
Identifying factors of fitness between business model and entrepreneurial opportunity for effective opportunity exploitation

Jahangir Yadollahi Farsi

Associate Professor, Faculty of Entrepreneurship, University of Tehran, Iran
Jfarsi@ut.ac.ir

Maryam Azizi

PhD Candidates, Faculty of Entrepreneurship, University of Tehran
Iran ma.azizi@ut.ac.ir

Reza Mohammadkazemi

Associate Professor, Faculty of Entrepreneurship, University of Tehran, Iran
r_mkazemi@ut.ac.ir

Babak Ziya

Assistant Professor, Faculty of Entrepreneurship, University of Tehran, Iran
bziyae@ut.ac.ir

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Abstract

The purpose of this study is to identify the factors of the business model and entrepreneurial opportunity fitness for effective opportunity exploitation. Several research results have shown that one of the reasons for the inability of businesses to survive and develop and subsequently their failure is rooted in the weakness of the fit between the components of the business model and their chosen opportunities. The focus of the business model is to achieve business goals which it's not enough and the elements of the business model on the other hand show that it does not adequately explain the performance in the economy that is changing fast and rapidly. Thus, paying attention to the alignment and fitness between entrepreneurial opportunity and business model is an important issue in creating or developing a business. This research is applied in terms of approach and qualitative in terms of method. The data from this study was collected through a semi-structured interview with 20 academic and industry experts from the ICT industry. The data analysis method involves coding in three steps: initial, open and axial coding which led to eight main categories including: level of innovation and creativity, market intelligence, quality management standards, product development, optimizing resource combination, effectiveness of learning, flexibility and agility that are components of the business model and opportunity fitness for effective exploitation of opportunities.

Key words: business model, entrepreneurial opportunity, fitness, opportunity exploitation

Identificando fatores de adequação entre o modelo de negócios e a oportunidade empresarial para uma exploração eficaz da oportunidade

Resumo

O objetivo deste estudo é identificar os fatores do modelo de negócios e adequação das oportunidades empresariais para uma exploração efetiva das oportunidades. Vários resultados de pesquisas mostraram que uma das razões para a incapacidade das empresas sobreviverem e se desenvolverem e subsequentemente seu fracasso está na fraqueza do ajuste entre os componentes do modelo de negócios e as oportunidades escolhidas. O foco do modelo de negócios é alcançar metas de negócios que não são suficientes e os elementos do modelo de negócios, por outro lado, mostram que ele não explica adequadamente o desempenho da economia que está mudando rápida e rapidamente. Portanto, prestar atenção ao alinhamento e adequação entre oportunidade empresarial e modelo de negócios é uma questão importante na criação ou desenvolvimento de um negócio. Esta pesquisa é aplicada em termos de abordagem e qualitativa em termos de método. Os dados deste estudo foram coletados através de uma entrevista semiestruturada com 20 especialistas acadêmicos e da indústria da indústria de TIC. O método de análise de dados envolve a codificação em três etapas: codificação inicial, aberta e axial, que levou a oito categorias principais, incluindo: nível de inovação e criatividade, inteligência de mercado, padrões de gestão da qualidade, desenvolvimento de produtos, otimização da combinação de recursos, eficácia do aprendizado, flexibilidade e flexibilidade. agilidade que são componentes do modelo de negócios e adequação de oportunidades para exploração efetiva de oportunidades.

Palavras-chave: modelo de negócios, oportunidade empreendedora, condicionamento físico, exploração de oportunidades

Identificando factores de aptitud entre el modelo de negocio y la oportunidad empresarial para la explotación efectiva de oportunidades

Resumen

El propósito de este estudio es identificar los factores del modelo de negocio y la idoneidad de la oportunidad empresarial para la explotación efectiva de la oportunidad. Varios resultados de la investigación han demostrado que una de las razones de la incapacidad de las empresas para sobrevivir y desarrollarse y, posteriormente, su fracaso se basa en la debilidad del ajuste entre los componentes del modelo de negocio y las oportunidades elegidas. El enfoque del modelo de negocio es lograr objetivos de negocio que no son suficientes y, por otro lado, los elementos del modelo de negocio muestran que no explica adecuadamente el desempeño en la economía que está cambiando rápida y rápidamente. Por lo tanto, prestar atención a la alineación y la adecuación entre la oportunidad empresarial y el modelo de negocio es un tema importante en la creación o desarrollo de un negocio. Esta investigación se aplica en términos de enfoque y cualitativa en términos de método. Los datos de este estudio se recopilaron a través de una entrevista semiestructurada con 20 expertos académicos y de la industria de la industria de las TIC. El método de análisis de datos implica la codificación en tres pasos: codificación inicial, abierta y axial que condujo a ocho categorías principales que incluyen: nivel de innovación y creatividad, inteligencia de mercado, estándares de gestión de calidad, desarrollo de productos, optimización de la combinación de recursos, efectividad del aprendizaje, flexibilidad y agilidad que son componentes del modelo de negocio y aptitud de oportunidad para la explotación efectiva de oportunidades.

Palabras clave: modelo de negocio, oportunidad empresarial, aptitud física, explotación de oportunidades

1. Introduction

Businesses in today's world face a challenging and constantly changing environment and despite market opportunities, new business ideas, sufficient resources and talented entrepreneurs experience failure. Studies show that the first years of the establishment of a business are usually associated with many difficulties and high percentages of these business fail during this period. The review of literature is full of examples of companies with innovative goods and services that have been defeated due to a lack of profitability, which is generally due to a lack of success in attracting enough customers and inability to compete and this suggests that a good product or service or advanced technology cannot guarantee success (Mason & Botelh, 2013). Several research has shown that one of the reasons for the inability of businesses to survive and develop and subsequently their failure is rooted in the weakness of the fit between the components of the business model and their chosen opportunities (Zott & Amit, 2010).

Although research on entrepreneurial opportunities is relatively high in entrepreneurship literature, over the past decade there are few studies that has focused on exploiting opportunities.

However, according to Krizner (1973), the discovery and exploitation of opportunity is the core of entrepreneurship and there are also many contributions in the entrepreneurial literature about the description of product development and the performance of product and process management (Rothberg,1981). But only in limited studies identification and exploitation of opportunities by entrepreneurs have been investigated. In such a way that the recognition and exploitation of opportunity by entrepreneurial companies is considered as a minor issue in business development process, perhaps this is due to the fact that researchers are interested in the overall process and are not interested in a specific process field. On the other hand, this may be due to the inherent nature of the discovery and exploitation of opportunity, which makes it difficult to conceptualize the exploitation of opportunities (Teach et al., 1989).

Despite some studies, there are major gaps in opportunity exploitation literature and conceptualizing the exploitation of entrepreneurial opportunities by taking into account a set of important factors at the business level and the coordination and fit between them is a topic that it has many ambiguities and requires deeper insights (Hunter, 2012). Thus, in these studies, the features of opportunity and business model have been investigated individually on the success of business creation and development and the alignment between these two structures has not been studied together. Hence, the exploitation of opportunity is one of the research topics that requires more extensive research, taking into account the coherence of the business model opportunity. Conceptualizing the exploitation of opportunities by considering the appropriateness of these factors is important because components of the business model have several choices that can lead to business success. So far, such an approach has not been seen in the literature. Consequently, the question of this research is what are the variables of fit between opportunities and business model for the exploitation of opportunity?

2. Literature review

2.1 Business model and entrepreneurial opportunity

Any business face with the question that what is the right business model for its opportunity? In general, it should be clear about what business model should be designed for business opportunity (Bilgeri et al. 2015). Entrepreneurship literature uses the concept of

business model to better understand how opportunities are exploited (George and Bock, 2011). The strategic fit of business model and opportunity is the company's ability to rapidly redesign its resources and activities to respond effectively to new environmental opportunities (Brozovic et al., 2016). Studies in the strategy states that managers must align organizational structure with strategic design. Although strategy formulation is a process-driven management, this heuristic encourages managers to carry out a comprehensive analysis of the business model to ensure that features are aligned with the available specific opportunities (Chesbrough, 2010).

An important challenge for entrepreneurs in creating wealth is the identification and development of wealth-creating business opportunities, entrepreneurs tend to identify opportunities in an uncertain environment to benefit from them. To this end, entrepreneurs need to clarify the ways in which their new business interacts with other suppliers, customers and partners, and in other words they need to design business models (Bilgeri et al. 2015). Companies are trying to find new ways to do business that breaks down the competitive rules of the current business and leads to development of new business models (Ireland et al., 2001). In other words, business model can be seen as a demonstration of the content, structure and management of interactions that are designed to create value through the exploitation of opportunities (Amit & Zott, 2001). developing the resources or capabilities to operate in value chain, which effectively determines the degree of competitive advantage of a company (Schweizer, 2005). This suggests that business model has a significant impact on business success (Lam & Walker, 2003), because a valuable business model generates benefits for both customer and the supplier of the product (Haaker et al., 2017). Business models can lead to increased customer willingness to pay or reduce the cost of opportunity for partners and suppliers by improving the effectiveness of interactions to create value (Bosch, 2015). Studies show that Fitness and coherence are important factors in designing a successful business model (Teece, 2018).

An appropriate business model not only leads to the exploitation of opportunity for wealth creation, but may itself be part of the development of opportunity. An entrepreneur as a designer can create opportunities in a new way by filling out market factors and products (Zott & Amit, 2007). Studying business models related to entrepreneurial research is often a study of the new venture and innovative industries. Business models may represent a kind of entrepreneurial opportunity creation (Downing, 2005; Franke et al., 2008; Markides, 2008), due to market imperfections (Cohen & Winn, 2007). The business model literature in the expression

of organizational theory represents six major themes including: 1. Organizational Design 2. resource-Based Perspective 3. Orientation and Meaning 4. Innovation 5. Nature of Opportunity and 6. transactive Structures. (George & Bock, 2011).

the business model is facilitating interference in the process of creating opportunity. The business model is defined as the link between innovation and value creation (Chesbrough & Rosenbloom, 2002), as well as a link between entrepreneurial assessment of opportunity and its exploitation (Fiet & Patel, 2008). Others focus on the transformative element of the business model and see the business model as a mechanism for exploiting opportunity (Amit & Zott, 2001). If opportunity is uncertain, the business model cannot be determined reasonably (Heirman & Clarysse, 2004)). The business model is sometimes seen with the business idea or value creation mechanism (Afuah, 2003; Markides, 2008), but distinguishes entrepreneurial opportunities from the company's profit management process. Investigating the use of the Venturer Capitalist business model relates the development of a business model with its potential business potential (Franke et al., 2008; George & Nathusius, 2007), but the mechanisms by which that opportunity and business model are not interconnected. (George & Bock, 2016).

In fact, studies have highlighted the relevance of opportunity in the structure of business model. In particular, the specialized language focuses on three areas for approval, including implementation, goals and ideas. The business model restricts the entrepreneurial idea to a defined opportunity, creates related goals, and limits the implementation of organizational activities that empower the opportunity. The business model develops with the knowledge and resources of the entrepreneur, and when organizational structures develop, it creates value through the exploitation of opportunities. In this framework, the business model is both a constraining and resource-constraining structure (Amit & Zott, 2001; Garnsey et al., 2008; Mahadevan, 2000; Morris et al., 2005; Tracey & Jarvis, 2007).). The developer's assumptions about the business model and its implementation activities will ultimately provide the opportunity for themselves. (George & Bock, 2011).

2.2 Opportunity exploitation

Entrepreneurship is about seeking opportunities and allocating resources to exploit it. Only during the process of exploiting the opportunity, opportunities are really created (Zahra et al., 2005). Therefore, both search and operation are needed to set up a new company. The exploitation of opportunity refers to what is being done to get an opportunity. Exploitation

includes activities such as modifying, evaluating, implementing, and commercializing (Bengtsson et al., 2005). The exploitation of entrepreneurial opportunity is a concept that needs to be explained to be evaluated as the result of entrepreneurial action. Entrepreneurs start their business process by searching for a business opportunity. When they rely on the profitability of the opportunity, they shift their focus from search to exploitation. (Choi & Gray, 2008).

Utilizing the opportunity to start an effective and complete operation to produce goods or provide services are the result of business opportunity. In this case, the entire entrepreneurial process depends on the decision of entrepreneurs to act on the basis of opportunity. Chow and Shefferd (2004) show that entrepreneurs' decision to exploit entrepreneurial opportunities based on their perceptions of the features of the new product and the recognition and capability is based on the research achievements of social psychology, entrepreneurship and organizational behavior. exploitation of opportunity with the tendency of individuals, perceived inner norms and perceived behavioral control (de Jong, 2012).

3. Methodology

The present research is applied in terms of purpose. In terms of collecting qualitative data it was done by using the grounded theory proposed by Strauss and Corbin. Data was also collected through a semi-structured interview and data analysis was conducted by coding. First, using open coding, the primary codes extracted from the interviews, the codes referring to the subject are grouped together after the concepts were extracted and the categories were compared and grouped. Twenty academics and entrepreneurs from ICT industry have been interviewed. The number of people selected for the interview is based on the adequacy of the data and the selection of samples is done in a purposeful way. After 11 interviews, due to theoretical saturation, there was no need for further interviews, but 20 interviews were conducted to enrich the statistical community. The information about the interviewees is also shown in below table.

Table1.

Interviewee's information

Entrepreneurs	Academic experts
<ul style="list-style-type: none"> - Education: Master and PhD - Practical experience in creating new ventures in ICT -Executive responsibilities in ICT -Sex: 10 men 	<ul style="list-style-type: none"> -Education: PhD -University professors, researchers -practical and academic experience in business model and opportunity exploitation and familiar with ICT industry -Sex: 7men and 3 women

For the validity and reliability of the study, Guba and Lincoln (1994) criterion of acceptability was used. In addition to the interview data being corroborated by the interviewees. Academic experts who did not participate in the study were also asked to review the findings. That is, after the interviews were transcribed for open coding interviews, the data pattern was also returned to the interviewees and asked whether the code was consistent with the idea that they had in their statements. Four academic experts were also asked to codify the interviews, along with the researchers. During the interview process, all details are reviewed and recorded. Some interviews have been repeatedly coded to confirm the reliability of the research method with the similarity of the extracted codes.

For data analysis, after referring to the interviews, qualitative data from the interviews were used in three stages of initial, open, and axial coding to classify data in similar groups. The factors from the coding table were identified and extracted and categorized, and then the final list of factors creating fitness between business model and opportunity were extracted for effective opportunity exploitation.

When it comes to analyzing the retrieved information, we use the key ingredients of qualitative: Open coding, Axial coding and Selective coding. Open coding is the first phase in doing data analysis. Open Coding or initial coding has started by carefully reading each annotation per selected interview in order to identify particular notions or opinions which may help in the coding process. In axial Coding, after finishing the open coding, the list of codes was revisited and the axial coding stage was begun. Therefore, the interviews were analyzed again and the codes were grouped based on their relationship. Finally, selective coding was engaged to refine and integrate the core concepts of these interviews.

4. Findings

As stated, the analysis of research data was based on the codification method presented in grounded theory method. The data obtained from the interview were classified in three stages. After the verbal statements of the interview were extracted by referring to the text of the interviews, verbal propositions were similar to the open source codes of the study and were composed of the same codes as the central codes. According to the purpose of the research, the text of each interview with the experts and entrepreneurs was examined and then according to the key points in the interview and conceptual labels were selected for them. After the initial coding, the codes were combined and the ones that were similar in the abstract classes were called concepts. The method of extraction of primary codes was by analyzing the text of the interviews and extracting the initial codes from them. Axial coding is, in fact, a method for creating concepts that is carried out through continuous comparative analysis and discovery of the logical relationship between codes with frequent reference to the original text of the interview.

In this study, after each interview and data collection, the research categories were formed and in subsequent stages of interviews, these categories were reviewed and modified.

At every step from initial codes to final categories, the process was criticized and modified by experts. In the coding, the codes of the interviewees are marked with the abbreviation S(scientist) and E(expert).

Table 2.

An example of a narrative statement of interviews

	Narrative statement	Open coding	Axial coding
1	Much of the costs of the company belongs to innovation	High share of innovation cost	The amount of innovation and creativity
2	Our company is more aware of our customers' expectations as well as their views than our competitors.	Higher awareness of target customers' attitudes, expectations and values than competitors	Market intelligence
3	Our staffs are highly knowledgeable.	Knowledge base of human capital	Focus on research and development

Table 3
Findings of the open and axial coding of interview

Axial coding	Open coding	Sample code	Frequency
Level of innovation & creativity	<ol style="list-style-type: none"> 1.High share of innovation costs 2. high level of novelty in value proposition 3. High innovation in distribution channel 4. High level of innovation in customer segmentation 5. High level of innovation in value chain 6. High level of creativity in employees 	E1-E2-E3-E4-E5-E6-E7-E8-E9-E10-E11-SI-S2-S3-S4-S5-S6-S7-S8-S9-S10	21
Market intelligence	<ol style="list-style-type: none"> 1. Higher awareness of target customers' attitudes, expectations and values than competitors 2. High alignment of product design with customer demand 3. Deep understanding of structure of market, industry and competitors 	E1-E2-E3-E4-E5-E6-E7-E8-E9- E10-S1-S2-S3-S4-S5-S6 –S7-S8	18
Quality management standards	<ol style="list-style-type: none"> 1. The high reputation of company in standard of quality of products and services 2. High quality control of products and services 3. Standardization of quality control procedures 	E1-E2-E3-E5-E6-E8-E9-E10-S1-S2-S3-S4-S5-S6-S7-S8-	16
product development	<ol style="list-style-type: none"> 1. The emphasis on redefining current products and services 2. High focus on selecting strong product development team 	E1 –E2-E3-E4-E5 -E7-E8-E9 - S1-S2-S3-S5- S6-S7-S8-S9-S10	17
Optimizing resources combination	<ol style="list-style-type: none"> 1. Effective usage of resources 2. Higher output than input 	E1-E2-E3-E5-E6-E8-E9-E10-S1-S2-S3-S4-S5-S6-S7-S8-	16
Flexibility	<ol style="list-style-type: none"> 1. High adaptation to environmental changes 2. High ability to identify key market changes 3. High resource allocation to respond to market changes 	E1- E3-E4-E5-E6-E7-E8-E9-E10-E11-SI-S2-S3-S4-S5-S6-S7-S8-S9-S10	20

Effectiveness of learning	<ol style="list-style-type: none"> 1. Improve company operations through knowing more about customer preferences over time 2. High knowledge exchange between employees and managers 3. High learning new things through direct customer observation and intra-company events 	E1-E2-E3-E4-E5-E6-E7-E8-E9-E10-S1-S2-S3-S4-S5-S6-S7-S8-S9-S10-	20
Agility	<ol style="list-style-type: none"> 1. Recognizing change in environment in a fast way 2. The ability to overcome unexpected challenges to address the unprecedented business environment threats and benefit from the benefits of changes. 3. Accuracy of forecasting changes in environment 	E1-E2-E3-E4-E5-E6-E7-E8-E9-E10-E11-S1-S2-S3-S4-S5-S6-S7-S8-S9-S10	21

According to the results of the coding, the factors of fitness between business model and entrepreneurial opportunity for effective opportunity exploitation in the ICT industry consist of eight main groups: level of innovation and creativity, market intelligence, quality management standards, product development, Optimizing resources combination flexibility, effectiveness of learning and agility. Level of innovation is related to the six factors of High share of innovation costs, high level of novelty in value proposition, High innovation in distribution channel, High level of innovation in customer segmentation, High level of innovation in value chain and High level of creativity in employees. The market intelligence includes the Higher awareness of target customers' attitudes, expectations and values than competitors, High alignment of product design with customer demand and deep understanding of structure of market, industry and competitors. Quality management standards is related to the high reputation of company in standard of quality of products and services, High quality control of products and services and Standardization of quality control procedures. Optimizing resources combination is related to effective usage of resources and Higher output than input. Flexibility refers to High adaptation to environmental changes, High ability to identify key market changes and High resource allocation to respond to market changes. Effectiveness of learning also includes Improve company operations through knowing more about customer preferences over time, High knowledge exchange between employees and managers. Finally,

agility is related to Recognizing change in environment in a fast way, The ability to overcome unexpected challenges to address the unprecedented business environment threats and benefit from the benefits of changes and Accuracy of forecasting changes in environment

5. Discussion and Conclusion

As stated, this research has been conducted in companies active in the ICT industry and the reason for choosing this new and dynamic nature of the industry is due to technological advances. With the growing growth of businesses in various industries and the dynamics of business space, attention to strategic issues and the development and design of the business model in the ICT industry is of great importance and the achievement of success in these businesses without the benefit of the design of the successful business model is not possible. Considering the significant role of ICT business in the country's economic growth and development, designing an appropriate business model that can fit with the features of opportunity is essential for effective opportunity exploitation.

Whereas in the ICT industry the importance of the dynamics and impact of rapid technology change is clearly evident, in that turbulent environment and with the high uncertainty in ICT industry, the business models of ICT companies need to be dynamic instead of static. In other words, they need to be in constant flow and respond to opportunities and threats in the external environment of the company in order to align with entrepreneurial opportunities.

Therefore, using the purposeful interviewing method and qualitative approach, this research has identified the variables of fitness between opportunity and business model for effective exploitation of opportunities in ICT industry.

Based on theoretical foundations and review of other researches and deep interviews and initial, open and axial coding of interviews with academic experts and entrepreneurs of the ICT industry, the measures of fit between business model and opportunity in the ICT industry were obtained with 8 main factors and 25 sub factors. These results show that the eight groups include level of innovation and creativity, market intelligence, optimizing resource combination, product development, flexibility, quality management standards, effectiveness of learning and agility.

A review of the literature also shows that flexibility is important in designing a business model (Combe et al., 2012; Farrell & Oczkowski, 2002). In fact, the concept of flexibility is

related to having a networked approach to business model design. The concept of a business model reflects the dynamic and consistent nature of business models and helps companies strategize and position themselves in the market (Hacklin & Wallnofer, 2012) in order to fit with opportunities. Therefore, businesses in the ICT industry must adapt their business model elements in a way that is flexible enough to adapt to environmental change and environmental dynamics.

A review of the literature also shows that one of the most important issues in designing a business model that leads to opportunity exploitation is related to the dynamic capabilities of companies (Eisenhardt & Martin, 2000). Thus, the ability of an organization to create, implement, and maintain a dynamic business model depends on how well the business models are able to enhance their dynamic capabilities (Teece, 2007). Thus agility as one of dynamic capabilities in an important element in fitness between business model and opportunity. As a result, companies in the ICT industry need to build internal and external competencies to address their rapidly changing environment to improve performance and design their business models from a search and research perspective that is key Function and tools to improve their internal and external capabilities and develop their new capabilities.

Innovation is also an important issue in business model literature because it is an important context for creating competitive advantage and restructuring organizations (Boons & Freund, 2013). A review of the literature shows that business model innovation and revision leads to sustainable competitive advantage (Cavalcante, 2014, Ranjith, 2016; Sosna et al., 2010). Therefore, companies in the ICT industry have to design and test new business models that fit their goals, re-evaluate and re-evaluate their business models in response to specific barriers that are largely external to adapt to market conditions. To respond to environmental change, management must be innovative, encourage subordinates to be creative, and enable them to make decisions. This should be done in a flexible and agile manner, and the decision-making process within the organization must be adapted to rapid changes in the environment in order to implement new ideas (Zabojnik, 2002). In order to opportunity, ICT managers must strive to create a culture that encourages employees to accept the risks that lead to new products. Therefore, managers of ICT companies should promote innovation in organizations, as innovation and openness lead to higher performance of these companies and consequently to improved processes. This means that ICT businesses need an open approach.

Market intelligence is another factor of fit between business model and opportunities. It means that, if companies want to reach to alignment, they should focus more on wants and preferences of their customers beside gaining more knowledge from competitors. It is obvious that, they should align their value proposition with the needs of customers. In addition, quality management standard is another measure of fit between business model and opportunity. Successful companies in opportunity exploitation are those that pay attention to standards of quality in their products and services. They have standard procedures for quality control in order to become famous in their quality in the industry. Optimizing resources combination is the fourth factors identified for measures of fit between business model and opportunity. It means that companies should focus on effective usage of resources in order to opportunity exploitation. Effectiveness of learning as another factor of fitness refers to High understanding of market dynamics and customer. Strong understanding and learning of changing customer preferences over time leads to effective learning. In this way, manager benefits from the experiences of partners and customers over time and There is a continuous improvement of knowledge in the company.

Identifying and explaining the factors of fitness between business model and entrepreneurial opportunities in the field of information and communication technology companies enhances the competitive advantage of these businesses and helps to achieve the company goals, influence customer acquisition decisions and gain lasting competitive advantage. Therefore, active companies in this field should focus on the dynamics of their business model and consider the factors influencing the fit between business model and opportunity in order to exploit opportunities.

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