

## ANALYSIS OF SOCIAL AND MACROECONOMIC ENVIRONMENT OF CROATIAN PRESCHOOL SCHOOL SYSTEM

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### Abstract

Analysis of the environment is the first mandatory step in strategic planning procedure regardless of the type of institution of interest. The paper discusses how the educational institutions in the Republic of Croatia adapt to changes in the environment and the regulatory frame work. Kindergartens are used as an example as they are often neglected part of educational school system. In the first part of the paper described are various approaches to the environment analysis with the emphasis on PESTLE. Further on, PESTLE analysis is applied to the analysis of the immediate and larger environment of the kindergartens. It is argued that the competitiveness of educational institutions, and especially kindergartens, in the future will largely depend on the speed of their response to changes in the environment and their ability to correctly estimate and anticipate the priorities and needs of their stakeholders. Results are put in the context of current global and Croatian social and economic trends. They stress major characteristics and trends affecting Croatian preschool system and also identify key success factors for the operations of established kindergarten. In conclusion, given are recommendations for further research specific for the management of preschool educational institutions that should be done to support the findings of this paper.

**Keywords:** *kindergarten operations, strategic management, PESTLE analysis, educational system*

## Introduction:

In the Republic of Croatia primary form of preschool education is kindergarten. According to the Ministry of science, education and sports of the Republic of Croatia there are 673 kindergartens with the total number of facilities 1598. 238 or 35.40% kindergartens are privately owned (175 are founded by physical persons, 50 by religious institutions and 13 by nongovernmental organizations - NGOs). While the rest of 435 or 64.6% owned by local or municipal public authorities. Number of children enrolled totals 151.514 or 58% of all eligible children in Croatia. 29.320 of them 19.4% are enrolled in private institutions while the rest of 122.194 or 80.6% are enrolled in public kindergartens. According to data of Ministry of science, education and sports 112.346 children or 74.1% attend regular full-day programs (table 1). 15.668 or 10.4% are in preschool preparation programs and 23.500 or 15.5% children in shorter half-day programs. Approximately 72% of children spent eight and more hours per day in kindergarten, 16% spent from five to eight hours per day and 13% children less than five hours (table 2.).

Kindergartens network employs a total of 16.133 employees of which 10.021 are educational employees and 6.112 technical employees. Among educational employees there are 721 expert associates (314 pedagogues, 173 psychologists and 234 special education teachers) and 216 senior nurses.

Founder	Total number		In regular programs		In preschool <sup>1)</sup>		In shorter programs	
	All	Girls	All	Girls	All	Girls	All	Girls
Total	128 046	61 348	114 394	54 626	11 378	5 474	2 274	1 248
Republic of Croatia	1 970	940	1 913	913	57	27	-	-
Local government and self-government units	106 834	51 112	95 055	45 327	9 986	4 729	1 793	993
NGOs	15 965	7 673	14 278	6 824	1 227	605	460	244
Religious institutions	3 277	1 623	3 105	1 562	108	50	21	11

Table 1. Children by type of preschool education program and by sex, beginning of 2012/2013 school year (source: [http://www.dzs.hr/Hrv\\_Eng/publication/2013/08-01-08\\_01\\_2013.htm](http://www.dzs.hr/Hrv_Eng/publication/2013/08-01-08_01_2013.htm) ).

Founder	Children		Time spent daily in preschool programs, hours			Percentage of children by time spent in preschool programs, hours		
	All	Girls	Less than 5	5 – 8	8 and more	Less than 5	5 – 8	8 and more
Total	128 046	61 348	16 285	20 107	91 654	12,71	15,70	71,57
Republic of Croatia	1 970	940	68	357	1 545	3,45	18,12	78,42
Local government and self-government units	106 834	51 112	14 037	16 235	76 562	13,13	15,19	71,66
Other domestic legal entities and natural persons (private)	15 965	7 673	2 009	2 859	11 097	12,58	17,90	69,50
Religious communities	3 277	1 623	171	656	2 450	5,21	20,01	74,76

Table 2. Children, by sex and by time spent daily in preschool programs, beginning of 2012/2013 school year (source: [http://www.dzs.hr/Hrv\\_Eng/publication/2013/08-01-08\\_01\\_2013.htm](http://www.dzs.hr/Hrv_Eng/publication/2013/08-01-08_01_2013.htm) )

## PESTLE analysis of Croatian preschool education system

The goal of the educational process is the inclusion of all children in the program as it develops, and according to available data it can be concluded that there is insufficient number of children covered by the programs of early education. The priority is to make available material, physical and personnel resources for the inclusion of all children prior to the year before they start school preparation program, including all the children with more than three years of age. These efforts should be realized through the strategic planning process, especially referring to setting clear vision statement as to respond to changes in the environment. Each educational institution should develop its own unique strategy that is the consequence of institution's vision and specific circumstances in the environment. General social environment was analyzed with PESTLE analysis. PESTLE analysis is an analysis of the business environment and provides a basis for development of strategic plans, as its task is to determine the factors that affect the business which are categorized as threats and opportunities. Basic PEST analysis covers political, economic, social and technological factors. Political factors include trade policies, the process of establishing kindergarten, the influence of lobbyists, governmental policies, foreign relations, political trends, governmental structure and internal political issues. Economic factors include domestic economic policies, tax policies, disposable income, unemployment rate and the index of consumer confidence. Social factors include the views of consumers, the media, business reputation, consumer buying habits, ethical issues of advertising and publicity, demographic change, education, health and fashion and role models. Under technological factors, discussed are the impact of the outdated technology and the importance of its improvement, the importance of information and communication, information technology and the Internet. The basic PEST analysis was extended with two more specific factors legal and ethical/ecological. Legal factors include the current and future legal regulation, a European legal framework, collective agreements, labor legislature, consumer protection act, legal regulation of users, the duration of the legal proceedings and registration of ownership of the kindergarten. Ethical / environmental factors refer to environmental concerns and regulations, consumer values, attitudes of employees, managerial style of leadership, organizational culture, employee morale, employee involvement and their professional education. PESTLE analysis was based on RapidBi template for PESTLE analysis (RapidBi, 2014). PESTLE factors were categorized as: no impact, impact and high impact. Potential impact may be L- low, M- medium, H- high or U- undetermined. It was also considered the time period of influence (0-6 months, 6-12, 12-24, 24 months and more). The impact factor was also considered as: positive (+), negative (-) or the connection remains unknown (?) and with the potential trend to be increasing (>), unchanged (=), decreasing (<) or unknown (?). The relative importance of the influence was stratified as critical, important, unimportant and unknown. Results are presented in table 3.

Factors	Notes	Potential Impact:	Implication and importance			
			Time Frame:	Type:	Impact:	Importance:
	(How might the factors listed on the left impact your business or part of the organization?)	H – High M – Medium L – Low U – Undetermined	0 – 6 months 6 – 12 months 12 – 24 months 24 +	Positive + Negative – Unknown ?	Increasing > Unchanged = Decreasing < Unknown	Critically Important Unimportant Unknown

			months			
<b>Political:</b>						
Trade policies	No impact	L	-	?	=	Unimportant
The process of establishing kindergarten	High impact	H	24+	?	=	Important
The influence of lobbyists	Impact	M	6-12	-	=	Important
Government policies	High impact	H	12-24	?	>	Important
Political elections	High impact	H	24+	+	=	Important
Inter-country relationships/attitudes	High impact	H	6-12	+	>	Important
Political trends	Impact	M	24+	?	<	Unknown
Government structures	High impact	H	12-24	?	>	Unknown
Internal political issues	Impact	M	-	?	=	Unknown
<b>Economic:</b>						
Domestic economic policy	High impact	H	6-12	?	=	Important
Tax policy	Impact	M	6-12	?	=	Important
Seasonality and weather conditions	High impact	M	0-6	+	>	Important
The distribution trends	Impact	H	6-12	?	=	Important
Disposable income	High impact	H	6-12	?	=	Important
Unemployment	High impact	H	6-12	-	<	Critically
The index of consumer confidence	No impact	H	24+	?	Unknown	Unknown

## Discussion

If one looks closer on political factors one may find that the range goes from those that have no influence to those whose influence is very important. It is therefore considered that trade policy has no effect on the improvement of conditions in preschools. On the other hand, the process of establishing institution has very important impact. Preschool can be established by the city or private individual. If the preschool is established by the city, it adapts to the environment slower than in the preschools founded by a private NGOs. It is therefore considered that the process of establishing has a critical importance due to the changes and reactions to changes in immediate environment. Private preschools become increasingly competitive to public preschools. The influence of lobbyists, which differ with respect to the individual need of preschool, currently has a secondary importance because preschools are crowded with not enough capacities to enroll all interested children. Parents are forced to enroll their children where there is a place for their child, so that lobbying does not make much impact on enrollment. With the reduction of number of children, it is assumed that lobbyists will increase their impact to enrollment processes. Government policies have major impact as the government is responsible for natality policies. Croatian political parties still encourage family oriented, pro birth-rate increase policies so it is considered that in the next two years these policies will have positive effects. Local community relations for preschool are always very important and therefore the influence period was estimated to 0-6 months. Good cooperation with the city, the city's office of education, local authorities is something that each manager of kindergarten strives to achieve.

A second group of factors consists of economic factors, which are also positioned in the range with no influence to those very influential. One of the most influential factors in this area is the domestic economic situation, especially in the cities where the preschool is paid based on income of parents. If the income of the parent increases, they accordingly pay more, which means fewer subsidies from the city. In that way, local communities try to increase the quality of preschool educational programs. As disposable income and unemployment rate are considered it is expected that their impact will be negative as the current economic crisis is expected to last for at least 12 more months. The economic factors belonging to the index of consumer confidence refers to the perceived quality of each institution. As there are not enough available facilities to provide preschool educational programs for all interested children consumer attitudes habits and lifestyle do not have substantial influence to the kindergarten selection process. Main criteria for enrollment of children refers to available facilities that diminishes the possibility that the parent will be able to look for some better and avoid worse preschools. In the next two years is not expected that situation will change. As far as private kindergartens are concerned situation is somewhat different because the their enrollment policy is not based on subsidies from local communities but rather on competitive issues such as price, program variety, employed personnel, etc. Consumer habits have a greater impact because parents still have greater trust stated to city preschools and therefore privately owned kindergartens are less favored. For public preschools this has a positive effect and is not considered to change within next six months. Demographic changes affecting preschools due to migration from the rural to urban areas are not expected to have substantial impact in the next two years. Ethnic issues are still influential, due to inclusion of ethnic minority children in preschools which always brings positive changes. Education, vocational training and professional development of all staff in preschools is considered very important. New pedagogical, technological, medical, and nutritional research has a huge impact on the quality of the educational process. Stoll and Fink (Slunjski et al. 2012) suggest that the speed of learning in the organization must be equal to or greater than the speed at which changes are occurring in the environment, if the institution wants to survive and sustain. The same authors call the associates' process of continuous professional development as a process of constant evolution. The new programs that kindergartens will offer, the new forms of communication with parents, a suitable nutrition or the inclusion for children with health related issues in the short or full-day programs, all those are ways in which a nursery can keep the trust of old and gain the trust of new customers. Considering that the training of educators for managing programs in kindergarten (sports, languages, etc.) lasts about a year, positive changes can be expected in a period of one to two years.

Technological factors are estimated being influential to very influential and they should be changed as soon as possible to exploit the possibilities of contemporary information and communication technologies. As preschool institutions are not very technologically advanced, there many opportunities for improvement of educational programs, especially administrative work inside and between institutions (such as an exchange of administrative and fiscal data with the local community and public institutions) through implementation of electronic commerce solutions. Also, investments in ICT would provide the opportunity for parents to better communicate with the entire preschool system.

Legal factors are rated from very influential to influential. Current legal framework has a huge impact, and changes that possibly could come in the future cannot be estimated because this is associated with elections and government policy. Therefore is rated the future legal regulation too. Very influential is considered employment regulatory framework as it regulates the preschools' employees and their duties and obligations in details, with very little

flexibility. European legal framework is considered positive, as it brings positive changes related to project development, documentation of educational activities, monitoring physiological characteristics and growth conditions of children. Duration of legal procedures is influential because of enrollment of new children in kindergarten, and it can be considered both positive and negative because the parents' satisfaction is directly related to enrolment policy.

Environmental factors that are essential for the quality daycare business are: land management, waste management, natural resource management, public health and environmental education. Waste management refers to the sorting and recycling of waste materials in collaboration with the municipal service center. Environmental awareness includes a responsible management of natural resources and the work on energy efficiency of the institution. Eco-awareness arises from the environmental education of all persons involved in the educational process in order to develop a positive relationship of the individual to himself and to his environment. Hence the concern of public health which involves partnerships of pre-school institutions with health centers, National Institute for Public Health and the like. These issues are increasingly becoming an integral part of preschool educational process.

## Conclusion

Preschool system should function as an ordinary business system that corresponds to the requirements of internal and external environment. These environments are sophisticated, as there are many interrelated factors that influence the work of kindergartens and the satisfaction of parents as their ultimate customers. In the strategy formulation process it is of utmost importance to classify and assess the factors from the environment. There are many available tools for such analysis but PESTLE analysis poses one of the most appropriate one as it clearly describes each factor making strategy formulation process focused to the needs of the community and parents, and also clear to all stakeholders.

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