Business Model Innovation of Exponential Organizations: The Case of Xiaomi

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Abstract: The latest trend in today’s organizational development is to become exponential organizations. As a new organizational paradigm for the Internet society and sharing economy era, it is a more flexible, streamlined, and entrepreneurial organization that efficiently integrates global resources and achieves rapid growth. While existing literature has explored how exponential organization success is inextricably linked to its business model, little attention has been paid to and summarized regarding each stage of the exponential organizations’ innovation in the context of the business operation cycle. Meanwhile, the limitations of previous studies were not providing sufficient explanation or strategies for Chinese manufacturing organizations’ exponential transformation to make them sustainable, and not upgrading to relate to organizations in general rather than focusing on a representative Chinese organization. This work aims to deeply analyze a single case of Xiaomi, the representative of exponential organizations, through a case study, summarizing the business model innovation strategies of exponential organizations from four perspectives—value proposition, value creation, value delivery, and value capture—and 11 elements of exponential organizations. The findings are as follows: (1) Making full use of Internet digital technology and effectively integrating and utilizing social resources can help exponential organizations to build an innovation ecology and (2) The 11 attributes of exponential organizations and the corresponding requirements provide more options and space for business model innovation. As a result, these findings add to the current discourse regarding exponential transformation and upgrading, with the expectation of providing theoretical references for the Chinese manufacturing organizations’ exponential transformation and upgrading.

Keywords: business model innovation; exponential organizations; case study

1. Introduction

In the past few years, the business world has witnessed the birth of a new form of organization—the exponential organization [1]. This type of organization uses Internet technology to revolutionize the way that economies grow [1,2]. In the era of traditional organizations, value creation heavily depended on the total cost of ownership, resources, equipment, and personnel costs: the more you owned, the more value you created. The expansion in scale increased the enterprise’s global influence, provided more opportunities to capture markets, and ultimately made the enterprises profitable [3]. However, such an increase in value required significant time costs and extremely large capital investments, which limited the amount of money and valuable talent available. Generally speaking, no one could know whether an investment would be successful before it was made, which inevitably led to a waste of resources. Therefore, while the system has some validity, it is not the best solution. Nevertheless, exponential organizations can effectively avoid the above situation [4,5]. Exponential organizations, strongly driven by advanced technology, have grown tremendously in influence and product output compared to their
competitors. Unlike traditional organizations that use large numbers of laborers or large-scale offline production, information provides the decisive and fundamental role in the development of exponential organizations [1,4].

In the Fortune 500 list, the average life expectancy of an organization was 67 years in 1920, and now a large percentage of the Fortune 500 organizations are less than 10 years old [1,4,6,7]. For those Fortune 500 organizations, today’s competition no longer comes from China and India but increasingly from startups that began with two people in a garage and used exponential growth techniques. YouTube, which began as a startup funded entirely by personal credit cards, was acquired by Google for $1.4 billion just 18 months later. Uber is now valued at more than $53 billion, up from one-thirtieth of that figure just eight years ago. Founded more than a decade ago, Airbnb’s brand is valued at nearly 100 billion RMB, and the most shocking thing is that the enterprises have no fixed assets at all. Uber, the “Airbnb of the car industry”, has a market capitalization of over 100 billion RMB as well. This is like Airbnb’s achievements, with no assets, few employees, and the same explosive growth [8]. With the continuous development of Internet digital technology, exponential organizations will increasingly become a more prevalent trend within corporate culture [4,7]. We are seeing a new generation of organizations expanding and arising at a rate never seen before in the business world, as shown in Figure 1.

Figure 1. Time to reach $1 billion in market capitalization. Note: Collation by authors.

As such, all traditional organizations will eventually face the challenge from exponential organizations [9]. However, traditional organizations do not have to be discouraged because they can also leverage big data, algorithms, platform models used by exponential organizations, and various new Internet digital technologies to achieve greater performance than their peers [1] and become more sustainable. For organizations within China, according to the World Internet Development Report 2021 [10], shown in Figure 2. China’s Internet Development Index score is 61.7. Its position in second place not only means that Chinese enterprises are maturing in the use of Internet technology [11] but, also, that Chinese traditional organizations have easier access to the skills and talent of Internet technology, and can gradually make the transition to exponential organizations.
In exponential organizations, digital technologies offer many possibilities for organizations to optimize their business models and change how value is created and delivered [12,13]. Nevertheless, what specific secrets do these successful exponential organizations use to respond to sudden changes in the external environment through business model innovation with digital technology? Furthermore, how does digital technology play a role in the business model innovation of exponential organizations? It is still a black box that needs to be unlocked, although these issues have aroused extensive concern in the industry and academic circles; for example, Du’s study of the impact of business exchange on customer value finds that digital technology is the mediating variable and engages customers in organizational business model innovation [12]. After analyzing the business model of traditional sales in the mother and baby industry, Guo concluded that digital technology could effectively engage customers in the process of value creation and business model innovation in the organization [14]. However, the knowledge of it is still limited. Many company managers do not understand how digital technologies can optimize business models and enable customers to participate in the innovation of the organization’s business model [15]. Most studies have only highlighted the advantages of the exponential organizations business model [5,13,16,17], and there is limited research on the specific methods of business model innovation in exponential organizations. Therefore, it would be a good addition to the existing research to analyze what specific methods of business model innovation have been effective in exponential organizations.

This study aims to apply usability theory to address the challenges of business model innovation in exponential organizations and to explore the inner logic and path of business model innovation in which technology empowerment promotes customer participation in value creation. For this purpose, we have chosen Xiaomi, a representative of exponential enterprises, and attempted to find out how exponential organizations effectively use the 11 attributes, thereby successfully creating business model innovation. Specifically (1) How do exponential organizations build an innovation ecosystem? (2) How does each of the 11 attributes of exponential organizations affect business model innovation? We aim to provide effective reference for the exponential transformation of Chinese traditional manufacturing enterprises through these above analyses.

The rest of the paper is structured as follows: Section 2 reviews previous studies that focus on business model features and state-of-the-art exponential implementation models,
Section 3 describes the methodology, Section 4 presents the case description, Section 5 provides the case findings, and Section 6 provides the conclusions and prospects.

2. Literature Review

2.1. Exponential Organizations

Ismail (2014) [1] developed the most widespread model of exponential organizations; therefore, understanding this model is the first step in understanding exponential organizations. The exponential organizations include 11 key attributes—an ambitious change goal (MTP: Massive Transformative Purpose); five external attributes (SCALE: Staff on Demand, Community and Crowd, Algorithms, Leveraged Assets, Engagement); and five internal attributes (IDEAS: Interfaces, Dashboards, Experimentation, Autonomy, Social Technologies)—as shown in Figure 3. Not all exponential organizations need to have all 11 attributes, but growth tends to be more exponential when they have more of them. Some scholars have pointed out that exponential transformation is necessary to avoid the obsolescence of companies (Marina, 2021) [13]. The main characteristics of exponential organizations are the use of high technology and having more technological advantages than traditional companies, in addition to being innovative in their organizational approach or business model (Pu, 2017) [17].

![Exponential Organizations' Attributes](image)

**Figure 3.** Exponential organizations' attributes. Source: Collation by authors.

2.2. Semi-structured Interviews

Semi-structured interviews are informal interviews that follow a rough outline. This method only has a rough idea of the conditions of the interviewees, the questions to be asked, and so on. The interviewer has the flexibility to make the necessary adjustments according to the actual situation at the time of the interview. There are no specific requirements regarding the way and order of questions, the way the interviewee answers, the way the interview is recorded, and the time and place of the interview. It is designed to ascertain subjective responses from persons regarding a particular situation or phenomenon that they have experienced, and may be used when there is sufficient objective knowledge about an experience or a phenomenon but the subjective knowledge is lacking [18,19].

The analysis of objective knowledge forms the focal point for developing the semi-structured interviews’ framework and developing the interview question stem. Participants were free to answer the open-ended questions as they wished, and the researchers could explore the responses. This framework and the flexibility of the answers constitute a semi-structured interview’s aspect of this approach. This makes it unique among interview methods because it provides the degree of relevance of the topic while maintaining participant independence [20]. Semi-structured interviews can be a useful tool in developing and refining a business model. By interviewing stakeholders, such as customers, employees, and suppliers, a business can gather valuable feedback on and insights into
their products, services, and operations. This can help to identify areas of improvement, highlight strengths and weaknesses, and ultimately lead to a better understanding of the business model and how it can be optimized [21].

2.3. Exponential Organizations’ Business Model

At present, business models are still in the process of continuous development; as such, domestic and international scholars have been exploring research on their various business models. In a study on the definition of “business model”, Osterwalder et al. (2014) [22] define it as a network in which an organization provides value to customers and generates profits through sustainable marketing, research, development, and procurement. Wang (2009) [23] defines a good business model as one that is long term, where income is greater than investment, and one that can forecast future developments. Allan Afuah et al. (2003) [24] define business models as organic systems that are mainly meant to select ways to produce long-term profits. This study constructed an index system to evaluate business models, which focuses on their elements, profitability, and profit growth trends. Ji et al. (2010) [25] argue that the design of a business model includes six value elements: value discovery, value proposition, value creation, value configuration, value management, and value realization. Zhu (2015) [26] contends that four modules dominate the Internet—search engine, e-commerce, online games, and instant messaging—and he defines the business model through the lens of these four modules. The most famous business model concept comes from Osterwalder et al. (2010) [27]; they define the business model as consisting of nine aspects and use the business model canvas format to expand on these concepts further. Osterwalder et al. (2010) [27] also suggest that the design of a business model includes four dimensions of value proposition, value creation, value delivery, and value capture. Regarding business model innovation, Teece (2010) [28] believes that, if business model innovation can achieve extreme differentiation, then it can gain a competitive advantage. Trimi (2012) [29] defines business model innovation as any new method that is difficult to replicate by existing players and other new entrants.

The business model of exponential organizations developed with the rise of the Internet. In China, the national conditions of economic diversification have provided opportunities for exponential organizations, which have led to different business models [5]. The business model theory of exponential organizations is very different from that of traditional linear organizations [30]. Exponential organizations are designed to leverage emerging technologies and other disruptive forces to create new and innovative business models [1,7]. The 11 attributes of exponential organizations are intended to help organizations adapt, thrive, and develop sustainability in an era of rapid technological change [1,31], and the business model is a crucial component of that adaptation. Exponential organizations tend to have highly innovative business models that allow them to scale quickly and efficiently, often by leveraging network effects, platforms, and other forms of exponential growth [13]. For example, exponential organizations may use crowdsourcing to tap into the collective intelligence of their stakeholders, or they may use blockchain technology to create a decentralized platform for exchanging goods and services. Overall, the 11 attributes of exponential organizations are intended to help organizations create new and innovative business models that can harness the power of exponential technologies and other disruptive forces to create transformative change [1]. Therefore, considering the characteristics of exponential organization business models described above, to a large extent, the “20 to 80 law”, which is widely applied to these traditional organizations, is not consistent with the behavior of exponential organizations [7]. As a result, the long tail theory was born. Chris (2006) [32] believes that if the channels of storage and distribution are large enough, the market share occupied by products with low demand or poor sales can match or even be larger than the market share occupied by more popular products. Internet enterprises offer virtual goods and services with virtually free overhead and distribution costs, which necessitates taking the long tail theory to its extreme in order to measure exponential organizations [23]. Marina Díaz (2021) [13] uses the following
formula for exponential growth: \( x_0 \) is the beginning of the metric that the organization wants to be measured; then, the organization provides the per cent increase \((r)\) and the fixed cycle \((t)\):

\[
x_a = x_0 (1 + r)^t
\]

Díaz [13] evaluates exponential enhancement using this formula, but her application only focused on an organization’s top-level management.

Per the analyses noted in this section, the sustainability of the exponential organizations’ business model is a growing concern. However, there are still no clear and demonstrable examples that traditional organizations can follow in order to know whether their strategic goals are moving them toward becoming exponential organizations. As a representative exponential organization born in the Internet era, Xiaomi has made full use of the Internet ecosystem in its business operations [1], so exploring its business model will have greater significance for transforming and upgrading China’s manufacturing organizations. For this reason, this paper summarizes Xiaomi’s operational model as a model exponential organization. In comprehensive terms, this paper intends to show how Xiaomi uses each attribute of the exponential organizations’ template for business model innovation. It also partly makes up for certain datapoints that have not yet been studied, and provides ideas for the exponential transformation of traditional organizations.

3. Research Design

3.1. Methodology

In this paper, we use the grounded theory-inductive coding qualitative methodology, relying on a single-case, in-depth research paradigm with three stages, including data collection, comparison, and analysis, to study the target case. To better understand business models, this paper reviews the extant literature on the choice of research framework, and identifies and classifies the components of business models cited therein (refer to Zott [33], Shafer [34], and Osterwalder’s [27] research on business models). We discuss the exponential organization’s business model from the perspective of value proposition, value creation, value delivery, and value capture to explore its mechanisms and the characteristics of exponential organizations.

3.2. Data Collection

The primary data sources for this study are secondary data collected from other research about Xiaomi and part of the primary data self-collation. Data-collecting methods include text investigation and phenomenon observation, semi-structured interviews, in-depth observation, and available data collection. These data sources include (1) written materials published in newspapers, in magazines, online, etc., including articles written by Xiaomi executives, and videos and articles containing interviews with these executives; (2) other materials, such as Xiaomi’s website, annual report, forums, etc.; and (3) semi-structured interviews with and records of relevant Xiaomi employees. The research was conducted over a three-month period from January to April 2022. The research team analyzed and classified all secondary data, and all information dealing with our research questions was extracted to argue the issues raised in the theoretical section. For data analysis, the structured content analysis method was used. We distilled themes from a wealth of qualitative information, then identified, extracted, and coded the required variable information, followed by coding into a quantitative data form. Meanwhile, coding was carried out according to the source of the data. For internal information, the codes are I1, I2, and I3; for external information, the codes are E1 and E2. To ensure the reliability and validity of the study, this paper refers to the case study methodology proposed by Yin (2004) [35]: first, to discuss the case study methodology and develop a case study plan, and, second, to use different data collection methods and interview other subjects on the same issue in the process of data collection. Additional follow-up questions were used...
during the semi-structured interviews depending on the situation to dig deeper into the information. When coding and organizing specific data, if there were inconsistencies, the research team negotiated together and repeatedly sought confirmation until an agreement was reached, the details of which are shown in Table 1.

Table 1. Case data coding.

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>Data Classification</th>
<th>Quantity</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal information</td>
<td>Internal organization documents, interview</td>
<td>2</td>
<td>I1</td>
</tr>
<tr>
<td></td>
<td>Enterprise Listing Annual Reports (2015–2021)</td>
<td>1</td>
<td>I2</td>
</tr>
<tr>
<td></td>
<td>Videos and books for business executives</td>
<td>9</td>
<td>I3</td>
</tr>
<tr>
<td>External information</td>
<td>Industry analysis reports</td>
<td>4</td>
<td>E1</td>
</tr>
<tr>
<td></td>
<td>Other related books, cases, papers</td>
<td>28</td>
<td>E2</td>
</tr>
</tbody>
</table>

Note: Collation by authors.

4. Case Description

4.1. Case Selection

The organizations were selected for the study based on three factors: representativeness of the organization, suitability of content, and ease of data accessibility. For this study we have selected Xiaomi as our research subject. The reasons for choosing Xiaomi as a research case are as follows: (1) Xiaomi’s business model appears to have been successful, and it is a public enterprise with complete information available for analysis [36]; (2) according to Ismail (2014) [1] and his assessment of exponential organizations, Xiaomi has an index score of 74, which is the highest index score among Chinese enterprises and is, therefore, representative of the country’s exponential organizations; and (3) Xiaomi fully utilized Internet technology and ecology in its business operations [37–39], which has significant implications for the transformation and upgrading of manufacturing organizations.

The Xiaomi Group ("Xiaomi") emerged during the high-tech boom [37–39]. Relying on Internet thinking, Xiaomi innovated the business model of mobile phone manufacturers by offering high-quality products at a low price, which disrupted the old market competition pattern [37,40]. In its fourth year, Xiaomi became the world's third-largest smartphone manufacturer, trailing only Apple and Samsung [40]. Subsequently, Xiaomi gained timely insight into the IoT blue ocean market, and began to focus on investing in its ecological chain system and expanding its industrial chain. By 2021, Xiaomi's revenue had reached RMB 328.3 billion [36], and its consumer IoT hardware business had taken the lead in the global market. Today, Xiaomi is no longer a traditional cell phone manufacturer; rather, it is a high-tech Internet enterprise that provides core technologies to consumers [37,39,41].

4.2. Case Study Framework

In this study, we used the study framework to conceptualize the case information and explored the mechanisms and characteristics of the exponential organization's business model, focusing on value proposition, value creation, value delivery, and value capture.

4.2.1. Value Proposition

The core goal of the value proposition is to discover and understand user needs. The Internet era emphasizes user-centeredness and user experience more than ever before [24]. Concerning value proposition design, unlike traditional business models, exponential organizations pay more attention to the "pain points" of customers and adopt different solutions for specific customer scenarios [11,42].
Lei Jun, the founder of Xiaomi, is often considered the Chinese Steve Jobs [43]. This is not only because Xiaomi, under his influence, was heavily inspired by Apple’s design, marketing, and supply chain management, but also because Xiaomi pays close attention to performance, quality, and customer experience, which are the three main features that the enterprise tries to offer its customers at an affordable price [39,44]. Xiaomi’s Massive Transformative Purpose (MTP) is “innovation for everyone”, reflecting the core of the enterprise’s value proposition [37,45]. Meanwhile, in order to reflect this MTP, Xiaomi not only set the high demand for the product innovation but also set up an open platform for app developers through its MIUI programs allowing everyone to innovate with this platform. Startups gain value from Xiaomi’s support for product development and the go-to market. Likewise, Chinese users have benefited from a variety of applications and services on the Internet that were designed specifically for them [45,46].

It is because Xiaomi follows this MTP that it is possible for everyone to join the innovation process of Internet products, greatly accelerating the popularity of Internet products in China [10,43]. Additionally, Xiaomi attracts many users for itself, and builds a solid foundation for the creation, delivery, and capture of the value that follows [41].

4.2.2. Value Creation

Xiaomi profits from its technological innovations, and, indeed, innovation is at the core of value creation. Xiaomi prefers to leverage the Community and Crowd resource [1] and makes full use of the cognitive surplus, the details of which are shown in Table 2. The technology of communication networks encourages users to join and share content and, due to a combination of intrinsic and social motivation, the desire to share is greatly enhanced. Design environments created by amateurs, often used by exponential organizations, can form communities and senses of belonging better than professional designs [1,37].

Xiaomi has pioneered an approach in its business model that has rarely been seen in Chinese enterprises to date [39,45]. Xiaomi believes that customers are one the best sources of product designs and services [37,43,45]. Therefore, Xiaomi has built a mechanism to discover, maintain, and encourage users to become loyal fans, and the perceived gratitude and respect shown by the enterprise provided these users with a strong motivation to engage with its services [37,45]. This has led its customers to shift from being “users and feedbackers of products” to becoming “drivers of product innovation” [37,43].

Xiaomi is also effectively using the dividends generated by these measures to continuously develop new products and services that are accepted by the market and continue to create value for customers, the market, society, and the community and crowd involved in product innovation. They are also making a positive impact on Xiaomi’s value delivery [1].

<table>
<thead>
<tr>
<th>Community and Crowd</th>
<th>Product Planning</th>
<th>Product Design</th>
<th>Product Development</th>
<th>Product Testing</th>
<th>Product Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xiaomi employees spend at least half an hour every day on user forums and social networking sites to interact with users and understand their product requirements.</td>
<td>Numerous channels are provided for users to offer Xiaomi suggestions, invite users to participate in the use of test versions, and rapid iterative development (Experimentation).</td>
<td>Users volunteer to participate in the development of the product and can develop additional applications on the MIUI platform.</td>
<td>Xiaomi has an entirely peer-to-peer service platform, driven and organized by users, facilitating enthusiasts to participate in product testing.</td>
<td>Xiaomi organizes special events for a community of 46 million fans and hosts comprehensive product launches similar to those held by Google and Apple.</td>
<td></td>
</tr>
</tbody>
</table>

Note: Collation by authors.
4.2.3. Value delivery

Marketing

Xiaomi has learned from Apple’s marketing strategy in the US and effectively used leveraged assets by adopting a model of direct sales plus logistical enterprise distribution [44,45], which circumvents profit sharing between stores and distributors and ensures a high degree of quality control [41,44]. In addition, this purely online approach is well suited for Xiaomi’s marketing online strategy, with reservations, purchases, and F-codes being well designed and administered in regard to implementation [41].

The reason that Xiaomi conducts business this way is due to the manner in which inventory is handled by distributors. Inventory has a cost during the storage process which factors into a business’s liquidity. In order to maintain liquidity and cover necessary expenses, an enterprise may be forced to incur additional debt and pay additional interest [37,41]. As the smartphone product model update cycle accelerates, phone manufacturers will often hold a new product launch in less than three months from the last launch, and its inventory backlog will soon be obsolete [40].

The problem that brand owners often have regarding information asymmetry due to demand at the end of the value chain can be solved through demand reservation. Unlike traditional manufacturing, which requires vast warehouses to store products for shipment [40,44], just like Toyota’s JIT model [47], Xiaomi improves on its sell-to-order inventory: this week’s production capacity is next week’s sales volume, also known as the zero inventory model. However, zero inventory is not the same as no inventory. Rather, through online user reservations and an accurate grasp of order quantities, only the necessary inventory is produced [48]. Therefore, maintaining market demand becomes the starting point of Xiaomi’s “hunger marketing” strategy [37,45]. By attracting consumers through social media and low prices, Xiaomi uses hunger marketing to multiply the value and attractiveness of its services in order to build a customer base with better loyalty, remain irreplaceable in the short-term market, and, eventually, form a circle around its resources and its solid customer base. At the same time, by fixing a limited number of “snaps”, Xiaomi can reduce purchasing costs and cut down on unnecessary waste [41,44].

In 2015, however, commensurate with the rise in the popularity of mobile Internet services and a slowdown in the e-commerce market, models that purely relied on direct online sales reached a bottleneck. In 2016, Xiaomi pushed a “new sales” strategy (shown in Figure 4) and promised the same prices for both online and offline sales [41].

![Figure 4. Xiaomi’s eight new sales strategies. Note: Collation by authors. Meanwhile, Xiaomi led the development of the MIUI mobile operating system (Interfaces) based on the “user development model” and created a fan culture [49] that completely revolutionized marketing methods in the cell phone industry. It is worth mentioning that Xiaomi has also created Internet buzzwords, such as “participation, cell phone control, F-code, and Xiaomi Fan Festival”, which have become banners for new interactive marketing in China’s marketing industry [49].

Behind every seemingly smooth landing, it is based on Xiaomi’s powerful algorithms technology, using data-driven, accurate prediction of production and sales patterns...
through continuous data training to make up for the traditional organization’s deviations in cognition. This is often one of the highlights of exponential organizations in business model innovation.

Due to the above method, Xiaomi’s marketing costs are only 2–6% [36], while marketing costs for traditional smartphone manufacturers are 10–20% [40]. Therefore, Xiaomi’s marketing costs are much lower than those of its competitors and give Xiaomi more room for value capture; the marketing expense results are shown in Table 3.

Table 3. Xiaomi’s 2015–2021 marketing expenses and marketing expenses as a percentage of total revenue.

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Expenses (Billion RMB)</td>
<td>20.98</td>
<td>14.54</td>
<td>10.38</td>
<td>7.99</td>
<td>5.23</td>
<td>3.02</td>
<td>1.91</td>
</tr>
<tr>
<td>Total Revenue (Billion RMB)</td>
<td>328.31</td>
<td>245.87</td>
<td>205.84</td>
<td>174.92</td>
<td>114.61</td>
<td>68.43</td>
<td>66.81</td>
</tr>
<tr>
<td>Marketing Expenses as a Percentage of Total Revenue</td>
<td>6.39%</td>
<td>5.91%</td>
<td>5.04%</td>
<td>4.57%</td>
<td>4.56%</td>
<td>4.41%</td>
<td>2.86%</td>
</tr>
</tbody>
</table>

Source: Collation by authors.

Sales

Xiaomi’s leadership strategy is “low price and high quality” [41,45]. On August 16th, 2011, Xiaomi announced the first generation of its cell phones. The configuration it used was Qualcomm’s flagship processor, the Snapdragon MSM8290 CPU, combined with Xiaomi’s MIUI one system and a 1 + 4 GB RAM, 8 MP rear camera. The price was RMB 1999. This was almost certainly breaking news in 2011. At the time, the hottest selling models in China included the Apple 4S, the Samsung Galaxy Nexus, the HTC Sensation, the HTC Desire, and the Motorola XT865. At the time, these phones were priced at more than RMB 4000. Table 4 shows the selling price for each generation of Xiaomi’s phones. All of Xiaomi’s phones have maintained sufficient market competitiveness [36]. The concept of “low price and high quality” is deeply rooted in Xiaomi customer expectations.

Table 4. Xiaomi cell phone selling prices.

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
<th>TTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xiaomi 1</td>
<td>1999</td>
<td>2011</td>
</tr>
<tr>
<td>Xiaomi 2</td>
<td>1999</td>
<td>2012</td>
</tr>
<tr>
<td>Xiaomi 3</td>
<td>1999</td>
<td>2013</td>
</tr>
<tr>
<td>Xiaomi 4</td>
<td>1999</td>
<td>2014</td>
</tr>
<tr>
<td>Xiaomi 5</td>
<td>1999</td>
<td>2016</td>
</tr>
<tr>
<td>Xiaomi 6</td>
<td>2499</td>
<td>2017</td>
</tr>
<tr>
<td>Xiaomi 8</td>
<td>2699</td>
<td>2018</td>
</tr>
<tr>
<td>Xiaomi 9</td>
<td>2999</td>
<td>2019</td>
</tr>
<tr>
<td>Xiaomi 10</td>
<td>3999</td>
<td>2020</td>
</tr>
<tr>
<td>Xiaomi 11</td>
<td>3999</td>
<td>2020</td>
</tr>
<tr>
<td>Xiaomi 12</td>
<td>3199</td>
<td>2021</td>
</tr>
</tbody>
</table>

Note: Collation by authors.

This low price and high quality [41,45] leadership strategy is central to Xiaomi, and it is also the one of the organization’s greatest values [1,37]. Furthermore, Xiaomi has been able to continuously sustain this strategy, for which its ability to effectively leverage assets is its core mean of success [1]. Xiaomi establishes strategic alliances by outsourcing foundries and the manufacturing process. It does not need to build its own production lines;
instead, it outsources low-value-added manufacturing processes to Foxconn and Inventec, allowing Xiaomi to dedicate more energy and resources to high-value-added segments while also reducing production costs. For example, in July 2014, in order to better collaborate with Xiaomi, Foxconn purchased 2000 sets of CNC numerical control lathes from an OEM to develop the bezel of the Xiaomi 4, adding automated production equipment to ensure on-time delivery of products [40]. In the past, this was a cost that was typically borne by the enterprise itself.

Xiaomi takes full advantage of the outsourcing of its foundry scale and capacity in order to improve production efficiency, reduce manufacturing time, and ensure on-time product delivery. Xiaomi also sends professional staff to outsourced foundries in order to develop products together with that foundry’s engineers (i.e., staff on demand), supervise all aspects of its production, reduce waste, and improve its production process. By doing so, manufacturing costs are reduced. Xiaomi uses its own technology and cell phone R&D capabilities to devote itself to technological innovation [50]. Thus, investments in fixed assets, such as production lines, are eliminated, and limited enterprise resources are devoted to R&D and sales, which add more value, minimize costs, and establish a relative competitive advantage in two links of the value chain [36].

Xiaomi also places great importance on user involvement in the sales process. For example, users can post Weibo (effectively, Chinese Twitter) and WeChat Moments with product images announcing the success of their reservation, thus transforming a simple sales transaction into an online interaction involving tens of millions of users (engagement) [5].

From here we see that Xiaomi brings in partners through a new, more open model and, through the resulting innovation, the cost of sales and production is effectively reduced. This also allows Xiaomi to always implement the low price and high-quality leadership strategy.

4.2.4. Organization and Management

Similar to many Silicon Valley Internet enterprise organization structures [51], Xiaomi has adopted a flat organizational structure model, which solves the drawbacks of hierarchical management, accelerates the information flow, and improves the efficiency of decision making (Autonomy) [1].

By the end of 2021, Xiaomi had 33,427 employees, with 30% working in marketing, 35% providing user service and logistics, 30% in R&D, and 5% in other positions, making it a three peak-structured enterprise—that is, marketing, R&D, and customer service. Other functions, such as manufacturing, logistics, and parts of the after-sales maintenance service, are outsourced [36].

In terms of hierarchy, Xiaomi only has three levels: Founder Executive Team, Team Leaders, and Employees [36]. Each member of the founder executive team is responsible for a large department. Below them are several smaller teams of 5 to 10 people consisting of a leader and a variable number of needs-based members, as Figure 5 shows. The team finds out what to do proactively based on user feedback rather than passively following the leader’s instructions (Autonomy). Each small team has a tribe-like culture with a cohesive atmosphere. When it comes to hiring employees, Xiaomi focuses on candidates who are passionate about their work and specialize in specific areas. Xiaomi also uses a broadband compensation system in its salary structure to support the development of a flat organization. Thus, employees can focus more on their personal abilities to improve and implement projects successfully without overthinking their positions and other external factors.
Enterprises are the primary drivers of innovation, and their talent mechanisms serve as internal drivers for fostering innovation. Xiaomi effectively guides its internal talent to innovate through administrative means and human resource strategies, and this innovative approach of continuously reforming and improving its internal institutional mechanisms complements its business model.

4.2.5. Value Capture

In a business model, the value capture mechanism is a strategy for learning how an enterprise can provide value to its users while creating value for itself \([16,23]\). Xiaomi’s revenue sources include sales of hardware, accessories, and services. Xiaomi’s main product, smartphones, is set at cost and has a small gross profit \([36]\), as seen in Table 5.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT (Billions)</td>
<td>24.42</td>
<td>21.63</td>
<td>12.16</td>
<td>13.93</td>
<td>~41.83</td>
<td>1.18</td>
<td>~7.47</td>
</tr>
<tr>
<td>Gross profit (Billions)</td>
<td>58.26</td>
<td>36.75</td>
<td>28.55</td>
<td>22.19</td>
<td>15.15</td>
<td>7.25</td>
<td>2.70</td>
</tr>
<tr>
<td>Total revenues (Billions)</td>
<td>328.31</td>
<td>245.87</td>
<td>205.84</td>
<td>174.92</td>
<td>114.61</td>
<td>68.43</td>
<td>66.81</td>
</tr>
</tbody>
</table>

Source: Collation by authors.

The Xiaomi model offers many advantages. For instance, direct e-commerce sales are less expensive and better for inventory management compared to traditional channel sales. The self-publishing system as a marketing anchor significantly reduces the cost of advertising and other marketing activities, and outsourcing large-scale manufacturing provides Xiaomi with better bargaining power than smaller manufacturers. Most importantly, the deep involvement of users in Xiaomi’s product development, sales, and service processes leverages their passion and limited time to contribute to the enterprise \([44,49]\).

Xiaomi’s business model is based on a staggered product-pricing model that shifts profits from major hardware products to value-added services such as accessories, redesigned user-centric R&D, marketing, and an Internet-based sales approach, thus reducing costs significantly. This business model has been well received by investors and, in the nine years since its inception to its IPO, Xiaomi has gone through multiple rounds of financing with total funding of approximately RMB 40.956 billion \([36]\), as shown in Table 6.
Table 6. Xiaomi financing history.

<table>
<thead>
<tr>
<th>Financing Rounds</th>
<th>Time</th>
<th>Funding Agency</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>2015.4</td>
<td>Singapore Government, Houpu Capital, All-Stars Investment, Yunfeng Capital, DST</td>
<td>1.1 B</td>
</tr>
<tr>
<td>D</td>
<td>2013.9</td>
<td>DST</td>
<td>Unpublished</td>
</tr>
<tr>
<td>C</td>
<td>2012.6</td>
<td>DST, Temasek</td>
<td>216 M</td>
</tr>
<tr>
<td>B</td>
<td>2011.12</td>
<td>IDG, Qiming Venture Partners, Qualcomm, Temasek, 5Y Capital</td>
<td>90 M</td>
</tr>
<tr>
<td>A</td>
<td>2011.7</td>
<td>IDG, Qiming Venture Partners, Shunwei Capital, 5Y Capital</td>
<td>41 M</td>
</tr>
</tbody>
</table>

Source: Collation by authors.

5. Discussion

This study follows the logic of phenomenon–reason–impact and was analyzed using Osterwalder et al.’s business model. The model consists of four dimensions—value proposition, value creation, value delivery, and value capture. Through the case study of Xiaomi, it provides a complete picture of the business model of exponential organizations. It reveals the mechanism of the entire user–organization interaction in the Internet era. The case shows that exponential organizations can increase rapidly; the core strategy is to make full use of the attributes of exponential organizations and involve them in the complete value process of the business model. Organizations should recognize their proactivity and innovation in using the latest technologies, as how they use digital technologies is crucial to implementing the exponential transformation strategy. In this paper we mainly want to analyze two parts: (1) Exponential organizations’ characteristics to building innovation ecosystem. (2) Degree of contribution of exponential organizations to business model innovation. From the specific research findings we can show the exponential organizations’ characteristics to building an innovation ecosystem.

In its business model, exponential organization Xiaomi has pioneered the use of previously unseen methods among Chinese enterprises that allows Xiaomi to be acutely aware of the needs and characteristics of its users. This has contributed to the exponential organization’s business model innovation and its business success. We compare the business models of Xiaomi and the traditional organizations (cell phone) in Table 7.

Table 7. Comparison of Xiaomi and the traditional cell phone organizations’ business model.

<table>
<thead>
<tr>
<th>Element</th>
<th>Exponential Organizations (Xiaomi)</th>
<th>Traditional Organizations (Cell Phone)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value proposition</td>
<td>Involving users actively in the product innovation process.</td>
<td>The user is only the purchaser of the product.</td>
</tr>
<tr>
<td>Value creation</td>
<td>1. Product development team works seamlessly with users at all stages of product development.</td>
<td>1. Innovation is internal to the enterprises and has nothing to do with users.</td>
</tr>
<tr>
<td></td>
<td>2. Iterative and incremental development, fast, more fault-tolerant, low cost.</td>
<td>2. Waterfall model, closed, long lead time, and high cost.</td>
</tr>
<tr>
<td>Value delivery</td>
<td>1. Marketing by attracting fans.</td>
<td>1. Marketing by traditional media such as advertisement, newspapers, magazines.</td>
</tr>
<tr>
<td></td>
<td>2. Self-media marketing system.</td>
<td>2. Rarely use self-media.</td>
</tr>
<tr>
<td></td>
<td>3. E-commerce direct sales, cost low, and can directly understand the customer feedback.</td>
<td>3. Traditional channel sales, offline stores, malls.</td>
</tr>
</tbody>
</table>
By comparison, we found out that the characteristics of exponential organizations for building innovation ecosystem are as follows.

- Exponential organizations are effective in using public recourse for their creativity, innovation, validation, and even crowdfunding, and they use the Internet platforms to complete the overall process. This research result is highly consistent with the research of Ismail (2014) [1] and Diamandis (2016) [7]. Consistent with the current business model of Internet organizations and relative to the Priyono (2020) [52] study, we found that the transformation of organizations can be achieved more effectively through public resources.

- Exponential organizations prefer collaboration to purchase and are willing to use the leveraged asset and grow with partners. This is also consistent with the research that organizations prefer win–win cooperation to achieve organizational change [53,54].

- Exponential organizations have strong computer science R&D ability and develop their algorithms. They use data-driven, accurate prediction of production, sales, and service patterns. Exponential organizations actively use new media and Internet technology to promote their brand and understand the usage habits of contemporary people, and offer the suitable interfaces for use. This finding complements Raju and Holm’s [43] research on leadership for organizational growth, which concludes that computer science is also a pathway to organizational growth.

It became clear that in exponential organizations’ innovation ecology, innovation stems from their force: Community and Crowd, Algorithms, and Leveraged Assets. These are also the aspects that exponential organizations should emphasize in building an innovation ecosystem [1].

### Exponential Organizations’ Attributes and Degree of Innovation Contribution

Business model innovation can be radical and incremental [55]. However, radical and incremental innovations are fundamentally different. In the main, radical innovation represents the ability to develop products that are completely new to the world or a particular industry, while incremental innovation refers to the ability to develop products that are new to the enterprises. Through the above analysis of Xiaomi’s business model, we can use the exponential organization’s attributes and two different methods of innovation to judge the Xiaomi business model’s innovation degree, as shown in Table 8.
Table 8. Xiaomi exponential organizations’ attributes and innovation degree.

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Description</th>
<th>Incremental Innovation</th>
<th>Radical Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTP</td>
<td>Innovation for everyone</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Interfaces</td>
<td>Xiaomi app store provides millions of applications</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Dashboards</td>
<td>Use of frontend ideas and quality to build backend, visual management</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Experimentation</td>
<td>Rapid iterative development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flat organizational structure</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>Decentralized management model, dynamic job roles</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Social Technologies</td>
<td>System for internal–remote interactions</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[56]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff on Demand</td>
<td>Outsourcing aftersales, maintenance, and other services</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Community and Crowd</td>
<td>Invite customers to participate in every aspect of product R&amp;D</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Algorithms</td>
<td>The Cloud-ML platform is the technical foundation for much of Xiaomi’s smart</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hardware</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leveraged Assets</td>
<td>Outsourced manufacturing</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>Customers participate in a game to win discount coupons</td>
<td>√</td>
<td></td>
</tr>
</tbody>
</table>

Note: Collation by authors.

As shown in the table above, the 11 attributes of exponential organizations provide Xiaomi with additional options and room for business model innovation. This multi-layer dimensional division reduces the granularity of business model innovation, making it easier for the organization to choose according to its specific situation. This study makes a valuable contribution to the existing literature by providing new insights and empirical evidence that build upon previous research in the field and is also in line with several studies that focus on Xiaomi [40,41,44,49].

6. Conclusions and Prospects

How do exponential organizations effectively use the 11 attributes, thereby successfully creating business model innovation? This question has never been settled in theory. This case study of Xiaomi’s business model innovation offers the following conclusions.

- There are three main characteristics of exponential organizations that can effectively help the organization achieve significant results in building an innovation ecosystem: Community and Crowd, Algorithms, and Leveraged Assets. Community and Crowd means that exponential organizations can effectively use external resources through the Internet platform to help enterprises innovate internally. Algorithms are used to help organizations to predict future development and innovation directions more accurately, with the aid of computer science and driven by data. Leveraged Assets means that exponential organizations seek common development through cooperation with partners based on complementary strengths and mutual benefits.
- This study argues that the 11 attributes of exponential organizations delineate a more segmented dimension for business model innovation, making it easier for organizations to choose the right direction for themselves in business model innovation and allowing them to be more focused on the innovation process.
Furthermore, the practical implications of this study are providing an example of successful exponential organizational growth; focusing on business model innovation; demonstrating how the four dimensions of value proposition, value creation, value delivery, and value capture and the 11 attributes of exponential organizations can be used collaboratively and even transformed into each other; and contributing to a fuller understanding and appreciation of business model innovation by clarifying the interrelationships between elements in the same cognitive dimension on the one hand and further exploring the interactions between elements in different dimensions on the other. This study has implications for other enterprises in that they can learn from these steps, which is our study’s main difference from other studies.

In addition to the practical implications outlined in the passage, this study also makes a theoretical contribution to the field of business model innovation. By identifying and exploring the interrelationships between elements in the same cognitive dimension, as well as the interactions between elements in different dimensions, this study provides a more nuanced understanding of how business model innovation can be effectively implemented. Moreover, the study’s focus on successful exponential organizational growth and the collaborative use and transformation of the four dimensions of value proposition, value creation, value delivery, and value capture, and the 11 attributes of an exponential organization, adds to the growing body of literature on business model innovation and its importance in achieving sustained growth and competitiveness in today’s rapidly evolving business landscape. Overall, this study contributes to the theoretical understanding of business model innovation by providing insights into the key dimensions and attributes that are critical for achieving success and growth and by highlighting the importance of collaboration and transformation in developing and implementing effective business models.

The research in this paper also has limitations. First, conclusions obtained from a case study approach have certain shortcomings in regard to generalizability; second, we did not deeply explore the motivations behind user participation in the operations of the organization, which is important for the organization to maintain enthusiasm for that participation in the long run [57]. Furthermore, although exponential organizations’ community and crowd model has been partially adopted by some enterprises, this does not mean that the model is without limitations, and some questions remain to be answered: If products are closer to users, based on opensource and standard components, can this method create disruptive products [57]? Gamification is used to encourage users to invest time and enthusiasm in the organization, volunteering their services to help it grow, but, invariably, people will get tired of playing any game; as such, how can an organization make user enthusiasm last indefinitely [58]?

Our study raises several opportunities for future research, both in theory development and validation. Therefore, further research is required on this case to examine subsequent developments of its business model. Furthermore, more advanced studies are needed to closely examine what a specific industry requires to conduct the exponential transformation, as every industry has different needs. Therefore, a more comprehensive study of the exponential transformation and sustainability of manufacturing-related organizations is a direction worth investing in the future.

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consent in accordance with the Declaration of Helsinki. Respondents were assured of confidentiality and anonymity. All participation was voluntary.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data and models used during the study are available from the corresponding author by request.

**Conflicts of Interest:** The authors declare no conflict of interest.

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