Article

THE INTERNATIONAL JOURNAL OF
ENTREPRENEURSHIP
AND INNOVATION

Value creation mechanisms of business models: Proposition, targeting, appropriation, and delivery

The International Journal of
Entrepreneurship and Innovation
2018, Vol. 19(3) 166–176

DOI: 10.1177/1465750318782774
journals.sagepub.com/home/iei
SAGE

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Abstract
Management scholars and practitioners generally agree that the primary functions of a business model are value creation and value capture. However, the meaning (conceptualization) of these terms, their measurement, and the factors and mechanisms affecting them remain contentious. In the current article, we provide answers to these questions by clarifying the consumers' value creation and business value capture constructs. Then, we demonstrate how they are determined by four business model mechanisms: value proposition and value targeting (affecting consumers' value through willingness to pay) and value appropriation and value delivery (affecting business value through price and cost). We demonstrate that a fine-grained analysis of a business model's value creation cannot be adequately performed without reference to these four mechanisms. The developed conceptual framework is illustrated and corroborated by the mini-case vignettes. We finish by outlining an application of the proposed framework to two crucial real-world business model situations: escaping the Giver Trap and remaining the Winner.

Keywords
business model, value appropriation, value capture, value creation, value delivery, value proposition, value targeting

Introduction

The cornerstone of the strategic management discipline is in understanding and explaining the between-firms performance variability (or, more narrowly, above-average returns) due to possession of a competitive advantage (Powell et al., 2011). In addition to the conventional ways of creating and sustaining the competitive advantage through proper market positioning (Porter, 1980), controlling valuable resources (Barney, 1991), or benefitting from an innovator's temporary abnormal returns (Teece et al., 1997; Verbeke et al., 2017), in the last two decades, management scholars and practitioners have started devoting substantial attention to analyzing the organization of the within-firm activity system, that is, its business model, which translates the competitive advantage into actual shareholder value (Massa et al., 2017; Shafer et al., 2005; Zott et al., 2011).[1]

Despite the emergence and development of a vibrant literature on business models, the underlying construct still lacks consensual definition (Foss and Saebi, 2018). Stressing the different features of the same phenomenon, researchers have conceptualized a business model, for example, as a "specific combination of resources" (DaSilva and Trkman, 2014), "design or architecture" (Teece, 2010), "articulation between different areas of activity" (Demil and Lecocq, 2010), "template that depicts the way the firm conducts its business" (Zott and Amit, 2013), "heuristic logic" (Chesbrough and Rosenbloom, 2002), or "structural template" (Zott and Amit, 2008). Notwithstanding this divergence, the current scholarly discourse has been converging on the "activity system" conceptualizing of the ontological nature of a business model (Demil et al., 2015; Martins et al., 2015). Within this view, a business

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model construct represents a "system of interdependent activities that transcends the focal firm and spans its boundaries" (Zott and Amit, 2010: 216). Similar to any system of activities within a firm (Aldrich and Ruef, 2006), a business model is embedded in the interrelated set of organizational routines (Osiyevskyy and Zargarzadeh, 2015), becoming relatively stable over time.

Most current studies agree that the two primary functions of a business model are value creation for the firm stakeholders and value capture for the firm owners (Foss and Saebi, 2017, 2018; Ladd, 2017; Massa et al., 2017; Osiyevskyy and Dewald, 2015; Osterwalder and Pigneur, 2009; Shafer et al., 2005; Zott et al., 2011). However, what these terms actually mean, how to measure them, and—most importantly—how exactly the management can affect them remain contentious.

Motivated by these gaps in the field's understanding of conceptualization, operationalization, and discretionary antecedents of value creation and capture within a business model, in the current conceptual article, we provide answers to these questions. Attempting to develop further the theoretical understanding of a business model as a "formal conceptual representation of how a business functions" (Massa et al., 2017), we first clarify the business model's value creation and capture constructs through the lens of value-based theory of strategy (Brandenburger and Stuart, 1996) and discuss their possible operationalizations and configurations within the business model value matrix (Biloshapka et al., 2016). Second, from this, we theoretically derive the four business model mechanisms that drive value creation: what the company offers (*value proposition*), to whom it is offered (*value targeting*), how it can routinely deliver on the promises in a cost-effective way (*value delivery*), and how it can ensure sufficient profit (*value appropriation*). We demonstrate that a fine-grained analysis of a business model's value creation cannot be appropriately performed without reference to these four mechanisms. Our discussion is concluded by outlining an application of the proposed framework to two important real-world business model situations: escaping the "Giver Trap" (i.e. translating total value created (TVC) into business value) and remaining the "Winner" (i.e. ensuring that the company sustains the optimal position of providing high consumer and business value).

Clarifying the core constructs: Value creation and capture by business models

Value creation

A business model is a mechanism allowing the firm's consumers[2] and owners to receive something valuable from engagement in transactions with the firm, that is, capture some "value" (Osterwalder and Pigneur, 2009). This value can be reflected, for example, in subjective appreciation and satisfaction emerging from the interaction with the firm (consumers) or profit and growth in the stock price (owners). In a broader sense, the consumers and owners are not the only significant constituents of a business model who expect to capture some value (Gassmann et al., 2014; Osiyevskyy et al., 2018a). Rather, this list has to include all crucial stakeholders, both internal (e.g. employees) and external (e.g. partners up and down in the value chain).

However, before any value is captured by any of the firm's stakeholders, it must be created first by the firm (Priem, 2007; Priem et al., 2013), and the place where this value is created is its business model (Massa et al., 2017; Priem et al., 2018). The value-based theory of strategy (Brandenburger and Stuart, 1996) is particularly instrumental in defining the business model's value creation process. In this study, we are developing the business model's value creation framework for the case of a firm and individual consumers.[3] A business model's TVC is the difference between the firm consumers' aggregated willingness to pay (WTP) for the firm's goods or services that were actually purchased and the firm's aggregated cost of acquiring inputs from the suppliers (C) (Brandenburger and Stuart, 1996):

$$\text{TVC} = \text{WTP} - C \tag{1}$$

The C term in equation (1) is intuitive, reflecting the firm's total costs incurred for serving the consumers (direct, indirect, and opportunity cost), whereas the WTP term is usually less familiar to management experts. In economics, "willingness to pay" is one of the fundamental concepts, reflecting the maximum amount of money (or other valuable goods/services or personal time) a person is willing to sacrifice to obtain a good/service from the firm. It reflects the subjective assessment of the benefits a consumer is obtaining from the exchange with the company (Priem et al., 2018), constrained by an individual's wealth. The distribution of WTP among consumers is the primary component of the well-known from introductory economics textbooks "consumer demand" curve.

Value capture

Although the TVC by a business model reflects the aggregated benefits created for the consumers and firm owners (the total "surplus" or social gains from trade in economics terms), these gains get divided between the consumers and the owners through the mechanism of price. The average selling price (P) allows presenting the value capture by each participant: consumers capture WTP-P ("consumer surplus": Priem et al., 2018) and the firm's owners capture P-C (profit, also referred to as supplier surplus or business value):

$$\text{Consumer value} = \text{WTP} - P \tag{2}$$

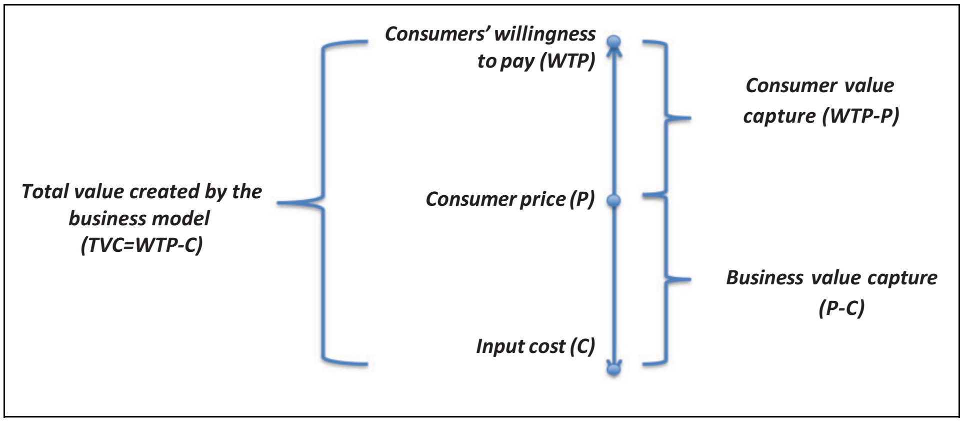

Figure 1. Disaggregation of TVC by a business model. *Source:* Adapted from Brandenburger and Stuart (1996). TVC: total value created.

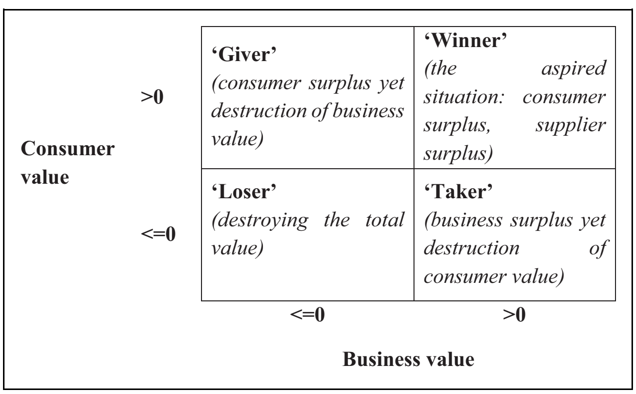

Figure 2. Business model value matrix. *Source:* Adapted from Biloshapka et al. (2016).

$$\text{Business value} = P - C \tag{3}$$

The value creation and value capture within the developed framework are graphically depicted in Figure 1.

Notably, whereas in some cases, all three focal variables (TVC, consumer value, and business value) are positive, this Winner situation should not be taken for granted. Juxtaposing the consumer value capture ("business model effectiveness") and business value capture ("business model efficiency") yields the business model value matrix (Biloshapka et al., 2016) presented in Figure 2.

The TVC can be negative, that is, a firm can be destroying value by producing something with input costs exceeding WTP for the end result ("Loser" business model). The consumers can be forced to incur negative value capture (i.e. pay more than the WTP) by market monopolists or government coercion ("Taker" business model). Finally, the business value capture can be negative, and often is, without intention (start-ups struggling to monetize) or deliberately (social enterprises, or growing businesses deliberately delaying earning profit for the sake of fast growth), when the price charged does not compensate for expenses incurred ("Giver" business model).

Prior research has correctly pointed out that a firm can operate more than one business model simultaneously (Aversa et al., 2017). For example, more than one distinct pattern of value creation and capture can be established (Osiyevskyy and Zargarzadeh, 2015), or a firm can have a mixture of interrelated yet different business models (Gassmann et al., 2014). In this case, the analytical approach for analyzing the business model effectiveness and efficiency (Figures 1 and 2) and the discussed further four mechanisms underpinning these factors can be applied to either each individual business model (level 1) or the aggregate "portfolio" of firm's business models (level 2). The latter analysis of the "combined" business model (level 2) must take into account the effectiveness and efficiency of the underlying distinct business models (from level 1) as well as their interactions with each other. The existence of interactions between the underlying level 1 business models can justify the situations when, for example, a Giver business model must exist to support the Winner one. This situation is exemplified by razor-blade business models (Osterwalder and Pigneur, 2009) or multisided platforms (Parker et al., 2016), where a Giver business model (loss leader product or consumer group using the service for free) is the necessary precondition for maintaining the simultaneously operated Winner business model (full-priced follow-up product or paying consumer group). Obviously, the interaction of these Winner and Giver business models on the lower level will determine the effectiveness and efficiency of the aggregated firm's business model of the second level.[4]

In the next section, we discuss the four primary mechanisms affecting value capture by consumers and business owners: value proposition, value targeting, value delivery, and value appropriation. The resulting framework is presented in Figure 3.

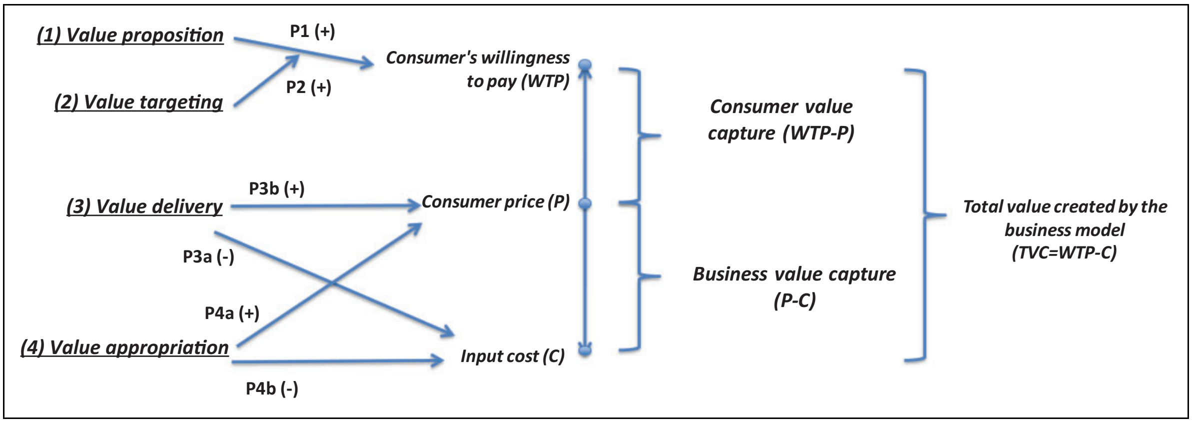

Figure 3. Four drivers of business model's value creation.

Drivers of value creation and capture

Creating and sustaining consumer value

Within the presented framework, the business model's consumer value (WTP-P) can be affected by either increasing WTP or decreasing price (*P*). Since decreasing the price cuts into the business value (i.e. is essentially a redistribution of TVC without increasing the "total pie"), the primary way of increasing consumer value is through increasing the WTP. The emerging research stream on demand-side strategy (Priem, 2007; Priem et al., 2018, 2013) provides insights into ways to increase the WTP of consumers. In essence, WTP is the consumers' evaluation of the benefits they will receive from interacting with the firm; as such, a company can impact this factor by changing the perceived utility of its offering by "giving focused consideration to consumers — and their dynamic, heterogeneous, endogenous, and, at times, latent needs" (Priem et al., 2018: 24). This can be achieved by introducing a product/service offer with features that meet consumers' desires and needs better than currently available offers (Zott, 2003), engaging consumers in designing the products/services (co-creation: De Oliveira and Cortimiglia, 2017), supplementing the physical product with services that increase the consumers' convenience (Visnjic and Van Looy, 2013; Visnjic et al., 2016), or making the products/services more accessible by providing flexible payment terms, loans, and so on.

More broadly, the two primary mechanisms influencing the consumers' WTP in the business model are *value proposition* (i.e. deciding what exactly to promise) and *value targeting* (i.e. deciding who is the primary recipient of the promised benefits that would appreciate them most) (Biloshapka and Osiyevskyy, 2018).

Value proposition. A value proposition is the promised set of benefits the firm offers to its consumers. A value proposition is multidimensional, comprising different levels of promised benefits on particular quality (performance) dimensions or attributes (Sheehan and Bruni-Bossio, 2015), such as speed, reliability, accessibility, capacity, or status. Moreover, an important trend in contemporary product markets, be it industrial goods (e.g. jet turbines) or consumer goods (e.g. automobiles; Nieuwenhuis, 2018), is "servitization" of business models (Cook, 2018; Visnjic and Van Looy, 2013; Visnjic et al., 2016), when the offer of physical products is integrated with a corresponding service offering. Arguably, this product–service integration allows dynamic increasing of the consumers' willingness by offering improved convenience, an additional crucial dimension of quality of the value proposition.

The consumers' assessment of the overall value proposition implies weighting the promised levels on particular quality dimensions to get a single perceived utility that will be reflected in WTP.[5] As such, a viable way of increasing the attractiveness of the value proposition is in the intimate understanding of consumers, for example, their most pressing problems and needs reflected in high weights of particular quality dimensions. This understanding of consumers and problem-based (rather than solution-based) focus allows fine-tuning the promised quality dimensions in an optimal way. This problem focus allows managers to see numerous opportunities to improve the offered benefits, keeping the value proposition relevant over time.

The peril of failing to offer an attractive value proposition is illustrated by the case of the demise of Cuil, a search engine aspiring to directly challenge Google in 2008 and 2010 (Osiyevskyy et al., 2018a). The Silicon Valley start-up was founded by former Google engineers and was supported by abundant investments from top venture capital firms (US$33 million). Cuil's value proposition to consumers was based on at least three superior quality dimensions: (1) having the largest search index (exceeding that of Google), (2) not storing users' search activity or IP addresses, and (3) displaying relatively long entries and thumbnails in the search results. However, these features required a set of trade-offs, inferior quality dimensions: (1) slower response times and (2) frequently wrong or irrelevant search results. As it turned out, because of information abundance today, in the consumers' eyes, the relevance of results much outweighs the index size. As a result, for most consumers, Cuil's distinctiveness of value proposition turned out to be irrelevant and inferior to that of Google, leading to an inability to get enough search consumers and ultimately shutting down.

We argue that Cuil's failure should be attributed to the objective inferiority of the value proposition, that is, failing to exceed the market leader in quality dimensions crucial to most consumers. However, sometimes even the objectively superior value proposition is not appreciated by consumers. The matter is that in addition to developing an outstanding value proposition, the company must also win the battle for adequate recognition of this fact among potential and current consumers. The situation when a company has a value proposition that is objectively superior to that of the competitors, but the consumers choose the competitors, usually happens because of the inability to signal the high quality of the focal company's offer (Biloshapka and Osiyevskyy, 2018). This situation is regularly observed when the competitor enjoys a loyal customer base or when company's efforts to give consumers the information about its proposal are ineffective, being presented in the wrong way. In most cases, this turns out to be a problem in communications: the subjective consumer's value (in their view) does not correspond to the objective value offered by the firm. This problem is particularly salient for "experience" products/services (such as health care), where their characteristics (quality dimensions and price) are hard to observe in advance; instead, they can be properly evaluated only after consumption. Even worse is the situation with the "post-experience" goods/services (such as vitamin supplements), which cannot be properly evaluated by consumers even after consumption. For experience and post-experience goods, the producer's reputation is disproportionally consequential, creating the inertia that prevents consumers from trying the alternative, objectively superior, offerings (Ma and Osiyevskyy, 2017). In such cases, new failure to convey their true value (signal high quality) leaves the objectively superior companies behind their inferior peers with better communication strategies or more established reputations.

As such, we formally state that:

> **Proposition 1:** The quality of the firm's value proposition (as perceived by consumers) positively affects the consumer value capture through positive impact on the consumer's *willingness to pay* (*WTP*).

Value targeting. The heterogeneity of consumer needs (i.e. major differences in their weighting functions applied to different quality dimensions of value proposition) makes impossible formulating one value proposition that would be best for all consumers within the same business model.[6] Moreover, a company's business model needs to serve more than one stakeholder group (beyond consumers). As such, whereas the value proposition is about the bundle of promised benefits, the other crucial issue affecting WTP is proper selection of the target consumers or stakeholders (i.e. *benefits to whom?*). In other words, the superior value proposition has to be matched with correct value targeting.

When there is no focus on the essential consumer group in the company, it may be confused about its purpose and whom it is designed to serve (Simons, 2005). If everyone is a customer, then no one is, so a successful business model should be aimed at delivering superior value to a specific group. The management must be able to find the "primary customer," for whom the firm offers the best-in-the-world value:

> Clearly identifying your primary customer will allow you to devote all possible resources to meeting their needs and minimize resources devoted to everything else. This is the path to competitive success. It's easy to try to duck the tough choice implied by the adjective primary by responding that you have more than one type of customer. This answer is a guaranteed recipe for underperformance: the competitor that has clarity about its primary customer and devotes maximum resources to meet their specific needs will beat you every time. (Simons, 2010)

The need to deal with the inherent trade-offs in value targeting is clearly illustrated in the case of Amazon, whose primary business model (Amazon Marketplace) serves four distinct types of customers: consumers, sellers, enterprises, and content providers (Simons, 2014). Trying to maximize the value for each simultaneously would lead to mediocre results. The reason for this is that the requirements (weights of quality dimensions) are substantially different between members of these four groups, for example, consumers generally benefit from low prices and a broad variety of competing offers, while sellers would prefer exactly the opposite, higher prices and limited competition. The research evidence shows that stakeholder expectations' conflicts can be inherently irreconcilable (e.g. Falkenberg and Osiyevskyy, 2014), and as such, in general, no single value proposition can be superior for all stakeholders and consumer groups. In the case of Amazon, the company follows its mission of being the "the world's most consumer-centric company," implying that consumers are their primary customers. The company optimizes the value proposition for consumers, for example, through offering free shipping, detailed product reviews (including negative ones), and an extremely wide selection of competing offerings, "even if that means sellers or content providers sometimes feel shortchanged" (Simons, 2014).

As such, the proper value targeting allows proposing the particular value proposition to the consumer group that would value it most.[7] Importantly, the selection of the primary customer is not a static decision; a business must adjust this strategic decision promptly to reflect the stage of the development of the company, customers, market, and competition. The problem of dynamic selection of the primary customer to focus on is particularly salient for the platform businesses of the modern era that create and capture value by facilitating direct interactions between distinct types of consumers (De Oliveira and Cortimiglia, 2017; Parker et al., 2016; Rogers, 2016). Here, to resolve the chicken and egg problem (e.g. an auction website needs a sufficient number of buyers and sellers), the firm must focus on nurturing and attracting one platform participant at a time, before dynamically switching to the next one.

In summary, the value targeting (proper selection of the primary customer) reinforces the positive impact of quality of value proposition on the consumers' WTP:

> **Proposition 2**: The quality of value targeting positively moderates the association between the quality of value proposition and consumers' *willingness to pay* (*WTP*).

Creating and sustaining business value

The business value provided by a business model is determined by the average price charged from the consumers (*P*) and aggregated cost of inputs (*C*): *P*-*C* (see Figures 1 and 3). As such, value capture can be achieved through either increasing *P* (as long as the consumers allow this, e.g. when coupled with an increase in their WTP or when enjoying a monopolistic market position) or decreasing *C*.

These two variables (*P* and *C*) are affected by the two business model mechanisms: *value delivery* (ability to fulfill promises of value proposition with minimal cost) and *value appropriation* (having a real competitive advantage allowing sufficiently high prices to capture business value).

Value delivery. A business model delivers on the promises of the value proposition (Sheehan and Bruni-Bossio, 2015) through the established system of activities (Osiyevskyy et al., 2018b). The design of an activity system reflects the transactive part of the business model (George and Bock, 2011; Zott and Amit, 2010), defining the way internal processes are organized to leverage the available resources for delivering consumer value. The activity system of a business model comprises the following: (a) revenue model (i.e. activities related to generating revenue), (b) go-to-market model (activities related to connecting to target customers), (c) production model (activities of transforming inputs into products or services), and (d) product development model (innovative activities related to launching and improving the existing products and services) (Biloshapka et al., 2016; Meyer and Crane, 2014;Osiyevskyy et al., 2018b).

Value delivery affects the business value capture through reducing the input costs (*C*) that the firm incurs for serving the consumers: the more efficient it is (thanks to, e.g. ruthless cost control, selecting the most efficient suppliers, embracing the platforming approach in product development and manufacturing (Meyer et al., 2018)), the higher the resulting business value capture of the business model:

> **Proposition 3a:** The efficiency of value delivery has a positive impact on business value through reducing the input costs.

Moreover, the high-reliable (i.e. effective) delivery, implying fulfilling and exceeding the promises of the value proposition with respect to the crucial-for-consumers quality dimensions of the delivered product or service (Sheehan and Bruni-Bossio, 2015), allows a company to maintain high prices (*P*). The opposite is also true (and is arguably observed more frequently): the inability of a firm to fulfill its promises to consumers requires it to reduce prices, with a corresponding erosion of the business value. As such:

> **Proposition 3b:** The effectiveness of value delivery has a positive impact on business value through increasing the price.

Value appropriation. Successful business models allow firms to capture ("appropriate") business value, which is the difference between the prices that consumers pay (*P*) and the costs of inputs (*C*).[8] Both components are determined by the firm's bargaining position in the market vis-à-vis resource providers (suppliers, creditors, partners) and customers (Coff, 1999). Absent bargaining power, any emerging margin would go to resource providers (Porter's supplier bargaining power threat) or buyers, who would enjoy economically unjustified low prices.

The firm's bargaining power, in turn, is determined by the presence and strength of a competitive advantage. Consider the case of most Internet-based messengers and phone/videoconference services (Skype, Viber, WhatsApp) — none of them were able to translate their business models' enormous TVC into sufficient business value. As a result, they failed to remain independent companies. The opposite case is that of Facebook, which was able to ensure that its TVC splits between consumer and business value in a Winner proportion (positive high levels on both dimensions: Figure 2). We argue that the difference between these cases is in the absence of real competitive advantage of messengers and phone/videoconference services (i.e. they are to a large extent interchangeable, have numerous competitors and substitutes, and the consumers have little problem with switching), which prohibited the companies from appropriating any part of the created value. Facebook, on the other hand, has an enormous competitive advantage because of its unique position and broad customer base; as such, the company was able to charge the advertisers a sufficient price.

The firm's competitive advantage can be based on one or more of the three strategic pillars: Bainian market power, Penrosian resource advantages, and Schumpeterian temporary rents (Powell et al., 2011). The Bainian pillar reflects all factors that allow an individual company to obtain above-average returns (monopoly rents), thanks to market power facilitated by clever positioning within an industry (Porter, 1980). The so-called Penrosian resource advantage stems from the ability of a firm to secure rents from possessing and combining scarce valuable resources (Barney, 1991; Wernerfelt, 1984). Finally, Schumpeterian rents are appropriated by entrepreneurs who reap the monopolistic benefits of successfully implemented innovations, until competitors imitate or emulate these innovations (Teece et al., 1997; Verbeke et al., 2017).

Therefore, the competitive advantage-based value appropriation affects the business value through increasing the consumer prices and/or reducing the input costs:

> **Proposition 4a:** The competitive advantage-based value appropriation has a positive impact on business value through increasing the price.
>
> **Proposition 4b:** The competitive advantage-based value appropriation has a positive impact on business value through reducing the input costs.

Although developed individually as theoretically distinct from each other, the four value creation mechanisms form a tightly coupled system, where a change in one element usually necessitates the adjustment of the others. For example, a change in value proposition (directly influencing the WTP: proposition 1) would in most cases require adjustments in the activity system of the business model, indirectly affecting by this means the value delivery (i.e. P and C levels: propositions 3a and 3b). As such, the four mechanisms (value proposition, value targeting, value delivery, and value appropriation) can be properly analyzed only as a system.

After outlining the essential value creation mechanisms of a business model (summarized in Figure 3), we now proceed to the application of the proposed framework to two important real-world situations.

Practical applications of the framework

Escaping the "giver trap"

At some point in their development, most companies must overcome the "Giver Trap" situation (Biloshapka et al., 2016; Osiyevskyy et al., 2018a). This situation implies that positive, objectively high TVC gets translated to consumer value only, with negative or zero business value (quadrant Giver in Figure 2). Unless operating a social enterprise, such situation is undesirable from the perspective of the firm's owners (who are not getting a fair return on their investment), and as such is highly unsustainable: the company has to either overcome this "Giver trap" or close its doors.

The Giver to Winner translation requires a significant improvement of the efficiency of a business model. Applying the proposed framework, we conclude that this improvement has to happen along two paths: (a) improving the value delivery, that is, the quality of fulfilling the promise of the value proposition to the primary customer (propositions 3a and 3b) and (b) augmenting the value appropriation ability through building and sustaining a competitive advantage (propositions 4a and 4b).

The inability to ensure effective and efficient delivery is usually caused by the flaws in organizational design, in particular, the wrong decision-making hierarchy, when the employees responsible for delivering the consumer value or driving the costs down do not have the necessary authority to do so (e.g. the decision-making hierarchy is too centralized and slow). As such, the key recommendations for such companies are:

a. Fixing the organizational design to empower the employees to effectively and efficiently deliver on consumer value promises, by eliminating shortage in authority and span of control. Obviously, the authority has to be matched with responsibility for achieving the results, in terms of ensuring the creation of business value.
b. Nurturing the firm's real competitive advantage through going back to the basics of successful strategy: (i) proper selection of the target market (to gain a temporary monopoly); (ii) developing and sustaining valuable, rare, inimitable, and non-substitutable resources; and (iii) constant innovating. This competitive advantage becomes the basis for creating the business value through profit—current/real (i.e. realized on the financial statements of the firm) or future/potential (boosting the firm's valuation).
c. Developing and implementing a viable profit formula within the business model (Christensen et al., 2016) and instituting the mechanisms for managing the future growth (Treacy and Sims, 2004).

Remaining a winner

Many great companies sooner or later achieve the aspired Winner state; once it is reached, the firm must employ specific strategies to remain there, lest it slips into the Taker quadrant. History teaches us that the value provided to customers tends to decay with time. For example, the Model T's consumers wanted a closed cabin and more comfortable ride—which Henry Ford failed to deliver in a timely manner. EMC came late to Cloud computing and storage services. Walmart has allowed its dominance in low-cost retailing to blind it to the threat of low cost, more convenient e-tail. And Nokia lost the leading market position in 2010–2011 and got into a failing trajectory because of the inability to develop a new mobile operating system fast enough (Ciesielska, 2018).

Although successful and prominent in the past, any company will be dethroned one day, unless it ruthlessly pursuits improvement in the consumer value. Sustaining the Winner position requires a specific strategy to maintain a high level of effectiveness (or consumer value), along two paths: (a) relevant value proposition (best offer for the price asked, compared to competitors—proposition 1) and (b) proper value targeting (proposition 2: clearly defining the primary customer and concentrating on serving this customer). The key cause for failing to sustain the Winner position is primarily related to an information acquisition and processing issue when the relevant customers' information is not reaching the strategic decision makers. This is driven by problems in organizational information systems, when the external (consumers') view is not getting enough attention, and by the top management team's cognitive blinders preventing proper assessment and action upon the objective situation.

To develop a strategy for sustaining the Winner state, the managers must first obtain a clear view of the factors that underpin the current financial performance. Management teams of most failing companies do not sufficiently understand the factors that moved the firm's business model to the Winners state in the first place. Without this understanding, it becomes impossible to sustain the success, particularly in changing uncertain environments.

Any change in a firm's revenue (positive or negative) can be decomposed into a combination of the following five factors (Treacy and Sims, 2004): (1) introducing new products/services, (2) acquiring new customers, (3) increasing sales to existing customers (rise in Share of Wallet through replacing competitors or substitutes), (4) increasing prices, and (5) benefitting from the overall market growth. The ultimate profit will also be determined by the sixth factor: (6) ratio of total costs to revenues. Of these six factors, the first three are directly related to the business model's ability to provide outstanding consumer value, reflecting the quality of the value proposition (new products/services and new customers) and value targeting (increasing sales to existing customers).

Successful companies have institutionalized processes and systems in place allowing fast and correct evaluation of the contribution of each driver to an overall financial performance dynamic. Unfortunately, standard financial accounting statements do not convey information on these six drivers; without this information, the managers remain blind to risks and opportunities embedded in their current results. The dynamics of individual growth drivers represents actionable metrics, allowing appropriate corrective or opportunity-chasing actions. Let us imagine a management team of a company reporting to investors a 50% annual revenue growth: is it a victory or a miserable failure? Gross revenue growth is a typical "vanity" metric, conveying no actionable information. To make it actionable, this figure has to be decomposed into individual drivers: what if the simultaneous industry growth rate was 60%? What if the industry growth rate was the same (50%), but the company's growth happened mostly through acquiring new customers, while the old ones were leaving?

Discussion and conclusion

The primary goal of our study was to clarify the frequently used but rarely well-understood concepts of business model's value creation and capture. Using a simple yet powerful model of the value-based theory of strategy (Figure 1), we demonstrated the meaning and operationalization of the key terms (TVC, consumer value, and business value). From this, we deductively derive the four business model value mechanisms: what the company offers (value proposition), to whom it is offered (value targeting), how it can routinely deliver on the promises in a cost-effective way (value delivery), and how it can ensure sufficient profit (value appropriation). We finish by applying the proposed framework to two important real-world business model situations: escaping the Giver Trap (i.e. translating TVC into business value) and remaining the Winner (i.e. ensuring that the company sustains the optimal position of providing high consumer and business value). The conclusion we would like to stress is that a fine-grained analysis of a business model's value creation cannot be properly performed without reference to the four mechanisms discussed in the current article.

Although the conceptualization of business model as a system of routinized interrelated activities serving the purpose of value creation and capture (Osiyevskyy and Dewald, 2015; Osiyevskyy and Zargarzadeh, 2015; Zott and Amit, 2010) employed in this study is internally focused, it also determines the firm's interaction with its customers (e.g. through value proposition and value targeting), shareholders (value appropriation), partners in value chain (design of activities for value delivery), and market competitors (value targeting determining positioning within the competitive landscape).

We hope the four-dimensional theoretical framework underpinning business model effectiveness and efficiency presented will become instrumental in further inquiries within the management literature on business models and strategy in general. For example, recent advances in data technologies, particularly the combination of machine learning and big data, are going to have a profound impact on management practice with respect to microeconomic value creation and capture. Machine learning technologies include various analytical methods designed to spot hidden patterns in the data, going beyond conventional limited statistical insights. These technologies become particularly useful when combined with big data technologies (i.e. collecting large volumes of unstructured data about social phenomena), yielding the information suitable for unprecedented quality managerial decision-making, reshaping business operations, and providing multiple new opportunities. To explore the fine-grained impact of emerging big data analysis technologies on business operations, it is important to scrutinize the changes enabled by these technologies on the primary mechanism of firm-level value creation and capture the business model. Here, the discussion of the impact of should hinge upon on the four business model mechanisms that drive value creation: the current study's focal value proposition, value targeting, value delivery, and value appropriation.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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Notes

1. We suggest distinguishing between a firm strategy, which sets the firm's rent creation potential through one of the three discussed above mechanisms, and a firm business model, which translates this potential to shareholders' profit. For example, a strategic resource of corporate reputation (which can be valuable, rare, inimitable, and non-substitutable: Barney, 1991) does not generate above-average returns in itself; rather, its strategic potential is implemented through a well-functioning business model (Ma and Osiyevskyy, 2017).
2. We use the general term "consumers" to refer to individuals or organizations that are receiving benefits from the firm's products or services. This group includes both end users and intermediate B2B purchasers, who are sometimes distinguished in the business model's literature as "consumers" and "customers," respectively (Priem et al., 2018).
3. Having other stakeholders (e.g. partners up and down the value chain) in this model is also possible with little modification (see, e.g. Garcia-Castro and Aguilera, 2015), but makes the discussion more complex.
4. The issue of aggregating the portfolio of level 1 business models is beyond the scope of our current study and requires a separate investigation (e.g. Aversa et al., 2017).
5. This weighting function is not linear (Adner, 1999). Rather, the consumers assign weights to some primary quality dimensions (e.g. status conveying of a car), while the rest of dimensions need to simply exceed some threshold level (e.g. mileage per gallon exceeding 18).
6. This statement applies at the level of a particular business model (level 1) with a single value proposition. Of course, a firm can operate more than one business model, each fine-tuned to particular customer segments (Osterwalder and Pigneur, 2009). In this case, the analysis of value targeting has to be performed for each particular level 1 business model.
7. The existing literature suggests that value targeting is correct if the focal primary customer, as a decision maker, has three key characteristics (Biloshapka and Osiyevskyy, 2018; Osiyevskyy et al., 2018a): (a) competence to appreciate the superiority of the firm's value proposition, (b) the motivation to engage in exchange, and (c) the authority necessary to implement the optimal decision to collaborate with the firm.
8. Of course, some businesses deliberately refrain from capturing the profits. One type of these businesses are social enterprises that are designed to serve the needs of a broader group of stakeholders without necessarily creating value for shareholders. The other type of such businesses are successful fast-growing enterprises that delay the opportunity to earn profit in the short term to fuel their growth and potential profit or firm value in the long term (consider the example of Amazon remaining unprofitable for two decades, or numerous Internet start-ups developed to be bought out by major players). However, the latter business model's position is inherently unsustainable as the business value in it is generated in the future rather than on an ongoing basis and is hence a subject to numerous risks, which resulted in, for example, the dot-com bubble of 2001. Alternatively, the "deliberate Giver" growth-oriented companies should be considered as having a potential buyer as a primary customer.

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