



## A Comparative Analysis of Business Models to Provide Suggestions for Pre-primary Education Business in Iran

Zahra Eftekhari<sup>1</sup>  
 Mohammad Ali Nadi<sup>2</sup> (Corresponding author)  
 Fariba Karimi<sup>3</sup>

ARTICLE INFO	ABSTRACT
Received: 19 January 2020 Revised: 05 May 2020 Accepted: 30 May 2020 Online: 05 June 2020	There have been many changes and developments in educational services provisions. This paper aims at investigating preschool educational business models from the perspective of implementing existing models and providing suggestions for those involved in this service in Iran. This is a qualitative comparative paper using the thematic analysis approach and identifying similarities and differences. A theoretical sampling method (data saturation) was used to collect data and through the content analysis method, the main components of well-known business models were examined and analyzed. The research findings show that most business models account for the industrial and commercial components of the job and do not pay much attention to the appropriate components of educational services. The research findings also showed the similarity of the models studied in the main components of the customer, profit, cost, information resources, and proposed values. In addition, the similarity of the models in terms of their fitness with the main components in the field of preschool business indicates the superiority of the Prifti et al (2017) model over other models. The main suggestion of the current paper is to prepare a model for preschool entrepreneurship appropriate for the conditions and atmosphere of Iranian entrepreneurship. It is also suggested that preschool entrepreneurial capitalists, as key actors, clearly articulate their expectations of the business process model.
<b>KEYWORDS</b> Business Model Economics of Education Preschool Iran	

<sup>1</sup> PhD Student, Department of Educational Management, Faculty of Psychology and Educational Sciences, Islamic Azad University of Iran, Isfahan Branch (Khorasgan)

<sup>2</sup> Associate Professor, Department of Educational Management, Faculty of Psychology and Educational Sciences, Islamic Azad University of Iran, Isfahan branch (Khorasgan), Email: mnadi@khuisf.ac.ir

<sup>3</sup> Associate Professor, Department of Educational Management, Faculty of Psychology and Educational Sciences, Islamic Azad University of Iran, Isfahan branch (Khorasgan)

## **1. Introduction**

Educational services are also affected by modern technologies. In fact, education as a public good has become more commercially viable in many parts of the world. This accelerating trend is most evident in preschools. In fact, in most countries, pre-schooling is not considered part of the formal public education course, and governments do not take the responsibility of economic support and budget allocation (Dyrfjörö & Magnúsdóttir, 2016). On the contrary, the family is the most important social institution that is responsible for the preparation of preschool education in various ways, especially economically. Thus, preschool education has been one of the most active private education sectors for long. In addition, economic developments over the past half-century, coupled with the increasing need for maternal work income, have led to more and more children under the age of six being sent to private preschools every day. Therefore, the "generation of kindergarten" can be considered one of the inevitable features of life in the age of information and communication (Gustafsson-Wright, Smith & Gardine, 2017).

The growing dependence of families on preschools has led to the emergence of a phenomenon called "preschool industry or economics." This economy is flourishing day by day and shows the growing trend of establishing preschool centers in all human societies. Despite this ongoing growth, preschools have three main problems: first, the poor quality of education and the poor professionalism of educators to care for and educate children, second, the low number of good preschools compared to the number of children and third, the high cost of the centers for many families (Karoly & Bigelow, 2005). All of these three problems have somehow affected the boom of this business. In fact, the traditional model of preschool education, which is still pursued by investors in many countries, especially Iran, has features that do not like modern developments in modern life. Some of the features of the traditional preschool business management model are:

- Individual and scattered private sector investments without setting the stage for the establishment of trade union support institutions
- Personal management based on the personal experiences of founders based on trial and error
- Lack of organic connection with modern competitive business environment

- Limited geographical activity scope and customer attraction through traditional methods of visiting, direct dialogue, and contracting

Given these characteristics, it must be acknowledged that the emergence of new technologies has made it difficult to continue the traditional ways of doing business in the commercial field of preschool education. In fact, today's business process is changing rapidly due to the active role of new information and communication technologies, especially the internet. As a result, many traditional ways of doing business have evolved and new methods have emerged. The influence of new technologies is such that it has affected the way of life today and even preschool education (Stefan & Richard, 2014). On the other hand, new technology has not only provided many facilities for various economic fields, but has also created new needs, new resources, new products, and new attitudes and values. These values can be grouped into two categories: first, values that were previously discussed but did not have a suitable presentation platform, such as the convenience of accessing different resources or the customer's pricing power in the new space and second include values not discussed in the past, and only with the creation of new technologies they have become possible, such as diversity in products and services and the formation of related virtual communities.

These developments have made it inevitable to establish and create new organizations, institutions, and enterprises. On the other hand, new technologies have brought new achievements to customers (Zott, Amit & Massa, 2010). One of the most important achievements is increasing customer choice. This power includes many benefits such as increasing customer information about goods and services, the novelty and attractiveness of the way services are provided, and increasing bargaining power to reduce the price of services. What is important in this regard is the model that stakeholders and investors use in their business process. In fact, business process management models are crucial to uncovering the hidden value of existing or new technologies in achieving business goals. Technology alone is not economically viable or it is not the ultimate value, but the economic value of technology is determined when it is developed and commercialized through a particular business model. These are business models, not technology, that play a major role (Pazhouhesh Jahromi 2018). From an organizational point of view, the business model is portrayed as a factor in the structure and design of the organization, that is, a manifestation of how the organizational body is structured (Winter & Szulanski, 2001), how the company interacts with stakeholders (Santos, Spector, & van der Heyden, 2015), and the consequences of structures on

company performance (Casadesus -Masanell, & Ricart, 2010). Using this perspective, business models are defined as content, structure and monitoring of inter-organizational, extra-organizational, and intra-organizational interactions that create, present, and acquire value (Pazhouhesh Jahromi, 2018). Furthermore, a business process model is the core of a competitive response of any organization, institution or firm to the market, values, the required activities, resources, knowledge, and profit (Wirtz, 2016). Therefore, the business model originates from the strategy of the organization or enterprise and is used as a model for designing business processes (Rezvani & Rouhani, 2013). Lim et al. (2004) believe that models are a set of organizational strategies for managing business processes. Entrepreneurial modeling helps to illustrate the logic of the organization or enterprise. Also, human activities are often influential in the process of preparing a model. For example, a team that maps the process and observes, interprets, and analyzes the job process plays a key role in preparing the final model. Also, the increasing complexity of business processes has led to an increase in the size and complexity of existing models. These two factors are among the most well-known factors that reduce the ability to understand models (Sanchez-Gonzalez et al, 2012). The ability to understand a model is the degree to which the information contained in it can be easily understood by the observer and the reader (Reijers and Mendling, 2011). Recker (2016) argues that business models that follow a complex process are more misunderstood; while modeling skills (Zugal, 2013) processing knowledge (Reijers & Mendling, 2008), activity label (Moody, 2004) symbol design (Reijers & Mendling, Dijkman, 2011) and learning style and strategy (Leymann & Roller, 1991) have a significant effect on model understanding.

Given the importance of designing business process models in Iran and during the last two decades, investors, managers, and also management researchers have tried to develop business process models and main factors and components. For example, Rouhani et al. (2015) identified managerial, organizational, process, and human factors in a study entitled "Key Success Factors in Implementing a Business Process Management System." Kalhori and Hajiheidari (2012) found that information technology and senior management are the two main factors that affect organizational readiness for successful implementation of business process management. Joneidi Jafari and Setayeshi (2019) also pointed out different styles of cognition affect people's perceptions of business models. Despite the efforts of Iranian researchers to develop business process models in various fields of work, so far no model has been developed for the commercial field of preschool education. There are three reasons: first, the large number of investors in preschool centers,

second, the absence of a cohesive professional identity and trade unions and third, the pursuit of traditional business models and the difficulty of developing new models (Neuman, 2015). Naturally, one of the first steps in developing business models is to identify and compare existing models. These models are generally provided by researchers, private preschools, educational institutions, and universities. Also, these models may not be directly related to the preschool course at first glance and may be related to one of the other courses of study or other areas of business. However, the choice of these models is based on the maximum similarity of its factors and components with the characteristics of the entrepreneur in the preschool stage. Accordingly, the current paper aims at analyzing the models in the business management process in order to provide suggestions for preparing a suitable business model for preschool business in Iran. Thus, the main research questions are:

First: What are the main features of business models?

Second: What are the similarities and differences between the models?

## **2. Research Method**

This is a comparative content analysis paper with a qualitative approach. Content analysis is used as a method in the analysis of social and educational issues (Altheide, 1996). This paper examines preschool business models. Data was collected using the content of national projects, databases, books, and assertions released in 2019. The implementation stages of content analysis included six stages of statistical population (58 sources), study of texts, determination of components, determination of the registration unit, counting of many components and quantitative and qualitative analysis. The method of data analysis was to convert the sentences and sections in the models into the basic categories of the business according to the research literature and then determine the frequency of the components.

## **3. Results**

### *Step 1: Describe the models*

Comparing business models can be somewhat predictive of their performance. Modeling the business management process helps by visualizing the process of doing activities related to

professional landscape development, knowledge sharing, and decision making. This section describes the features of a number of research-related models:

- *Ferlatte and Justis Model*: Nicholas Ferlatte and Cleveland Justis (2012) developed a model for the Institute of Education in the Pacific Historic Parks of California, USA. The business is relatively simple for an educational institution: indirect and program costs spend the largest share of the revenue, which is highly dependent on the choices made about the indirect costs, composition of program, pricing and potential demand. This model offers three potential scenarios for the ideal: aggressive, mixed, and conservative. An aggressive model is built with extensive investment in marketing, sales, and fundraising. The aggressive model focuses the institute's efforts on shorter programs and reaching target markets with the ability to pay high program costs. The mixed model shows the balance between the main and marginal programs. This model shows the average amount of start-up investment and requires a combination of marketing and development to gradually enter the final stage. The conservative model creates more conservative financial assumptions than the previous two models, and is based on portfolios and programs for children and teachers in the local school and program with low-volume, high-content and low-focus groups. This model will take longer to achieve financial stability, and institutions will have significant confidence in fundraising. Staff recruitment takes place over a long period of time. There will be less emphasis on sales and marketing, and growth will be gradual.
- *Drozadová Model*: Like other firms and institutions, it is natural for educational institutions to change their current trends and activities and to present a new business model in the new social conditions. Drozadová (2008) presented this model in 2008 and refers to two categories of educational system tasks and infrastructure tasks. According to the model, the functions of the educational system include five sections of students, educational procurement, organization and management, information processing, and information resources, while infrastructure tasks of model include terminal equipment, communication network, information processing software, communication services, selection and information processing and software application. All of these sections are directly connected to the communication network and through it they are connected to different sections of the educational system except the student. Information resources are much

more diverse than in the past. In addition to the printed form and electronic form, it is possible to process, store, select, transfer, search and present them electronically. Information processing is closely related to information resources. Because existing information resources cannot be used directly for teaching, they need to be tailored to the needs and wants of students. The educational organization depends on the type of educational institutions. There are significant differences between primary and secondary schools, universities, and business institutions that provide learning opportunities. An educational organization means the establishment of a institution and the conditions of legislation and duties related to the performance of the educational institution. Learning is the most important part of structural work. The whole business model is created for the learner. If all parts of the model need to fundamentally change their current paradigms, the learner will not be an exception to this rule (Drozadová, 2008).

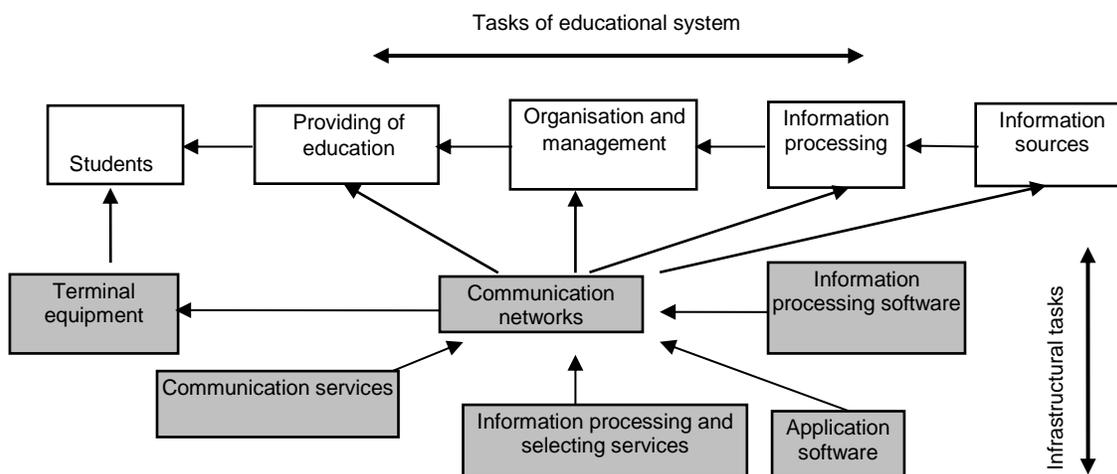


Fig 1 .Business model of educational institution providing e-education

- Luttikhuis Model:* The Luttikhuis model is the result of a research study by a master's degree program at the University of Twente, the Netherlands. The research titles "the first steps in identifying the future business model for higher education institutions". The researcher emphasizes in today's economy the technology has impacted personal, social, cultural and professional life by the computer network revolution. This has a huge impact on the role of educational centers and the traditional knowledge transfer model. So it is time for educational institutions to do this. Emerging technologies are welcomed. Of course,

part of this goes back to their redefinition of the business management process. Thus, the researcher has tried to interview using the Canvas model to identify the main components of a business at the university. The Luttikhuis model has 7 components that indicate the future university should take into account in its current educational strategies. The biggest hurdle is the cost of implementing an e-learning strategy. The future university must operate in an environmental system to meet new learning challenges. The ecosystem includes various members, namely suppliers, the research department, information and communication technology and education companies (2016). The main components of the model are key partners, key activities, value propositions, customer relationships, customer segments, key resources, communication channels, cost structure, and revenue streams.

- *Bin Yahaya and Bin Ahmad Dahlan Model:* The researchers aim to redesign the business model as one of the newest business models at a local university in Malaysia. The purpose of this business model, which is in great demand in the higher education environment, is to take into account information technology in a revolutionary way in the concept of digital smart campus strategy. Researchers emphasize that Malaysia seeks to create academia not only for local people, but for all human beings around the world. Therefore, the Ministry of Higher Education (MOHE) is trying to collect suggestions and ideas for reforming the business model of the educational system to turn the country's universities into "future universities" using the new structure of information technology through cooperation with the government, industrial training companies, and industrial technology companies (Bin Yahaya, & Bin Ahmad Dahlan, 2015). The main components of the proposed model of these researchers are: 1) strategies including the definition of general strategies that are desired to be realized in the global market through full effectiveness, 2) activity profiles including the definition of activities that are associated with special success, and 3) experiences including the experiences of students, staff, and partners to support future strategies, 4) brands including the definition of new brands for students, staff and institutions, and 5) outputs including defining strategic outputs for each stakeholder group.
- *Afuah and Tucci Model:* The Afuah and Tucci model has four determinants of profitability that affect all activities of an institution or company. First, the industrial factors that examine the impact of market elements, including competitors, barriers, and customers,

resources that help differentiate value, costs that brings a new kind of value, i.e., low cost model, and positions that are looking for suitable locations that are not occupied, or the company or institution can add a new market to its existing market. The collaboration of these components creates a successful business model, and their uniqueness is a source of competitive advantage (Afuah, 2003).

- *Osterwalder and Pigneur Model*: This model refers to the structure of the organization in an effective business model and shows the distribution channels, suppliers, and raw materials in the three economic, social, and biological layers of the business (Joyce et al, 2016). This model has received considerable attention and acceptance, and most of the world's successful schools use it as a guide to their activities. This model accounts for the design of infrastructure and profitability mechanisms (Tecce, 2010), useful manpower, education and effective communication (Solis et al, 2014), the patience in the time of uncertainty, and the discovery of new opportunities in the communication environment. The model also answers three key questions: which activities, how and when should be performed. Alexander Osterwalder and Yves Pigneur (2002) use the concept of canvas to explain the nine components of their model: customers segments, customer relationships, distribution channels, value proposition, core resources, core business, partners, cost structure, and revenue stream. The canvas is a powerful tool for visualization and clearly demonstrates all of its components and connections.
- *Prifti et al. Model*: Prifti et al. (2017) tried a new type of service called Education-as-a-Service model at the Munch Technical University of Germany, with the aim of gaining a deeper understanding of emerging job models in the field of education. They also used the Canvas model as a general structure and found that there are many commonalities between business models. Accordingly, their model includes the main components of the Canvas model, but with new components. These components are:

*Key Partners*: Usually limited to software developers, but there may be other partners, such as hardware and infrastructure partners, as well as training institutions for technical knowledge, curriculum, or training development. Each of these partners is critical to providing the services and contributes to services at various levels, including hardware and infrastructure, software or curriculum.

*Main Activities:* They refer to the usual activities of the provider, such as installation, operation, and maintenance of infrastructure. Developing a curriculum or training and maintaining support tools and services are other important activities. Technical, practical, support and curriculum are other key activities, while teacher training should be highlighted as a key activity of the EaaS provider.

*Key Resources:* There are three main resources: a reliable IT infrastructure, staff knowledge, and training and support materials. A case study showed that software licenses for system performance and support tools can be among the main resources.

*Value Proposition:* EaaS may provide many benefits for teaching by providing an up-to-date and reliable infrastructure, which creates modern teaching scenarios, and the ability to start quickly on innovative topics.

*Customer Relationships:* Creating collective portals as a platform for the exchange of knowledge between EaaS providers and their customers. Such tools help to produce and maintain customer relationships. EaaS providers also provide personal support to teachers and researchers. Collaborating with some customers to develop and improve curricula is another type of customer relationship.

*Channels:* An EaaS provider can present its services to prospective customers at research conferences, arrange user group meetings for existing customers, and meet new or existing customers through the portal or through contact email.

*Customer Segments:* Customer segments consist of customers who focus on training and research. Customer training may include: schools such as secondary education institutions. In addition, continuing education is more important for employees, so companies and individuals who want to learn more may also be interested in offers.

*Cost Structure:* Costs may include hardware costs, license fees, infrastructure costs such as electricity, telephone, technical equipment, and training and executive staff costs.

*Revenue Streams:* There are two options for revenue streams. The first is payment for each use and the second is the annual subscription. Experimental evidence suggests

that subscription is more appropriate for the EaaS business model, although the payment model may be more successful for any use in other business areas. In teaching, it is necessary for teachers and students to be able to act on their tasks without the pressure of time and worries (Prifti et al, 2017).

*Table 1*  
The main components of Prifti et al. business model

<b>Key Partners</b> <ul style="list-style-type: none"> <li>• Hardware providers</li> <li>• Software providers</li> <li>• Infrastructure providers</li> <li>• Content co-creators</li> </ul>	<b>Key Activities</b> <ul style="list-style-type: none"> <li>• System setup</li> <li>• Technical maintenance</li> <li>• Running a support infrastructure</li> <li>• Train-the-trainers</li> <li>• Curriculum support</li> <li>• Curriculum development</li> </ul>	<b>Value Proposition</b> <ul style="list-style-type: none"> <li>• Enabling a quick start for teaching, training, or research based on new, innovative software</li> <li>• Provide access to cost-efficient, reliable, up-to-date enterprise systems for teaching, training, or research</li> </ul>	<b>Customer Segments</b> <ul style="list-style-type: none"> <li>• Teaching                             <ul style="list-style-type: none"> <li>• Institutions of higher education</li> <li>• Vocational schools</li> <li>• Secondary schools</li> </ul> </li> <li>• Training                             <ul style="list-style-type: none"> <li>• Companies</li> <li>• Everyone interested</li> </ul> </li> <li>• Research</li> </ul>	<b>Customer Relationships</b> <ul style="list-style-type: none"> <li>• Service desk</li> <li>• Selfservice</li> <li>• Newsletters</li> <li>• Portals</li> <li>• Communities</li> <li>• Co-Creation</li> <li>• Email</li> <li>• Individual assistance</li> </ul>
<b>Revenue Streams</b> <ul style="list-style-type: none"> <li>• Subscription fee</li> <li>• Pay-per-use</li> </ul>				<b>Channels</b> <ul style="list-style-type: none"> <li>• Internet/online-services/email</li> <li>• Phone</li> <li>• Conferences etc.</li> </ul>
<b>Key Resources</b> <ul style="list-style-type: none"> <li>• Reliable IT-Infrastructure</li> <li>• SW-licenses</li> <li>• Staff qualified for maintenance, curriculum development, and support</li> <li>• Curricula</li> </ul>		<b>Cost Structure</b> <ul style="list-style-type: none"> <li>• Hardware</li> <li>• Infrastructure (incl. buildings, energy, etc.)</li> <li>• Software, licenses</li> <li>• Staff</li> </ul>		

Source: Prifti et al, 2017

*Step 2: Compare the models*

This step consists of two parts. First, the main elements or components of the models are presented in a comparative table, and then the similarities and differences of the models are examined. Table 2 shows the main components of each model.

*Table 2*  
The main elements and their number in business models

No.	Model	Main components	Number of components
1	Osterwalder and Pigneur	Customer Segments, Customer Relations, Channels, Value Proposition, Main Resources, Main Activities, Partners, Cost Structure and Revenue Stream	9
2	Afuah and Tucci	Industrial factors, resources, costs, situations	4
3	Prifti et al.	Customer segments, customer relationships, channels, value proposition, core resources, core business, partners, cost structure and revenue stream	9
4	Bin Yahaya & Bin Ahmad Dahlan	Strategy, activity profile, experiences, brand, output	5
5	Luttikhuis	Key partners, key activities, value proposition, customer relationships, customer segments, key resources, communication channels, cost structure, revenue streams	7
6	Drozadová	Students, Educational Procurement, Organization and Management, Information Process, Information Resources, Terminal Equipment, Communication Network, Information Processing Software, Communication Services, Selection and Information Processing Services, Software Application	11
7	Ferlatte and Justis	Aggressive, mixed and conservative	3

The data in the table show the diversity of the main elements or components of the business model and its designers have not set a specific limit for themselves. Among these, the Drozadová and Ferlatte and Justis models, with 11 and 3 components, have the highest and lowest numbers of main components. Also, the components of the Prifti et al. model are the same as that of the Osterwalder and Pigneur models, but they have been developed for different businesses. In addition, the components of the Osterwalder and Pigneur models have generally been taken into

account by other designers and used in different terms or with minor modifications. Table 3 is the similarities and differences between the components of the models.

*Table 3*

The similarity and difference of the models according to the main components

Components/ model	Customer	Cost	Activity	Revenue	Communication network	Information resources	Proposed value
Osterwalder & Pigneur	*	*	*	*	*	*	*
Afuah and Tucci	*	*	*	-	*	*	-
Prifti et al.	*	*	*	*	*	-	*
Bin Yahaya & Bin Ahmad Dahlan	*	-	*	*	-	*	-
Luttikhuis	*	*	*	*	*	*	*
Drozadová	*	*	*	-	*	-	*
Ferlatte and Justis	*	-	-	*	*	-	-

The features and characteristics of the models analysis shows that developers have taken 7 main components into account. The customer component is the only common to all models, because in principle, business models are designed to maintain and increase the customer. Also, the table data shows that, despite the fact that the Osterwalder and Pigneur model is one of the first business models and has a time precedence over other models under study, the comprehensiveness of this model with seven important components is still more than the models. Of course, in terms of comprehensiveness, the Luttikhuis model is also completely similar to that of the Osterwalder and Pigneur. On the other hand, it seems that the Ferlatte and Justis model is the most different from other business models, which can be largely attributed to the distinctive attitude of the designers of this model. The table data show that most business models are similar to each other in at least 5 main components and the maximum difference between them is in the two components of value proposition and information resources.

The other important point the current paper accounts for is the fit of business models with the field of preschool education. What happens in the preschool education process as a business area is based on the fact that the main purpose of this job is to provide opportunities for the social presence of children under the age of 6. Therefore, the main elements expected in a business model related to preschool education may include the following components:

- Customer: Children and their parents
- Cost: Including hardware costs (kindergarten and welfare and educational equipment), personnel costs (coach salaries), current costs (water, electricity, gas, telephone, etc.)
- Activities: All educational activities
- Profit: Deducting expenses from the center's income
- Communication network: Traditional (banner, brochure, poster, radio and television advertising, publications) and modern (new technologies such as website, online advertising, etc.)
- Information sources: Traditional (parents, educators), modern (databases)
- Value proposition: Social education

Accordingly, now we may compare the models according to the importance given to the components of preschool business (Table 4). A review of the Table 4 data content of business models shows that some of the designers of the models have given more importance to the commercial elements and components than the educational components, while a reasonable fit should be made between the elements of the model with the nature of the business. Accordingly, out of the 7 models studied, the degree of emphasis on commercial components in 4 models is very high. It should also be noted that all models take into account educational factors on average, which shows the similarity between them. Also, the comparison of the models shows that only 3 models have a great emphasis on the role of educational factors and have clearly pointed out factors such as students, teachers, teaching materials, and educational management. In the meantime, it can be said that the Prifti et al. model developed at the University of Munch in Germany is the best model for the preschool business model in Iran. Of course, to a lesser extent, Bin Yahaya and Bin Ahmad Dahlan and Drozadová models have also emphasized the role of educational agents. In addition, the data in the table shows that the inclusive factor (or customer) is the most important educational factor considered in most models. In a nutshell, there is the biggest difference between

the three models of Osterwalder and Pigneur, Afuah and Tucci and Luttikhuis with other models in terms of emphasis on educational components.

*Table 4*

Comparison of business models in terms of the importance given to the components of preschool business

Model	Degree of emphasis on business components	Degree of emphasis on educational components	Emphasized educational components	Model type
Osterwalder and Pigneur	High	Medium	Inclusive as a customer	Book
Afuah and Tucci	High	Low	-	Book
Prifti et al.	Medium	High	Curriculum, students, teaching materials, teaching scenarios, teachers, staff knowledge, teacher	Minch University of Germany Project
Bin Yahaya & Bin Ahmad Dahlan	Medium	High	Student, staff	Malaysian University paper
Luttikhuis	High	Medium	University	Thesis, University of Tont, the Netherlands
Drozadová	Medium	High	Inclusive, education, management, information resources	Paper
Ferlatte and Justis	High	Medium	Children, teachers	Project of the California Institute of Education

#### **4. Conclusion**

The preschool education system in Iran has been largely run by the private sector during its more than 100-year activity. In fact, despite its many ups and downs, preschool education is merely a part of the education system with the government's little interest in intervening in its mechanism. Thus, the preschool education system, like many other countries, has largely found a non-governmental identity based on a business-educational activity. Naturally, in order for this identity to continue, it is necessary for the preschool business, like other businesses, to adapt to the changes and developments of modern life, especially new technologies. That is why paying attention to the design of new models of preschool business is one of the challenges for private investors in this economic sector.

The literature review showed that, firstly, the concept of business management and design of its models is still a new conceptual field both among researchers (academic space) and in the business world. Hence, the researchers have not been able to find studies that show the possible role, dimensions and challenges of using business models in the field of preschool education. Thus, the current paper enjoys the advantage of taking into account this business for the first time. Second, most business models are developed for industry (factories) or services (commercial companies) and are not well-suited to the business environment of preschool education as a semi-commercial field. This finding is consistent with that of Stephen and Richard (2014), which shows that existing models generally include industrial components that do not belong to the educational model. Therefore, their components may be able to determine the external environment of the characteristics of the preschool business model, but they are incapable of determining its internal environment. Third, a number of existing models have failed to well demonstrate the role of new technologies in the core components of preschool business. This finding is consistent with that of Slavick (2011) and Soleimani (2014), which show that these models represent the preschool business as a system. They do not define complexity and suffer from the fundamental weakness of not being able to properly demonstrate the causal relationship between the components that represent their connection with each other in an educational setting.

Given these limitations, the research findings showed that the researchers focused on 7 business models that were somewhat more in line with the field of preschool education. Other

findings of the research indicate the content analysis of different parts of each model. Accordingly, research has shown that in terms of the comprehensiveness of the elements, the Osterwalder and Pigneur model is the best in Iran. Also, in terms of the appropriateness of the main factors of the model with the preschool business environment, the Prifti et al. model developed at the University of Munich, Germany may be one of the best models for investors and the private education sector in Iran. The results of the research can be used to guide preschool center principals to successfully implement business process management. Research findings also help to gain an overview of the current state of preschool business models. The main suggestion of the current paper is that, due to the short history of the idea of using the business model in the private sector of preschool, managers need to provide a suitable model with the conditions and business environment in Iran. It is also suggested that preschool businesses as key actors clearly define their expectations of the business process model. Coordination between other key model actors (parents, educators, and children) should be considered in the model. Entrepreneurial modeling as a modern and powerful tool can help develop job opportunities and increase private sector income in the field of preschool education.

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