superior design and product development capabilities and transfer them to serve additional product markets – over and above PCs – but also capitalized on its exceptional management and marketing capabilities and integrated the "whole" to develop a unique value proposition and customer engagement mechanism – in other words, a business model innovation[21]. This enabled Apple – to the surprise of many, at the time – to first disrupt the digital music industry (i.e., iTunes and iPod), in turn paving the way for its insurgence in the smartphone market (i.e., iPhone), which ultimately reinforced its position in the computer market (i.e., iOS system).

When crafting an additional business model, managers need to ensure that the latter will leverage their firm's existing distinctive capabilities[22]. Why is it so important? Put simply, a firm's distinctive capabilities embody what a firm does *best*, better than its competitors. An idiosyncratic set of capabilities integrates resources gained from experience and mastery, such as tacit knowledge[23], know-how, and management systems (all stemming from the gradual increase in an organization's experience curve).

Thus, if managers extend such unrivalled competences to the service of additional value creation and capture mechanisms, not only can the firm benefit from existing economies of learning but can also exponentially increase its learning curve – by improving routines and enhancing existing capabilities, and even creating new ones.

As such, they need to fundamentally ask themselves: how can I translate my capabilities over and above their current functional boundaries? In doing so, managers must first examine and delineate the structure of their current business model(s) activities. Only then can they inquire into how the novel business model can replicate an analogous architecture of activities – fundamentally based on capabilities. To be clear, this abstraction task is not a simple one; in fact, it may come as quite the conceptual challenge. And yet, careful investigation may yield very fruitful answers, and pave the way for potent and dynamic cross-business model linkages – and unique growth opportunities that transcend industry and product market boundaries. Ensuring that a novel business model is embedded within an organization's existing capabilities is not only beneficial in terms of efficiency, but also serves as a catalyst for the enhancement of the latter and ultimately, to unprecedented performance.

Let us return to Amazon's portfolio of business models. Yes, it is in the enactment of a synergetic business model portfolio that lies the secret to Amazon's unique competitive advantage. It empowers Amazon with explosive growth trajectories, as the highly complementary business models all dynamically work together in generating mutually reinforcing advantages. The "Web Services" business model subsidizes the "Prime" and "Fulfilment" business models – making Amazon financially self-sustainable. What is more, these business models, in addition to "Instant Video," act in fact as value-creation complements to enhance the "Marketplace" value proposition, and galvanize the sales and performance of the latter focal activities; but also strengthen its core competencies in the provision of exceptional customer service, user experience and supply-chain orchestration.

In being the leading online retail marketplace, Amazon naturally attracts a huge number of seller-customers who seek to increase their visibility via the platform (further catalyzed by the "Fulfilment" value proposition). This provides an extensive range of available products which, coupled with low prices, attract buyer-customer demand. This increased demand, in turn, generates more Prime subscriptions, whose bundle of value-added services in and of itself serves to ensure that buyer-customers remain loyal and frequently purchase on the Marketplace – thus driving its sales. Prime memberships also empower Amazon with more customer consumption data – which serves to enhance customer service and online retail experience, amongst other focal value creation activities. This, in turn, attracts more buyer demand, which attracts more sellers, which ensure low-cost products, and so on.

*[Insert Figure 1 here: Amazon's business models, resources, capabilities and performance]*

As such, the joint adoption of the five complementary business models provides the e-commerce megalith with access to critical resources, that serve to augment its value creation activities and capabilities (see "About the Research"), and to fuel network effects for the explosive growth of its core e-retail platform. But what about the nature of the relationships with the remaining business models? The Consumer Electronics Manufacturing business model has specifically been deployed as an attempt to support the Amazon eco-system. Simply put, this backwards integration manoeuver aimed at offering to its core e-retail customers cheap technological products (i.e., Kindle reader, Kindle Fire, Fire TV, Fire Phone, Dash Button), bundled and sold with access to other business model attributes (i.e., Fire Phone: Firefly button). As such, the deployment of this "razor-and-blade" business model epitomizes Amazon's direct pursuit of portfolio complementarities, in order to drive sales and growth of its core activities. And yet, amongst its seven business models, it is in fact the one that enjoys the least synergies with the others. In fact, it entails a focus drift from its core activities in favor of unrelated extra-industry activities, thus resulting in financial and strategic losses – as illustrated by the very disappointing Fire Phone launch and its subsequent rapid market withdrawal.

## QUESTION #3: IF I HAVE TO DROP ONE BUSINESS MODEL, WHICH ONE SHOULD IT BE?

However much appealing the idea of cross-business-model "synergies" may seem, its practical application is rarely as straightforward as one would wish. Nor is the successful execution of intra business model portfolio complementarities. In fact, the most synergetic portfolios often encompass specific business models whose dynamics would have never intuitively been thought of as so mutually reinforcing. In this light, portfolio robustness – and synergies – must be examined from a granular and critical perspective.

To illustrate this example, let us go back to the Consumer Electronics Manufacturing business model and examine the rationale behind its deployment. Amazon's substantial technological resource base morphed, over time, into new technology development capabilities. Intuitively, one can naturally assume that these new capabilities could be strategically extended to the development of technologies that, in theory, would complement online retail activities. However, in practice, this business model diversification does not leverage Amazon's distinctive capabilities. Yes, Amazon has grown to cultivate capabilities in technology development, mostly in the area of online platform and big data management; but this is quite different from technological development in consumer electronics, which is not what it does *best*. As such, crafting an additional business model that aims to extend non-core competencies will not yield capability-enhancing complementarities, and thus will fail to generate synergies for the overall portfolio. More so, if two business models do not leverage the same capabilities *and* serve strategically

dissimilar industries, the overall dynamics will create detrimental inefficiencies and possibly substitution effects.

In this light, managers must constantly audit and critically examine the inter-relationships across their business model portfolio. Like traditional types of corporate diversification, business model diversification embodies a strategic conundrum, and does not always generate superior performance. As such, where a business model does not generate the coveted intra-portfolio synergies, managers *must not* be afraid to streamline the latter, so as to focus and bolster those activities that are strategically optimal.

## IMPLICATIONS FOR VALUE CREATION

Every organization's paramount purpose is to create *value*; whatever activities it undertakes, whatever product markets it serves, whatever stakeholders it engages with, it exists to generate *value*. Value is the basis for customer satisfaction, for growth and performance, and ultimately the purpose of the enterprise. By the same token, the perennial quest of strategic management revolves around the exploitation of each and every opportunity available within an organization's habitat in the name of *value creation*. Strategic management tends to overlook the bigger picture in favor of a more narrow focus on financial performance, which is only one albeit important indicator of success. Value creation and value capture make the business model and the resources and capabilities underlying the portfolio of business models include but are by no means limited to financial resources. Pursuing knowledge and reputation sustains Amazon and in the case of Formula One racing performance does not map well onto the teams that perform well financially. The core question for any manager points to the purpose of the enterprise and often boils down to: how do I structure the portfolio of business models?

Business model diversification means assessing the synergies of the portfolio and must be achieved through a *configurational* perspective in order to determine whether the *joint* adoption of multiple business models leads to superior performance and serves the purpose of the enterprise. If managers inquire into every business model separately they seldom perceive the strategic value of complementarities that underpin the overall portfolio (i.e., if one looks at the "Prime" in isolation, it will appear financially unviable). Thus, they will miss out on the portfolio's "global optimum" as the essence of its *value* does not necessarily rest in its profitability in and of itself but rather how it enhances an organization's capabilities.

As such, diversifying into business model portfolios offer incommensurable cross-fertilization opportunities to effectively compete in today's turbulent business landscape. How? Through innovation and flexibility. This is precisely the secret to Amazon's success: business model experimentation. In the words of Jeff Bezos: "I believe we are the best place in the world to fail, and failure and invention are

inseparable twins. To invent you have to experiment, and if you know in advance that it's going to work, it's not an experiment."[25]

Thus, one of the key aspects in effectively competing in today's business environment is organizational agility[26]. Managers must always keep an eye for new opportunities, but must also critically ensure that their organizational culture supports such flexibility and openness. Established firms *do* possess an advantage as they control a greater resource base, and have integrated many more unique capabilities than any of the most disruptive new entrants. The secret lies in never resting on one's laurels. Leveraging business model diversification – as we observed at Amazon, Apple, or many other organizations – offer a myriad of growth prospects for the optimal deployment of resources and capabilities to exploit changing market opportunities.

## ABOUT THE RESEARCH

This article extensively draws upon the contributions of Aversa, Furnari and Haefliger (2015), and their investigation of the Formula 1 racing industry, in which firms leverage multiple business models – up to six – to generate manifold revenue streams from the same technology. In exploring the following questions: "Which configurations of business models are associated with high and low-levels of performance in a technology-based environment? What is the nature of the complementarities underlying high-performing configurations?" they found that the high-performing configurations all featured the joint adoption of two specific business models, which was not featured in any low-performing firms. This configuration enabled firms to access critical resources, but most importantly was linked by capability-enhancing complementarities – which fostered faster learning whilst strengthening the firms' focus on their core activities.

Our reasoning with regards to business model portfolio diversification was initially instigated by the scouting, collecting, monitoring and analyzing of more than 50 cases of iconic business models — or what we call *exemplars* — within the Business Model Zoo™ initiative (led by Prof. Charles Baden-Fuller at Cass Business School). Launched in 2012, this research program has sought to classify investigate various business models — in terms of their design and execution — across a various range of contextual environments, in order to trace the former's economic consequences and harvest possibilities for future endeavors.

Deriving our ideas from the constant monitoring of business model diversification instances amongst these organizations — and others — this article builds on the aforementioned contributions to investigate the synergies between resources and capabilities for business model portfolios deployed within one large organization. Specifically, our initial research explored the following question: "What are the logics of business model diversification in creating value for the firm?" We based our study on a qualitative longitudinal analysis of the various business models adopted by *Amazon.com* during the 1995-2016 period. We followed a multi-step process to construct a 21-year longitudinal database, containing information on *Amazon.com*'s business models and financial performance. We first collected secondary data from a broad range of publicly available and reliable sources, from which we constructed a basic timeline of "major events" pertaining to Amazon's organic growth. The latter was then coded and analysed building on Baden-Fuller and Mangematin's (2013) conceptualization of business model elements, encompassing four dimensions: customer sensing (number of customer groups), customer engagement (value proposition for each customer group), value-chain and linkages (network of actors through which the product/service is delivered to customers), and monetization mechanisms (pricing, complementary assets). This enabled the identification of Amazon's seven distinctive business models, and whose synergies were further qualitatively examined. Our research revealed that Amazon's portfolio

encompassed five complementary business models, and the latter *configuration* provides the e-commerce megalith with access to critical resources that serve to augment its value creation activities, fuel strong and positive network effects for the explosive growth of its core e-retail platform (i.e., by expanding the scope of available products), which in turn work to strengthen its capabilities (i.e., continuously improving the customer experience). We substantiated this research by building on existing literature to identify iconic cases of business model diversification, in order to assess portfolio synergies – thus providing the practical insights for the identification of this article's key questions.

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Tables and Figures

**Table 1: Leading question**

## THE LEADING QUESTION

How does business model diversification work to create value for the firm?

**FINDINGS**

- Value creation guides the configuration of a business model portfolio in order to generate diverse resources and capabilities that include but go beyond bottom-line contributions.
- Ensuring that your portfolio of business models optimally exploits your resource base, creates synergies and cross-fertilization opportunities for cost and operational efficiencies as well as risk reduction.
- Positive complementarities across a portfolio's activities create idiosyncratic cross-capability synergies, which in turn generate unique growth and *core* performance enhancement opportunities.
- The essence of a business model portfolio's value lies in it converging a firm's activities to reach a "global optimum;" not solely in terms of its financial profitability.

**Table 2: Successful diversification**

## HOW TO SUCCESSFULLY DIVERSIFY INTO BUSINESS MODEL PORTFOLIOS

Firms seeking to leverage business model diversification can a follow a common set of mechanisms in order to comprehensively examine how to leverage their resources and capabilities — as to create cross-business-model linkages and exploit the potential of cross-business-model synergies.

1. Start by asking what is that your firm does, and more so what it does *best.*
2. Carefully examine and delineate the structure of the current business model(s) activities.
3. Clearly outline the key resources your firm possesses, then inquire into how you can mobilize these physical assets to generate an additional commercial use, or to cater an additional market segment.
4. Fit the novel business model so that it fully integrates your organization's *core* capabilities.
5. Seek to constantly innovate with what you already possess, whilst remaining *open* to new ideas.
6. Always examine your business models from *configurational* perspective.
7. Flexibility is key: where you find that one business model does not generate the coveted intra-portfolio synergies, don't be afraid to drop it.
8. Ensure that their organizational culture supports such flexibility and openness.
9. Develop efficient coordination and integration mechanisms to guarantee strategic control at the corporate level.
10. Frequently "audit" your business model portfolio to make sure the "whole" galvanizes what you do *best.*

**Table 3: Amazon Business Models**

| Constitutive parts of a Business Model | BM1: Marketplace | BM2: Prime | BM3: Fulfilment |
|---|---|---|---|
| **Customer sensing** | Triadic Matchmaking: links together 2 customer groups – buyers and sellers. Both groups pay, but transaction fee is charged to the seller; the buyer pays for product. | Servitized product: Dyadic - 1 group: loyal customers who frequently use AM. Directly pays. | Servitized product: Dyadic - 1 group: sellers on Amazon.com |
| **Customer engagement** | *Buyers*: Amazon provides access to a huge range of products and prices. Buyers can also post reviews and rate products, and have also access to other buyers' reviews. Sellers: They can list their products for free on several Amazon websites through a single seller account.<br><br>*Sellers*: They can list their products for free on several Amazon websites through a single seller account. | *Bus-based:* product offered as a bundle of complementary services, which include: early access to sales, Kindle library, storage service, video and music streaming, expedited shipping, photo storage, and 30-day trial. | *Taxi-based:* Amazon Fulfilment centers warehouse, pick, pack and ship products to buyers, and handles customer service. Offers additional services aimed at scaling business and extending sellers' customer base. Single seller account provides access to all regional websites. |
| **Value-chain linkages** | Highly integrated system: Amazon links together buyers and sellers through an internet-based self-service platform. Its high-performing servers enables Amazon to deal with huge volumes of traffic. All payments are handled by Amazon, thus controlling fraud protection. | Highly integrated system: complement products leverage assets controlled by Amazon. | Highly integrated network: Amazon takes care of shipping, inventory management and warehousing. |
| **Monetization** | Single pricing for *buyers:* pay the price listed on website. Single pricing for *sellers:* pay a fixed percentage of buyer purchase price.<br>*Timing of payments*: Amazon collects payments from buyers upon purchase, but pays out money to sellers later (CCC: roughly – 30 days).<br>*Complementary assets:* Prime for buyers and FBA for sellers | *Single-pricing*: Annual subscription of 99$ paid in full.<br>*Complementary assets:* Serves as incentive to drive Amazon Marketplace sales by providing free expedited shipping. | Pay-as-you go monetization system: charges fee per storage space and order fulfilment. Does not charge shipping costs. Charges for optional business services may apply.<br>*Complementary assets:* complements transaction fee of Marketplace BM. |

| **BM4: Web Services** | **BM5: Instant Video** | **BM6: Consumer Electronics Manufacturing** | **BM7: Mechanical Turk** |
|---|---|---|---|
| Simple product: Dyadic- 1 group: small developers and software-based start-ups. Pay directly. | Simple product: Dyadic – 1 group: entertainment consumers with access to Internet OR Prime members. | Simple product: Dyadic – 1 group: typically other Amazon BM customers, who consume Amazon Consumer Electronics alongside other Amazon goods. | Triadic Matchmaking: Links together 2 customer groups – providers and requesters of "Human Intelligence Tasks." |
| *Bus-based:* uses its automated web-infrastructure to offer cloud-based computing platforms. | *Bus-based*: subscribers enjoy unlimited streaming of Amazon's database of movies and TV shows. | *Bus-based:* Customers purchase standardized, scale product as part of the wider Amazon eco-system.<br>Main products: Kindle, Kindle Fire, Fire TV, Fire Phone, Dash Button.<br>Main features: inexpensive and easy to use.<br><br>Successful products such as the Kindle support Kindle Store e-book consumption.<br><br>Fire Phone was unsuccessful, albeit its attempt to create linkages with other BMs (i.e., Firefly button, free Amazon Prime etc.) | Amazon links together the two target customer groups through a technological platform, thus facilitating their interactions.<br><br>*Providers and requesters:* Bus-based mode of engagement. Links together providers who seek additional revenues by offering their services to satisfy the needs of requesters – who seek services which cannot be completed by a computer (i.e., HITs) |
| Integrated: leverages its own web and data infrastructures and sells it to customers. | Licenses content from network providers, film studios and distribution company. | Integrated: Lab126 engineers design products. Distributes through its e-store or via retailers (depends on products: Fire Phone and AT&T) | Highly integrated system: Amazon links together providers and requesters through an internet-based self-service platform. |
| Pay-as-you-go monetization system: fee per storage space. | If not part of the annual Prime subscription, monthly subscription of $6.58/ month.<br>Complementary assets: serves as an incentive for joining Prime. | Single pricing: Single price at time of purchase.<br>Complementary assets: Serves as incentives to increase other BM sales, such as Kindle and Kindle Store, or Fire TV and Instant Video, etc | Requesters pay roughly a 20% transaction fee directly to Amazon, upon completed task (and the requester's satisfaction). |

**Figure 1: Business models, resources, capabilities and performance**