# GLOCALIZATION IN INTERNATIONAL CONSTRUCTION PROJECTS

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# Approval of the thesis:

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#### **ABSTRACT**

#### GLOCALIZATION IN INTERNATIONAL CONSTRUCTION PROJECTS

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Success in implementation of international construction projects depend on an optimal integration of globalization and localization strategies. Therefore, glocalization strategy seems the best alternative for decision makers in an international construction business.

Initial objective of this research is to make a clear and extensive definition of Glocalization in international business and thus reveal the fact that it is applicable in international construction business as well as in other sectors. In order to achieve this objective, related literature is reviewed. At the end of this research all detailed phases of international construction process is integrated with glocalization strategy.

Final objective of this research is to go one step further into details and figure out the extent of local conditions' impact on international construction and present a general understanding of how to apply the strategy. Consideration of local conditions is the most crucial part of glocalization strategy. In order to achieve this objective, a research depending on expert opinions is made. Delicately chosen experts are asked to rate the impact of local conditions on international construction business sub strategies by a questionnaire. Research findings reveal the fact that impact and exposure levels of conditions and sub strategies approximately lay in a range of medium to high level. Following the relative comparison of factors, a more accurate decision making process in international construction business can be achieved.

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It is to be stated that this thesis is a pioneering study, since Glocalization has not been investigated particularly for international construction up to now.

Keywords: International Construction, Globalization, Localization, Glocalization,

# ULUSLARARASI İNŞAAT PROJELERİNDE KÜYERELLEŞME

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Uluslararası inşaat projelerinin uygulanmasında elde edinilecek başarı, küreselleşme ve yerelleşme stratejilerinin en uygun entegrasyonuna bağlıdır. Bu kapsamda, küyerelleşme stratejisi uluslararası inşaat projeleri için en uygun seçenek olarak belirginleşmektedir.

Bu araştırmanın birincil hedefi uluslararası inşaat projelerinde küyerelleşmenin açık ve geniş bir tanımını yapmak ve böylece küyerelleşmenin diğer sektörlerde olduğu gibi uluslararası inşaat projelerinde de uygulanabilir olduğu gerçeğini ortaya koymaktır. Bu hedefe ulaşabilmek amacıyla konuyla ilgili literatür taraması gerçekleştirilmiştir. Bu araştırmanın sonucunda, bir süreç olarak uluslararası inşaata ait tüm detaylı bölümler küyerelleşme stratejisi ile entegre edilmiştir.

Bu araştırmanın nihai hedefi ise bir adım daha detaya inerek yerel koşulların uluslararası inşaat projeleri üzerine etkisinin kapsamını ortaya koymak ve stratejinin nasıl uygulanacağı konusunda genel bir anlayış sergilemektir. Yerel koşulların belli bir ölçüde dikkate alınması küyerelleşme stratejisinin en önemli bölümüdür. Bu hedefe ulaşmak için uzman görüşlerine dayalı bir araştırma yapılmıştır. Konusunda uzman kişilerden, yerel faktörlerin uluslararası inşaat projelerinin alt stratejilerine etkilerini derecelendirmeleri bir anket aracılığıyla istenmiştir. Araştırma bulguları, koşulların ve alt stratejilerin etki ve maruz kalma derecelerinin orta ve yüksek seviye olduğunu göstermektedir. Bu kapsamda, faktörlerin göreceli karşılaştırması dikkate alınarak, uluslararası inşaat projelerinde daha doğru bir karar verme süreci

sağlanabilecektir.

Küyerelleşme konusu bugüne kadar özellikle uluslararası inşaat projeleri için

araştırılmadığından, bu tezin öncü bir çalışma olduğu söylenebilir.

Anahtar kelimeler: Uluslararası İnşaat, Küreselleşme, Yerelleşme, Küyerelleşme

viii

Dedicated to my family

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# TABLE OF CONTENTS

ABSTRACT	v
ÖZ	vii
ACKNOWLEDGEMENTS	X
TABLE OF CONTENTS	xi
LIST OF TABLES	xiv
LIST OF FIGURES	xv
CHAPTERS	
1. INTRODUCTION	1
2. COMPARISON OF CONSTRUCTION INDUSTRY WITH	H OTHER
INDUSTRIES	3
2.1. Historical Approach	3
2.2. Differences in Process	4
2.3. Project and Product Development	6
2.4. Organizational Considerations and Operations Manager	ment 8
2.5. An Overview of Construction Industry	10
3. GLOBALIZATION	13
3.1. Introduction to Globalization	13
3.2. Social and Cultural View	14
3.3. Political View	16
3.4. Financial View and International Business	16
4. LOCALIZATION	19
4.1. Localization as an Alternative Strategy	19
5. GLOCALIZATION	21
5.1. Definition	21
5.2. Importance of Glocal Point of View and Differences	23
5.3. Integration of Globalization and Localization	25
5.4. Transition of a Business Enterprise from Global to Glo	cal 27

6.	OUTPUT	BASED	APPROACH	FOR	GLOCALIZATION	IN
IN	TERNATION	NAL CONS	TRUCTION (A	RCHIT	ECTURAL)	31
	6.1. Effe	cts of Gloca	alization on Arc	hitectur	e	31
	6.2. Sam	ples for Glo	ocalization of Co	onstruct	ion Outputs	33
7.	PROCESS	BASED	APPROACH	FOR	GLOCALIZATION	IN
IN	TERNATION	NAL CON	STRUCTION	• • • • • • • •		. 37
	7.1. Strat	tegic Mana	gement			38
	7.2. Proj	ect Manage	ment			41
	7.3. Fina	nce				44
	7.4. Hun	nan Resourc	ces and Supply	of Mate	rials and Equipment	46
	7.5. Mar	keting				48
8.	DETAILE	ED EVA	LUATION	OF	GLOCALIZATION	IN
IN	TERNATION	NAL CONS	TRUCTION			51
	8.1. Basi	c Factors o	f International C	Construc	tion Process	52
	8.2. Eva	luation of	Glocalization t	hrough	International Constru	ction
	Process .					57
	8.3. Bene	efits of Glo	calization in Int	ernation	al Construction	60
	8.4. Drav	wbacks of C	Glocalization in	Internat	ional Construction	61
9. ]	RESEARCH	METHOD	OLOGY			63
	9.1 Profi	le of The R	espondents			64
	9.2 Deve	lopment of	A Matrix Ques	tionnair	e	65
	9	.2.1 Selecti	on of Local Cor	siderati	ons	66
	9	.2.2 Selecti	on of Sub Strate	egies		69
			-			
10.	RESEARCH	I FINDING	is			73
	10.1 Pro	file of The	Respondents	• • • • • • • • • • • • • • • • • • • •		73
	10.2 Pe	rception o	f Respondents	Towar	ds The Extent of I	Local
		•	-		Construction Business	
	Strategie	S				77
	10.3 Seq	uence of Lo	ocal Considerati	ons' Im	pact Scale	89
	10.4 Seq	uence of Su	ıb Strategies' Ex	xposure	Scale	92
11	SHMMARY	& CONC	MOIZH			95

11.1 Summary	95
11.2 Major Findings	97
11.3 Recommendations for Future Studies	100
REFERENCES	101
APPENDICES	
A. A SAMPLE OF THE QUESTIONNAIRE	105

# LIST OF TABLES

# **TABLES**

Table 2.1	Overview of the Purchaser in Industrial Processes
Table 8.1	Risk Indicators and Possible Sources
Table 8.2	Risk Related Factors and Possible Sources
	Possible Sources of Uncontrollable Factors in an International Project
Table 10.1	Respondents' perception towards the extent of local considerations'
impact on bus	siness sub strategies in international construction process

# LIST OF FIGURES

# **FIGURES**

Figure 2.1	Manufacturing versus Construction Process
Figure 2.2	Management Levels in Construction
Figure 2.3	Management Levels in Manufacturing
Figure 5.1 with the Strate	Organizational Development of International Business in Accordance egy Chosen; Globalization, Localization or Glocalization
Figure 5.2	Major Components of Business
Figure 6.1	Modern and Old Japanese Single Houses
Figure 6.2	Types of Roofs. 34
Figure 7.1	Major Components of International Construction Business
Figure 7.2 Enterprise	Organizational Structure of an International Construction 40
Figure 7.3 Glocalization	Organization of an International Construction Business Running Strategy
Figure 7.4 and Equipmen	Market Classifications of Construction Services, Products, Materials
Figure 8.1	Application of Glocalization as a Business Strategy in International
Construction	Process
Figure 9.1	Sub strategies in international construction
Figure 10.1	Experience level of respondents in terms of time spent in international pusiness
construction r	)IISINESS/>

Figure 10.2	Managerial level of respondents
Ü	Duration of respondents' current companies in international pusiness
•	Impact levels and sequence of importance for each local
C	Exposure levels and sequence of importance for each sub
C	Impact of each local consideration on the whole international process
Figure 10.7	Exposure of each sub strategy to all local considerations93

#### **CHAPTER 1**

#### INTRODUCTION

Interaction and integration of world markets led to major shifts in strategies applied for expanding. The concept of Globalization and Localization has been researched and implemented in order to achieve a successful expansion in the world market. Developments in global considerations together with preservation of local demands generated an alternative approach for international business strategies. Finally, concept of glocalization, an optimal integration of Globalization and Localization, emerged after 1990s. This thesis is concerned with a thoroughly understanding of glocalization strategy and its applications in international construction business.

The objectives of this study are to define glocalization as a business strategy by a construction perspective, to find out whether it is already in use by international construction enterprises and to insert this terminology to international construction business. A balanced integration of global and local considerations throughout international construction process is highlighted to reason the application of glocalization in international construction.

The majority of the current literature on glocalization concentrates on manufacturing industries. Glocalization as an international business strategy has not been particularly investigated in the construction industry. However, it is a common practice that any international construction enterprise running business out of its home country develops a business strategy unique to the location of the implied project. Above all, construction business is project based, thus effects of the local conditions of the project cannot be disregarded. In order to better understand glocalization as a business strategy in international construction, a detailed evaluation of construction process is to be held.

This thesis begins with a comparison of construction and manufacturing industries. After that, explanations of basic concepts, namely globalization, localization and glocalization are figured out to render a general understanding of international business strategies. Project based structure of construction, which makes it different from other sectors, and the general perception of the meaning of glocalization comprises the reasons behind the lacking in investigation of glocalization in construction industry.

In the former parts of the study, application of glocalization and integration with international construction is studied in general terms. In the latter parts, detailed integration, covering the whole duration of a construction process, is provided by investigating through construction risk management literature. After that, expert opinions, supporting the proposals in the main text and figuring out the general perception about local factors' impact, are asked by a questionnaire. Finally, answers given by experts in international construction management are analyzed and a brief summary of the subject is expressed.

#### **CHAPTER 2**

# COMPARISON OF CONSTRUCTION INDUSTRY WITH OTHER INDUSTRIES

# 2.1 Historical Approach

Mankind differed from other creatures by the talent of building things, which was special to him even in prehistoric times. Instinct of surviving in the nature brought out a search for shelters. Building basic shelters from wood, stone or animal parts started construction in prehistoric times.

When societies developed and improved their organizations by passage of time, construction became an imperious value of civilization. It was a value that was also being developed and improved gradually. As civilization grew, there appeared many factors affecting construction. After a while the main scope of construction changed. It was not anymore only for the basic shelter to satisfy instinct of surviving, but also for sanctuaries to satisfy religion and many other factors that can be obviously seen in monuments of history.

Construction was developed day by day and great structures such as The Pyramids came along, which go on astounding modern people about the gigantic scale and ability of people to build them in ancient times.

Development in construction was directly dependent on the sources coming from the complications of developing society. There appeared to be several factors to consider while applying a construction project. Realization of a construction project required solving not only technical problems but also non-technical ones. These non-technical problems are not able to be defined precisely because they stem from society, in other words human which is the most complicated creature. Today modern construction is trying to deal with all these problems.

As a matter of fact, mankind had several instincts that led to the birth of several industries. Instinct of surviving and building a shelter for this purpose exposed the construction industry. However, prehistoric humans were hunter-gatherers and in the passage of time they started to manufacture what they hunted and gathered. Some of these manufactured items became a part of construction industry. After that there became links among several industries, but these links did not change the fact that Construction industry and Manufacturing industry hosted much dissimilarity.

Nevertheless, there is one similarity among them. Construction industry and manufacturing industry all have to deal with non-technical problems which stem from society. Society related factors such as the culture the most prevalent, religion, financial issues, legislation, human resources and many others to be found out comprise these technical and non-technical problems (Halpin and Senior, 2012).

#### 2.2 Differences in Process

Overview of construction industry may show it to be service-oriented at first glance; however it has one large product-based process. Although the process of construction is product-based, the process of constructing any type of facility is different from that of manufacturing any product.

At the very beginning of the process, manufactured items are designed in a format and the purchaser of that item is unknown. To put it in another way, production is completed before the presentation of the product for the purpose of seeking a potential purchaser. In manufacturing industry, an estimation that one purchaser will be interested in that product is held beforehand. After the prediction of market potential and needs special to that market, design and the quantity of the item to be produced are determined. Design and production are completed before selling. Advertisements, having a crucial role in increasing sales, emerge.

When the determination of design and production of the item is completed, risk of an unprofitable investment comes along with the determination of price and quantity. Items produced may remain in stocks unsold or may be sold at a price below the total

cost. Manufacturer renders a decision on the price considering direct costs as well as indirect costs of production.

In manufacturing industry, products are sold to individuals directly or to wholesalers in large volumes. The sales network is developed, no matter how and no matter how many intermediate sellers there are, for the purpose of getting products off to the end user.

In the process of construction industry, the timing and method of selling activity is quite different. At the beginning of the process, the demand of the purchaser for a facility is revealed. Purchaser basically states the scope of work in accordance with his demand and after that; details of specifications are completed by a design professional. Before mass production came into being, the method was also the same for manufacturing industry. A purchaser demanded for a piece of furniture, for instance, and forwarded his demand to the craftsman with technical specifications. The craftsman produced the furniture according to the demand. However, inspection of the produced item was not able to be held before purchasing. As a result, the manufactured item was unique.

This method is still in use for construction industry due to the uniqueness of the constructed facilities. The client seeks for several contractors to achieve his demand. The client makes his decision and then an agreement is made among parties. The facility is designed and constructed after that agreement, so production takes place in the end of the process. Purchasing is done for a virtual item consisting of graphically shown or verbally written specifications. This is obviously the opposite of manufacturing process where the purchaser is determined at the end of the process (Halpin and Senior, 2012).

Risks emerging from these different processes also differ. In manufacturing, risk for the manufacturer is basically whether to find a purchaser by competitive prices and risk for the buyer is whether to meet a product operating as advertised. However, in construction, risks comprise of more complex issues that may cause a failure in completing the project in time or completing the project with defects of functionality. A chronological diagram of the phases of processes in construction and manufacturing industries is shown in Figure 2.1.

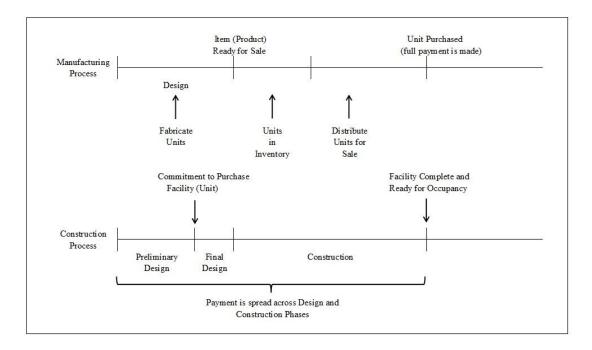


Figure 2.1. Manufacturing versus Construction Process (Halpin and Senior, 2012)

# 2.3 Project and Product Development

Manufacturing industries fabricate great numbers of identical products, whereas the output of construction industry is a single and matchless end product. The end products of construction industry differ from each other in terms of design and method of production. Purpose of usage, appearance and site diversity of the facility make it unique. In some cases, similar facilities such as seen in housing projects can be constructed, however adaptation of the building to unique site conditions and minor changes in styles make the products be unique.

Manufacturing large numbers of similar products is called mass production. The initial activity of mass production is the design and production of a prototype. When the decision makers come to a determination, large numbers of the same item is produced, so mass production begins. In some cases, limited numbers of products are manufactured for a specified purpose. For example, hydropower tribunes of a dam are specially designed and produced for a unique purpose. Production of such limited

numbers of units is called batch production. It was previously mentioned that construction industry has a product-based process. Items produced by the method of batch production are widely used in construction industry.

Since the output of construction industry is a unique and single facility, batch production or mass production systems cannot be a method of construction. Production system in a construction work is rather dependent on a project format. A project consists of both the design and production phases. A prototype is not constructed for decision makers; moreover the final output is already a prototype since its quantity is one.

Management and planning of resources differ among mass production systems, batch production systems and projects. Resources are planned and controlled within the framework of a project. However, in manufacturing industries resources are applied through the production phase of large units.

A construction project is initiated by definition of a client, purchaser of the product, for a needed facility. Feasibility studies are carried out and initial cost is roughly estimated. Conceptual design is made and scope of work is defined. Final design is preceded and therefore project is fully defined. The project is advertised and a constructor is selected from the proposals. Production is initiated and facility is ready for acceptance when construction work is complete. A period of testing can be applied for some complex projects. These are the basic steps of a construction project development in general terms; however minor modifications can be made in accordance with the special aspects of the project.

The development of a product is rather different in manufacturing industries. At the initial stage opportunities are evaluated and the best product idea is selected by decision makers. The concept of the product is refined by feedbacks. Some researches and studies are carried out in order to point out whether the product is going to appeal to consumers or not. The product is designed and prototypes are produced for the purpose of finding out the approximate cost and testing. Mass production starts to a level and market tests are run. Finally the product is launched to the market (Halpin and Senior, 2012).

# 2.4 Organizational Considerations and Operations Management

The project format of construction output leads to several hierarchical levels to take place in construction management. Figure 2.2 shows four basic levels of hierarchy in construction management.

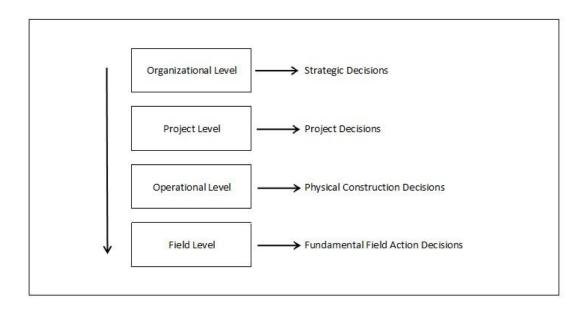


Figure 2.2. Management Levels in Construction (Adapted from Halpin and Senior, 2012)

Management is basically a decision making process and determination of management levels is dependent on classifying the levels of decisions. Organizational level, which is the top level of management in construction, relates to strategic company considerations. Every firm has a legal and business structure. This structure makes up the core of decision making. Strategic decisions such as investment choice, market search and decision to enter, realization and method of partnership, strategic decisions on gross project attributes and likewise are organizational level considerations. Project level decisions are specific to the unique project. Cost and time control and management of resources related to the project are examples of project level decisions. Operational level, process level in other words, deals with technological details and performing of the construction. These physical construction considerations are determined at this level. Field level, the lowest level of management in construction, is concerned with primary decisions of work tasks (Halpin and Senior, 2012).

Levels in manufacturing industry is similar to that of construction industry, however a crucial part of strategic level is spread among all levels. Figure 2.3 shows levels of hierarchy in manufacturing industries.

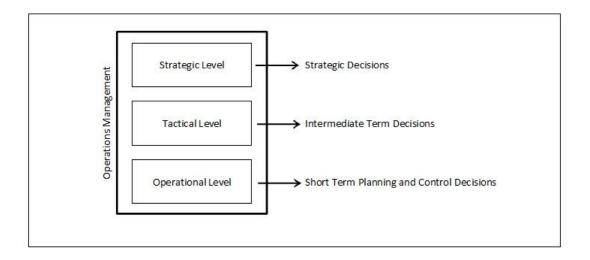


Figure 2.3. Management Levels in Manufacturing

Operations management is a widely used term in manufacturing industries. The main goal in manufacturing industries is to convert resources into finished products ready for sale. An operations manager is the upper-level manager who directs this converting process. Having an upper position in hierarchy allows operations managers to take strategic decisions, but operations management is spread among all levels and minor decisions become a part of this position as well. Obviously, the slight difference comes from the nature of manufacturing industry. The position of the target party, the purchaser is at the end of the process. At the strategic level operations management involves decisions about new product ideas, production site locations and capacity developments. Decisions about scheduling within the existing limitations of the firm take place at the tactical level. Short term planning and control decisions are made by the operations manager at the operational level. Common characteristic of all level decisions is that there is a targeted purchaser at the end of the process (Collins, 2009).

# 2.5 An Overview of Construction Industry

Construction as an industry is six to nine percent of the gross domestic product of developed countries (Chitkara, 1998). Construction industry, hosting several subsectors, is the leading sector of world economy.

Projects, comprising the output product, can be classified into three main subsectors. Subsectors are basically infrastructure construction referring to fundamental facilities, building for residential purposes and industrial construction for facilities of manufacturing industry.

Infrastructure construction mostly comprises of facilities targeting public. Owners of these facilities are commonly public or semipublic parties. Building construction projects comprise of facilities having residential, educational, social or commercial purposes. Industrial construction refers to facilities of manufacturing industry involving highly technical and interdisciplinary engineering details (Halpin and Senior, 2012).

It was already mentioned that the great difference of construction industry and manufacturing industry appeared to be the phase of the purchaser to be at the beginning or to be at the end of the process. Both industries may have exceptions. Having a general classification of both industries, Table 2.1 gives an idea of the portion of the exceptions.

Purchaser, presenting one of the parties in the process, can be public, semi public or private. Semi public refers to exceptions in the process referring from differentiated delivery models such as Build-Operate-Transfer, Public-Private-Partnership or likewise. Such models involve a changing type of owner. Private entities own the facility for a varying period of time. Boxes shaded in grey show the exceptions of the industries in terms of the place of the purchaser in the process.

The major understanding of the process and exceptions are going to shape the content of glocalization. Product based and process based approaches to glocalization for international construction are going to be considered and mentioned in the following chapters in accordance with these terms.

Table 2.1. Overview of the purchaser in industrial processes

(Adapted from Halpin and Senior, 2012)

TYPE OF INDUSTRY	SUB-SECTOR	FACILITY OR PRODUCT	TYPE OF PURCHASER (FOR THE MOST PART)	PURCHASER AT THE BEGINNING OF PROCESS	PURCHASER AT THE END OF PROCESS
		DAMS	PUBLIC OR SEMI PUBLIC	+	
		TUNNELS	PUBLIC OR SEMI PUBLIC	+	
		BRIDGES	PUBLIC OR SEMI PUBLIC	+	
		HIGHWAYS	PUBLIC OR SEMI PUBLIC	+	
		AIRPORTS	PUBLIC OR SEMI PUBLIC	+	
	INFRASTRUCTURE	URBAN TRANSIT SYSTEMS	PUBLIC OR SEMI PUBLIC	+	
		PORTS	PUBLIC OR SEMI PUBLIC	+	
		PIPELINES	PUBLIC OR SEMI PUBLIC	+	
		WATER TREATMENT PLANTS	PUBLIC OR SEMI PUBLIC	+	
		COMMUNICATION NETWORKS	PUBLIC OR SEMI PUBLIC	+	
		SINGLE HOUSES	PRIVATE	+	+
	BUILDING	HIGH-RISE APARTMENTS	PRIVATE	+	+
		CONDOMINIUMS	PRIVATE	+	
		SCHOOLS	PUBLIC OR SEMI PUBLIC	+	
		UNIVERSITIES	PUBLIC OR SEMI PUBLIC	+	
CONSTRUCTION		HOSPITALS	PUBLIC OR SEMI PUBLIC	+	
		COMMERCIAL OFFICE TOWERS	PRIVATE	+	+
		WAREHOUSES	PRIVATE	+	+
		LIGHT MANUFACTURING PLANTS	PRIVATE	+	
		THEATERS	PUBLIC OR SEMI PUBLIC	+	
		GOVERNMENT BUILDINGS	PUBLIC OR SEMI PUBLIC	+	
		COMMERCIAL MALLS	PRIVATE	+	+
1		RECREATION CENTERS	PRIVATE	+	+
	INDUSTRIAL	PETROLEUM REFINERIES	PUBLIC OR SEMI PUBLIC	+	
		PETROCHEMICAL PLANTS	PUBLIC OR SEMI PUBLIC	+	
		SYTHETIC FUEL PLANTS	PUBLIC OR SEMI PUBLIC	+	
		NUCLEAR POWER PLANTS	PUBLIC OR SEMI PUBLIC	+	
		STEEL MILLS	PUBLIC OR SEMI PUBLIC	+	
		HEAVY MANUFACTURING PLANTS	PUBLIC OR SEMI PUBLIC	+	
	MASS PRODUCTION	ANY PRODUCT	PRIVATE		+
MANUFACTURING	BATCH PRODUCTION	ANY PROCUDT	PRIVATE		+
	SINGLE PRODUCTION	ANY UNIQUE PRODUCT	PRIVATE	+	

#### **CHAPTER 3**

#### GLOBALIZATION

#### 3.1 Introduction to Globalization

Globalization became a key concept of international business in the late 20<sup>th</sup> century. Businesses consisting of several sectors were affected by globalization without any exception. Several scholars tried to define the term Globalization with different points of view; however what they all had in common was the idea of a one type world with similar characteristics.

Giddens (1990) is a sociologist considering globalization by social aspects. Affect of an event taking place at a distant place shapes local happenings. Events are deemed to be social and thus globalization is defined to be an international social interaction. This definition is so general that it consists of everything as a part of social life.

Dasgupta and Pieterse (2009) state that globalization emerged at the initial stage for the purpose of applying political issues to bring different people, various classes and cultures from all over the world, together. However, this was nothing other than a myth that can never be realized.

Ghauri and Powell (2008) consider globalization by a financial point of view. Referring to an economic phenomenon, globalization is a formation of a single world market. Multinational companies are the major actors and the required environment is provided by the free flow of private capital across borders.

Baldwin (2014) reviews globalization in a multiphase international business view considering radical changes in technology. The first globalization emerged after industrial revolution, where production and consumption unbundled on an unprecedented global scale as natural and man-made trade costs fell. The second

globalization had accumulating changes via the radical changes in supply chains provided by improvements in information and communications technology. To sum up, globalization is the international movement of products and services.

Several perspectives for understanding the term Globalization can be found out through literature review. Since international business has various subsectors and the whole business was and is affected by globalization, different approaches of globalization may be involved by different disciplines as well. What they all have in common is that the output, the final position of the globalization process or the consequence is the same in general terms. The objective is to realize a single output. The world consisting of various and different cultures, religions, geography, power, stability, social life and so on, intersects at one point and goes on resembling.

One great divisive issue of globalization is that dominant and recessive factors of multi criteria lead to an undesirable resemblance. Countries having financial power greater than others and having a privileged status of the world are going to feature a dominant position. Danger of cultural corruption, for instance, is going to come out as a consequence of the process.

Globalization is something like printing the entire world with the same color. However, multi colored presence is the nature of the world. It was inevitable for business sectors to embrace globalization during process. Because dominance over recessives is also a part of nature but after a worthy period a changing period began in the basic concept of globalization.

# 3.2 Social and Cultural View

Globalization is the affect of an event that takes place in one distant position in the world. The consequence of this affect is that the local happenings are shaped. First of all, globalization involves not only economical or financial issues but also differentiations in socio cultural aspects. Social point of view defines local happenings as changes in socio cultural conditions.

All positive or negative improvements in social life are under the affect of globalization or its characterized impacts. Capitalist economic system, which forms the core of globalization, changed economic systems at the beginning. Changes in economic systems became the major factor changing social life.

Process of globalization altered social policy adapted to organize social life by political, administrative and economic changes. Not only local social policy makers but also international organizations appeared to consider social policies on a regional scale.

Liberal ideologies obviously had an impact on international organizations. Power and activities of these organizations can be examined in terms of pros and cons.

As a matter of fact, social life and culture are bound together. Social life is mainly dependent on the culture. Transmission of global affect from foreign happenings to local cultural and social life is inevitable. However, one fact that disrupts the expansion of globalization is the values of the society not able to be changed.

Ideally the mysterious purpose of globalization is to set out a homogenized culture for the world. Homogenization can be captured through the interaction of several cultures. However, the practice does not meet the ideals. Globalization is even named as Americanization in some researches. This is the expected result of unbalanced interaction. Interaction of different cultures is obviously dependent on financial power. Globalization stems physically from international transfer of goods, services and finance. A culturally optimized product of a dominant culture is not going to fit to another culture. Then there are going to be two alternative consequences. The local culture is whether going to reject the product or going to shift itself to allow suitability.

Literature review reveals two contradictory approaches for the social consequences of globalization. Globalization is a facility used to improve global social life conditions by interactions of different cultures. This is the optimistic approach. In direct contradiction, globalization leads to a cultural corruption by unbalanced interactions of different cultures (Giddens, 1990).

#### 3.3 Political View

After cold war ended, globalization played a major role worldwide for the purpose of integrating various people from various classes and cultures. Some scholars deemed this purpose to be a myth due to diverse thoughts of different cultures. Another question in mind was the level of major global players' power. Globalization was a neoliberal process and thus had so much uncertainty.

Local politics were obviously impacted by globalization. Terms such as neoliberal or capitalist came to being by the emergence of globalization theory. Politics had to be changed and revised in order to meet the requirements of globalization process. Legitimate conditions and business life regulations were shifted. Politics were shaped and became the essential director of changes.

Neoliberalism, rooting globalization, became a global policy. It was defined as a free market which was not regulated by governmental powers. One reason for renaming of globalization as Americanization is that neoliberal globalization was created by Americans. It was like a storm covering the whole world working for the advantage of powerful players such as USA. However, all other countries were affected.

Leaving all uncertainties behind, the interrelation of globalization and politics cannot be ignored. Since politics is the regulator and governor of business issues, the required conditions of globalization can only be obtained by political steps. It is common not to estimate political actions and unexpected happenings occur all around the world depending on uncertain expectations and decisions (Dasgupta and Pieterse, 2009).

#### 3.4 Financial View and International Business

Direct foreign investments came up by the help of opened foreign markets. Opening of foreign markets was accelerated by the globalization process. Manufacturing, communication, sourcing, distribution, marketing, human resources and such like aspects of business life were affected and eventually changed rapidly. Globalization provides potential benefits and risks as well to business and society.

Financial view of globalization brings about two basic factors. One of them is the idea of a single world market and the other is the free flow of private capital. In the late twentieth century, international investments expanded massively. All around the world, local governmental interventions to business, such as control of prices, were cut off gradually. Crossing the borders in terms of international business was easier than ever before.

The consequences of globalization were considered in two contradictory approaches. The optimistic approach is that capital or contemporary products and services are going to flow from rich countries to poorer ones and thus going to provide a peaceful world by the impact of globalization. The pessimistic approach is that local and national states are no longer going to be able to control their own economies, values of rich and powerful cultures are going to be imposed and ethical objections are going to be held terminating in conflicts.

Putting aside these contradictory approaches, Ghauri and Powell (2008) define the term globalization from the purchaser's point of view. Globalization means that an everyday product might be designed in one country, manufactured in another using materials and components sourced from a third, marketed through a call center in a fourth, for delivery and use in any number of others. Thus, labels of origin are losing their meaning.

Globalization has several components that have impact on the process. Economic or financial conditions are the leading factors. The instinct of international business, seeking of resources and markets, is executed in accordance with the allowance of these conditions. Politics play a crucial role in arrangements of this process and the suitable platform for the process is provided by knowledge and improving information systems.

Attraction of foreign investment became a prevalent goal of local governments. Attraction is allowed by more freedom in trade. Consequently, the rise in international investments led to the break of global economy.

The break of global economy is in simple terms due to the lowering of costs. Baldwin (2014) describes the lowering of costs in two chronological phases. The former one was the post period of industrial revolution in the late nineteenth century and the latter one was the improvement of information and communications technology in the twentieth century.

Every demand of human had to be produced locally before industrial revolution. The evolution in industry triggered the idea of globalization because more than demand was able to be produced by new technologies. Globalization became an intensification of foreign markets competition. The most crucial components that have to be hired in order to win this competition were skilled workers and high technology. Both required financial power. As a matter of fact, the winners of globalization were the financially powerful ones.

In other words, industrial revolution separated the locations of production and consumption. Booming in information and communications technology separated the locations of production stages. Finally, costs were lowered more and international business had a more complex structure.

Globalization is a platform made for facilitating and enhancing the exchange of money and products or services internationally. International business cannot be deemed to act regardless of globalization. Globalization is a worldwide trend which brings about the fact that no country can stay alone in international arena. Although contradictory pessimistic and optimistic approaches against globalization comment differently, the tremendous boom in international business cannot be explained without globalization (Ghauri and Powell, 2008).

#### **CHAPTER 4**

#### LOCALIZATION

#### 4.1 Localization as an Alternative Strategy

Globalization strategy in international business focuses on developing and designing a globally recognized product or service and transferring it to other locations in the world. This process excludes local conditions and interest. Regardless of local attributes such as religion, culture, language, economy, education level, economy and so on, a global actuality is imposed. In contrast to globalization, localization strategy focuses on local conditional factors regardless of globally accepted actualities. Decision makers in international businesses, utilizing the strategy of localization, design products and services, according to the local conditions of the area they run business.

Localization is deemed to be conservative compared to innovative globalization. However, the existence of localization is due to the resistance of certain local communities to globalization. Social, economic, cultural and business characterizations of localities require typically or traditionally developed products, services and resources as well.

Localization is not concerned with localization of a global product or service. Both the product or service and the process are localized. When process is attributed to the market environment, localization is not concerned with a local product or service in a global market. Local product or service is processed in a local market by all business phases.

It was mentioned that a tremendous boom in international business was faced by the existence of globalization. Localization is contradicting globalization as a business strategy in basic methodology terms, nevertheless economic development of the

world is impacted by localization, too. The primary reason is that although product, service, resources and the market are local, the investor who is the main party of initiative can be a global actor. Global actors are able to adapt their business outputs so that they are changed wholly and cannot be the same as their original global product or service anymore.

Cross border integration in international business requires localization as an alternative strategy. Localization strategy can be named as adaptation strategy as well and the most important effective factor is the cultural values. Since the main aim is to gain the purchaser in order to expand business, local purchasers' preferences and specific local requirements are considered thoroughly by this strategy. Localization is often chosen as a strategy where there is a refusal of purchasers for globally standardized products or services. The reasons for the refusal are commonly the cultural values (Rigby and Vishvanat, 2006).

Localization can only be utilized successfully when a balance is captured. Too much localization is going to either increase costs or impair the business. Therefore, the cost of adaptation process and the deviation from the main scope of business are to be determined. Going one step further, the intersection of more than one location in terms of local factors can be identified in order to set out the balanced level of adaptation.

However, too much regulations and decreasing the level of local adaptation are going to change the basic definition of localization and lead to a new term called 'Glocalization'. Glocalization, a balanced integration of globalization and localization, is going to be emphasized in the next chapter.

#### **CHAPTER 5**

#### **GLOCALIZATION**

#### **5.1 Definition**

Globalization strategies' ignorance of local factors and localization strategies' refusal of global actualities due to several reasons led to a search for another international business strategy. The new strategy came into being by an integration of both. It was called 'Glocalization', where global and local actors of international businesses interacted each other in a balanced manner.

Ignorance of local factors was described by Levitt (1983) as 'a failure in global imagination'. It was stated that 'many companies have tried to standardize world practice by exporting domestic products and processes without accommodation or change and have failed miserably'. Adaptation of global actualities in accordance with local requirements was needed to grow international business. Requirement of this kind of adaptation led to glocalization, a new integrated strategy.

Oxford Advanced Learner's Dictionary defines glocalization as 'the practice of conducting business according to both local and global considerations'. The origin of the word is shown as a blend of Globalization and Localization that appeared in 1990s. However, according to Vizureanu (2013), the introduction of Glocalization Concept was made in the late 1980s by Japanese. After 1980s, researches on glocalization defined it as an alternative concept of Globalization considering cultural, social and political dimensions.

Glocalization differs from Globalization because adaptations of local considerations shape business activities. Standardization and Adaptation are two basic elements of both strategies. Svensson (2001) put an emphasize on the point that 'there has to be a balance and harmony between the standardization versus the adaptation and the

homogenization versus the tailoring of business activities'. As it was mentioned before, the obtained balance is important in terms of profitability of business and protection of the originality of the brand. As a matter of fact, balance is obtained between Globalization and Localization.

Herbig (1998) depicts glocalization strategy as 'think global act local' which is a widely accepted motto. The business systems of any entrepreneur presenting an investor company are parts of global factors. Thinking global is the duty of the global actor in any of his business systems. The inferior parts of the business system specialize in accordance with the different location that it is run on. Acting local is the duty of the global actor as well. However, it is wholly depending on the diversified situations of the international arena.

Another definition of the term focuses on the output rather than the process. Customization of the product or service is emphasized. Local factors shape the produced or serviced item and the output carries global actualities and local requirements together. This is kind of an output based approach. Adaptation strategy that was mentioned above is directly related to the consequence of the business operation.

Literature review on the definition of glocalization leads us to two different but parallel approaches. In fact the former one covers the latter one. One of them is about the conducting phase of international business. This is a very general term of international business that involves the output of the process too. Considering the whole conducting phase of business is about a process based approach. The other approach is about the product or service that is the consequence of the process. Adaptation is about the changes in the product or service executed according to local needs. This can be named as output based approach for glocalization.

To sum up, glocalization is a major shift of international business via integration of local and global factors. All subsectors of international business are exposed to glocalization in several aspects. Only the ones which are able to create the optimum balance between global and local factors seem to be successful in the international arena.

## **5.2 Importance of Glocal Point of View and Differences**

Since major conditions effecting international business improved and changed gradually, new and responsive strategies were developed. Investors launched cross border operations and gained success according to the strategy they applied.

There are some differences between the traditional global business which is the consequence of globalization and glocal point of view which is a strategic aspect developed by differentiating business actions depending on the changing conditions of international business functions.

A global actor, who is a cross border investor, has several central units taking place in more than one location that consist just right the investment place. These units are under control of one unique center, which is the core unit of taking all business decisions. This is the traditional method applied in globalization strategy. The central organization seeks and works for standardized products or services appealing to all target markets around the world. All phases of international business are executed under control of the central organization (Jeannet and Henessey, 2004).

Globalization strategy considers world market as one and unique, therefore applies the same strategy and submits the same outputs for every different location. However, glocalization strategy considers location differences and develops functions special to each location. Glocalization acts like a local while taking the advantage of keeping the awareness of global actualities.

All international business enterprises initially globalized their market strategies. Although prices were decreased and competitiveness was developed, globalization did not bring success to enterprises in a constant manner due to differences in locations.

Glocalization strategy requires adaptation of outputs and processes to an extent and this adaptation involves additional costs. When compared to losses as a consequence of local purchasers' refusal of business output, additional costs of planning and execution for adaptation are less. This is obviously the reason why enterprises chose

the strategy of glocalization, however success still depends on a balanced optimization of adaptation.

As mentioned above, traditional globalization strategy provides a significant reduction in all business function costs. Reduction is verified by introducing a standardized product or service to each location. A standardized process and planning and control of business from a central organizational unit have impact of cost reduction, as well.

In contrast; adaptation of products, services or processes, special researches and planning for each different location and multi central organizational management units in glocalization may seem to lead to additional costs. When localization strategy is applied solely, this contention is obviously true. However, glocal point of view provides a balance in terms of functional costs by integrating global and local strategies.

Svensson (2001) states that 'the global strategy approach to manage worldwide business activities appears to be a managerial utopia. Therefore, the concept of glocal strategy is introduced to provide an improved accuracy of the present usage of the global strategy approach among scholars and practitioners'. The starting point of international business having a glocal point of view is the globalization strategy. In other words, enterprises are able to respond to continuing changes by glocal strategies not splitting away from global ones. Global and glocal strategies are in sort of integration.

To sum up, global strategies cannot be successful unless adaptations for local requirements are made. Local conditions are going to affect business functions, but to a limited extent. Limitation of the extent is to be found out by decision makers in order to create a balanced manner. Optimal intersection of global and local factors is going to provide success to international business. Glocalization reveals itself to be the optimal strategy to be applied, therefore it becomes important.

## 5.3 Integration of Globalization and Localization

International business requires interaction of different people, governments and private companies of different nations. Strategies in international business are related to different locations and differences in the locations are referred from the actors of business. Actors consisting of people, governments and private enterprises reveal the business environment. Several factors have impact on the environment and business process as a whole is shaped by this environment. Localization strategy involves a total exposure to the differences of the environment, whereas globalization involves a total exposure to the overriding impact of the global actor's environment.

Glocalization is in the center of these two exposures. Interaction of overriding global actors and insistent local refusals is making out the ground. Glocalization reveals a newly developed strategy that allows the true interaction of private sector, governmental entities and civil societies. The strategy is based on a balanced type of international business.

Figure 5.1 presents a basic visual outline of globalization, localization and glocalization. Different tones of black, white or grey represents the differences in global or local factors that have impact on international business. Globalization aims to standardize the process, product or service, so all locations are printed in the same color of black. There is only one center unit and all the process is managed from one point. Different local factors have no effect. Localization strategy requires one central unit and several local management units, however the central unit has no impact on the decisions made, therefore global factors have no effect on the process and output. Therefore the colored representation remains the same as local ones. The only link between central unit and local central units is financial. Glocalization strategy has a more complex and mutual structure. There are several local central management units and one central unit of the whole business. Local central units put forth the local considerations, business central unit puts forth global considerations and by a mutually effected decision making process a global output under impact of local considerations is created. Therefore, the colored representation is neither global nor local, but a mixture of both which includes different tones of grey.

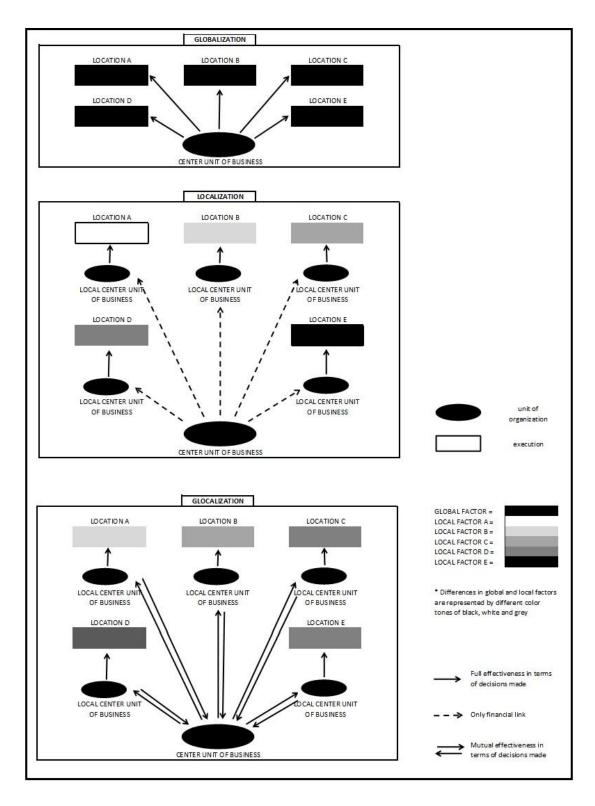


Figure 5.1. Organizational Development of International Business in Accordance with the Strategy Chosen; Globalization, Localization or Glocalization.

## 5.4 Transition of an International Business Enterprise from Global to Glocal

What makes out the difference between international business and domestic business is the diversity of environment faced across borders. A business enterprise can recognize domestic conditions easily, however understanding the environment in the other locations of the world requires additional effort. More resources are to be invested for this purpose.

International business has always sought for the right strategy to be competitive and successful in the world market. Strategy is a plot that has full impact on shaping all the phases as a process and components as a structure of business. Major components of a domestic or international business enterprise can be summarized as seen in figure 5.2.

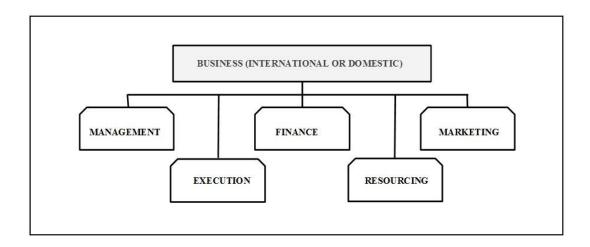


Figure 5.2. Major components of business (adapted from several open sources in web)

All business enterprises define a strategy in accordance with the environment. The strategy chosen effects the organization and functionality of the enterprise. Since organization structures differ due to changing environmental conditions, all levels of planning activities have to be adapted to changing conditions as well. Management, execution, finance, resourcing and marketing, which are the generalized terms comprising every part of a business, have to be adapted to local conditional differences.

Glocalization changed the main understanding of globalization and optimal adaptation to environmental conditions became a necessity. As a consequence of this necessity, every major component of business has to be developed not in a standardized manner but in an adaptive manner presenting variety in different locations.

Business Dictionary defines Management as 'the organization and coordination of the activities of a business in order to achieve defined objectives'. Planning, organizing, coordinating and controlling are the main duties of management. Since glocalization leaves the system exposed to changing conditions, all these duties are to be carried out by a contingency approach.

According to contingency approach, style and structure of management are impacted by environmental conditions. There is not a completely true decision that is valid all the time at all locations. Management is not a standardized function and actors of management have to analyze environmental conditions very well in order to implement the duties in the best manner. Since glocalization is a strategy emphasizing changing conditions, contingency approach of management seems best to fit.

Execution may be referred to different functions in different industries. For example, execution is production of an item in manufacturing industries, whereas constructing of a facility in construction industry. Execution is the physical process of converting inputs to outputs. Execution strategy of a business comprises of sub activities such as purchasing, planning, controlling, qualifying, analyzing of costs and so on.

As in other components, execution also requires an adaptation depending on local conditions. Adaptation of execution is about the output to a great extent; however sub activities of it may require an adaptation dependent on plots other than the output, too. Another term defining adaptation may be flexibility. Flexibility in execution function is going to allow the business type to be open to changes. Adaptation in execution for the changes in outputs provides the business enterprise a great competitiveness, since targeting the independent choices of locals is a major issue.

Providing of money or wealth in general terms to business enterprises is the major issue of finance. Business cannot be realized without finance. There are several factors related to finance in local conditions. The general economic condition of the country, trade activities, quantitative indicators such as interest rates are examples of these factors and have a deep impact on running business. Global strategies require risk management and overcoming uncertainties. Glocal strategies require awareness of local conditions in determination of how to do this.

Finance is important for long term decisions. Additional research, planning and cost are needed for identification of resources and efficient usage in glocalization. Fluctuations in the global economy have for sure an inevitable effect on one location's economy. However, each country has his own financial conditions that have effect on the business run and these local conditions have to be analyzed. Orientation to the process of mechanisms regulating the economy can be managed by adapting financial functions to local requirements. Besides, risk management and overcoming uncertainties cannot be accomplished by ignoring local conditions.

Resourcing is probably the first step factor leading to profit or loss in business. Needed, effective and qualified resources have to be found, developed and sustained. Resourcing can be categorized as materials supply and human resourcing. Both are crucial sub components of a business.

Glocalization is related to human resourcing by a large extent due to dependence on cultural differences. Integration or adaptation to local conditions can be carried out well by employing locals. These employees are not only the ones in charge of execution but also the ones in charge of management. Competitiveness in the local market is going to be captured by this strategy. Certainly, arrangement of working conditions has to be regulated in accordance with local legislation and culture. This generates another aspect of adaptation.

Marketing component of business is much more related to the output based approach of glocalization. Difference between construction industry and other industries revealed the fact that major point is the position of the purchaser in the process. Although there are some construction facilities where purchasers are at the end of the

process most of them begin the process with a determined purchaser at the beginning. Therefore, marketing in glocalization is a more significant issue in manufacturing industries and it is about the adaptation of the output, which is the product or service.

Finally, the common point is that a business enterprise has to adapt all of its components and sub activities to local environmental conditions. Adaptation is to be carried out in a balanced manner which is going to define the tiny nuance between profit and loss, success and failure (Kanter and Dretler, 1998).

#### **CHAPTER 6**

# OUTPUT BASED APPROACH FOR GLOCALIZATION IN INTERNATIONAL CONSTRUCTION (ARCHITECTURAL)

#### 6.1 Effects of Glocalization on Architecture

Open resources define the term 'Glocalization' as the application of running business in accordance with both local and global considerations. This kind of general description includes all phases of a conducted business. As a matter of fact, what to be shaped and adapted is referred to a process rather than an item. However, widespread perception of glocalization is different. Glocalization is commonly perceived to be tailoring of a product or service to accommodate the user or consumer in a local market. What to be shaped and adapted is the output of the process. In fact both definitions are true, but they have different approaches.

Literature review reveals the fact that glocalization in international construction is not a sufficiently researched subject. The reason for this is probably the common perception of the term 'Glocalization'. It was mentioned before that construction industry and other industries, especially manufacturing industries, have several dissimilarities. The greatest striking difference is the emplacement of the purchaser in the process. Majority of construction business projects position the purchaser at the beginning of the process, whereas the purchaser is at the end of the process in manufacturing industries.

Referring to the general perception of glocalization, the facility to be constructed at the end of construction process is to be tailored to accommodate the purchaser, who is the end user. When the user is predetermined and the output to be adapted is already sold, there is not going to be a need to adapt the facility. Since adaptation of product or service is for the purpose of attracting the attention of buyers and raising the sales, general perception of glocalization can be applied to international construction where buyer is at the end of process.

Table 2.1 presents a general categorization of construction industry outputs. As it can be seen; private single houses, high-rise apartments, commercial office towers, warehouses, commercial malls and recreation centers are potential outputs for construction industry to be sold to the user after completion of construction process. In order to understand the effect of glocalization on such facilities, the possible changes to these facilities under impact of local conditions are to be considered.

Such construction outputs can be adapted to local demands especially in architectural structure. Scientific engineering requirements for design and construction via modern methods and technology cannot be changed for local conditions since they are globalized and reigning worldwide. Architecture has an artistic value to some extent and that is why it can be adapted to local conditions. Artistic value of architecture can be referred to changes due to local culture. Besides, factors such as climatic and geographical local conditions may have effect on architecture.

Considering financial values, infrastructural, industrial and governmental buildings comprise the majority of construction industry. However, output based approach for glocalization cannot be applied to such facilities. Is it possible to see a bridge or a dam tailored or adapted to local end users and ready for sale? Such facilities are already sold before construction begins, so they are already designed in accordance with the scope, the requirements, of the client. In other words, they are mostly under impact of global considerations. Nevertheless, these facilities, comprising the majority of construction industry's total financial value, have a direct relation to glocalization by a process based approach. This subject is going to be mentioned in the next chapter.

Ready for sale construction outputs have to be exposed to glocalization since they are going to target local buyers. Probable choices of locals and adaptation of facilities to increase sales have to be considered. Nevertheless, global advances even in architecture are not going to be ignored. As it was already stated, an optimal integration of global and local factors is to be provided.

## **6.2 Samples for Glocalization of Construction Outputs**

Adaptation in construction outputs is about changes in architecture to a large extent. Constructed ready for sale facilities are to be tailored in accordance with local buyers' demands and requirements. Architectural adaptations may be referring to both exterior and interior ones. Architectural aspect has global technological and financial considerations as a science. However, architectural aspect has local cultural and social considerations as an art. Optimal adaptation of global and local factors leads to a successfully applied glocalization.

Japanese single housing samples are good examples that show effect of culture on architectural structure. Figure 6.1 presents a visual comparison of modern and old Japanese single houses. Japanese people are perceived to be committed to their traditions very much. Although they are at a higher level in development of technology, they never lost their traditional identity. Their traditional temperament has a deep impact on their architectural approach.

Modern Japanese architecture compiles modern and traditional concepts. Traditionally, Japanese housing structures are dependent on minimalism and simplicity. According to Japanese traditions, one room in a house is to be used for multi purposes such as sleeping, eating and sitting. Therefore the houses do not comprise of too many rooms. One another philosophy of Japanese people is to be extraverted to outside, therefore a rooftop having a broad vision of outside is a must. Reviewing Figure 6.1, it can be figured out that such characteristics are still valid in modern Japanese houses. This is the adaptation part of the facility to local cultural conditions. However, all materials used in modern houses are globally accepted and most recent technologically developed materials. Another point is the modern appearance of the house in terms of general lines. These are the effects of globalization. To sum up, a good combination of global advances and local traditions in a modern Japanese single house reflects the aspects of a glocalized construction output.





Modern Japanese Single House

Old Japanese Single House

Figure 6.1. Modern and Old Japanese Single Houses

Climatic conditions are one another factor of differentiated local requirements. Some locations are exposed to heavy snow whereas some locations face limited and rare precipitation. This factor obviously has an effect on roof types. Figure 6.2 represents different types of roofs. The decision of constructing a hip roof or a flat roof completely depends on local climatic conditions.

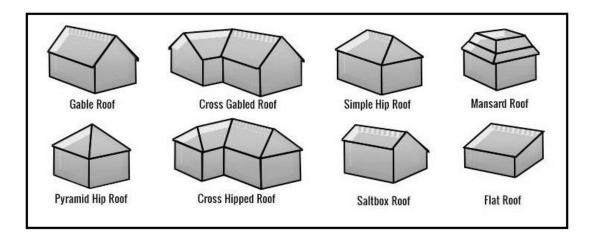


Figure 6.2. Types of roofs

Besides, the most recently developed materials used in the construction of a roof are going to provide a better isolation. Global recognitions of developed materials and construction techniques are to be considered.

Another point to be discussed is whether glocalization has an effect on the output constructed facility, where the purchaser, the client, is predetermined. Since glocalization is tailoring of an output to accommodate the purchaser, adaptation of a constructed facility to client's requirements seems possible. However, the tiny nuance is that in such a position the purpose of glocalization is not to attract the attention of the buyer but to satisfy designated client's demands. This is a controversial issue regarding the scope of glocalization, but similar samples are seen in construction industry.

By the impact of local client's requirements construction may result in some differences from similar projects worldwide. Demand of luxury qualifications is an example. Probably the cost becomes so much greater than a moderately constructed one. Client, who is the local actor, directly shapes the output in a different way depending on his financial capability.

#### **CHAPTER 7**

## PROCESS BASED APPROACH FOR GLOCALIZATION IN INTERNATIONAL CONSTRUCTION

Glocalization is a business strategy of running business in accordance with both global and local considerations. All phases of business are included; therefore integration of each movement at each phase is to be provided by recognizing local, global factors and their interactions. Major components of a business are shown in Figure 5.2. These components are also valid for international construction.

Business strategy development for international construction requires knowledge and expertise different from that of domestic construction. Management, execution, finance, resourcing and marketing components combining the whole of international construction are all exposed to local conditions. Besides, an international construction enterprise is a multinational organization operating throughout the world. International construction process is a long phase starting from market entry decision and project inception and ending in final completion. Each component of business is an effective actor during the whole process.

Splitting the business into components and analyzing effects of glocalization on international construction through each part is a better treatment for recognition. Strategic Management of an international construction company reveals a first step of making out an organizational structure. Execution of business is referred to project management, since construction has a project based system. Financing of an international construction enterprise generates the core of this business. Resourcing is a crucial asset in business and appropriate employment or supply of materials and equipment in international construction is going to contribute to the achievement of business objectives. Marketing in construction industry is about seeking for profitable works in the international market at the first step and regulating marketing

strategy in accordance with the changing situations. Consequently, a privatized combination of international construction business is shown in Figure 7.1.

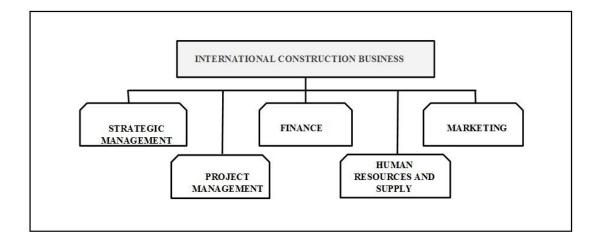


Figure 7.1. Major Components of International Construction Business

Decision of launching international construction business necessitates a considerable amount of effort built within a business strategy. Identifying key factors by the help of international construction risk management is essential to expose glocalization in a detailed approach; nevertheless the general structure of this business highlights a general understanding of the subject. Each part of international construction business is to be considered thoroughly by integrating glocalization strategy and nature of business actualities.

## 7.1 Strategic Management

Strategic management in an international construction enterprise starts with the expansion and definition of an organizational structure accommodating local demands and global factors. As it was shown in Figure 2.2, top two levels of construction business are strategic management and project management. Both two levels are very much related to glocalization in terms of functionality and scope.

Enterprises running construction business in the international market make domestic arrangements and adapt to local conditions while expanding. The business clearly focuses on local market and is run on a project by project basis. In a simple aspect, a head office is necessary for coordinating, controlling and associating projects, procurement, supplies and finance. Head office constitutes the core of the business. However, when the business expands in a particular location, a local office handling majority of the head office's functions is developed. Moreover, common practice is that an independent subsidiary is established. An independent subsidiary gives a local identity to the enterprise and is authorized to take independent decisions to a large extent.

Giving a local identity is a crucial responsibility of the independent subsidiary and can only be achieved by applying the main concept of glocalization which is "think global but act local". The independence of the subsidiary is to a large extent, but the links with the head office are still preserved and ignorance of global considerations is avoided.

International construction may focus on more than one location in the world. Number of subsidiaries increase by international expansion and an international structure focusing on centralizing all operations is developed. There are senior executives in local management divisions and they are given responsibility for running the business on behalf of the chief executive. Another benefit of this system other than considering local conditions is lightening the load of the head office (Howes and Tah, 2003).

Any business applying glocalizaton strategy was shown in Figure 5.1. Organizational structure of an international construction enterprise can be seen in Figure 7.2.

Such an organizational structure is fundamentally presented in the figure. However, organizations may be more complex and detailed. Divisional structures by product, region or functions can be chosen. Matrix structures or even two dimensional matrix structures presenting a mixture of the divisions can be developed. There is no one correct organizational structure. The fundamental principle shaping the consequence

is the same, so that it is not going to change in terms of considering global and local factors separately.

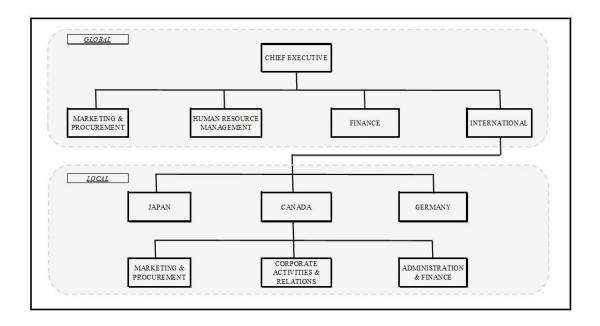


Figure 7.2. Organizational structure of an international construction enterprise (adapted from Howes and Tah, 2003)

Typical organizational development of an international construction business resembles that of a business running glocalization strategy. Local subsidiary is given a wide range of authorization but still linked to the chief executive. This is probably due to preserving connection to global actualities but in the meantime understanding and adapting local conditions in a better manner. A detailed organizational development of an international construction business running glocalization strategy can be seen in Figure 7.3.

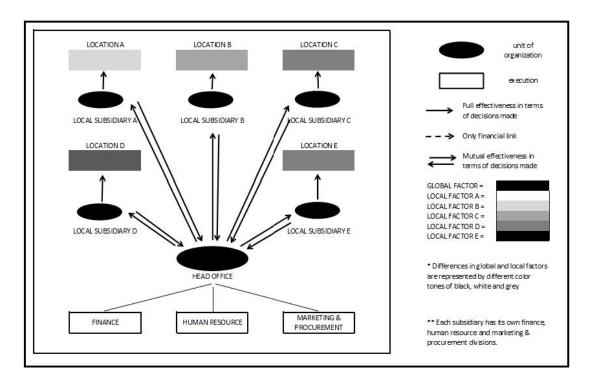


Figure 7.3. Organization of an international construction business running glocalization strategy

## 7.2 Project Management

Strategic organizational development of an international construction business requires a significant amount of local conditions consideration. It is already mentioned that construction business has a project by project basis. Besides, project level management is the second higher level of the industry. Therefore, project management is also very much related to glocalization and local factors are to be taken into consideration while executing project management.

Construction project management hosts management and controlling of each project activity taking place in the all project process. The main goal of construction project management is to complete the project effectively and efficiently. Main factor that has impact on realizing such a goal is the business infrastructure of the enterprise in the location of the project. One project manager is going to be in charge of this level and execute the requirements of the project by using resources provided from home, local or third locations. Head office is going to support the project manager with

global considerations. Using resources from local places is an activity of glocalization strategy. However, financial analyzes showing the pros and cons are to be generated in order to maintain the balanced adaptation.

A locally established company, which can be partly or wholly owned by the international construction enterprise, is going to play the major role in supplying of logistics and infrastructure enabling the exact running of the project. Understanding and adapting local conditions is going to be better applied by the usage of a local company, since this sub organization is going to be much more familiar with local conditions.

Contractual arrangements are one of the main activities effective on project success. Contractual arrangement has to be conducted in accordance with both global and local legislation. The interaction and conformity of global and local legislation are to be carried out and formed in an exact manner so that not to face any disputes in the future of the project. Therefore, another factor of glocalization in international construction appears to be the understanding and integrating of local legislation.

Construction projects have their own unprecedented circumstances coming out of the difference in location. One another source is the size and complexity of the project, but each individual project requires special adaptations. As a matter of fact, each project requires a complex management system due to the diversity of organizations involved in the project such as design, logistics, supply of materials and equipment and so on. The project manager is to be fully authorized in making decisions of local or global choices of the diversity of organizations. Optimal adaptations by optimal globalization and localization in coordinating these organizations are carried out to contribute to project goal.

Decision of the selection of global or local organizations involved in the project is to be made as early as possible in order to define the exact procedures and systems in advance. Project management failures often arise from the absence of clarity and definitions in organizational development and structures related to the unique project. Making the decision in advance is a part of planning and coordination that has to be completed at the beginning of the project to a large extent.

One crucial actor in an international construction project is the client. Since construction industry differs from other industries in terms of buyers' definition, client is said to be the buyer of construction industry. Glocalization in general terms is targeting the requirements of the buyers. Therefore, the client's preferences and desires are very important. Since more than one project is able to be executed, an international construction enterprise may have more than one client at the same time. However one unique project has one unique client. Therefore, the main responsibility to understand and follow through on the conditions inserted by the client is mainly belonging to the project manager. Head office is going to handle the requirements strategically as well, but since the client is mostly a local actor, project management team is going to be much more close to the client.

The common practice is that the project management team is formed in the local place. Authorizations given to the project management team and the extent of direction of the head office are determined in advance. The unique projects' environmental conditions are going to determine the level of services and support available in the location. Level of authorization transfer depends on the strategy applied by the enterprise. A good strategy to apply glocalization is sometimes to appoint a local agent or a local advisor. As it was mentioned, human resources management is also about employing of management staff at each level. Therefore, employment of local staff is another strategically applied activity in determination of project management. The level of local staff employment is another issue of balancing factor in glocalization.

The environment of the project is to be analyzed by the project management team very well. Local site conditions, weather conditions, access options for materials and equipment to the site, supply of local skilled labor and several other factors comprising the local conditions have significant effect on the process of the project. Since the main goal of project management is to effectively and efficiently complete the project or to set out the final completion within the specified time and budget, local conditions are to be considered thoroughly and optimal adaptation is to be provided by the project management team (Howes and Tah, 2003).

#### 7.3 Finance

Concept of globalization became a worldwide strategy chosen by many businesses and as a consequence international finance brought back several changes. Improvement in information and communications systems accelerated the changes in the financial system so that it became more interacted and integrated. Financial system of the world is now much more sensitive to effective factors taking place in any one other location. However, finance, which is the irrefutable factor comprising the core of business, is to be given shape considering local financial conditions.

Financial institutions and several types of innovations are developed to facilitate financial cash flow across the borders. This facilitation seems to be proper especially among developed countries, but developing and undeveloped countries together with a high rate of debt have to account for taking measures such as imposing exchange controls at a higher level. Interventions to the financial system is for the purpose of protecting a local economy, however measures for protection bring forth the major risks for an international business investment.

International construction business that is run in developing or undeveloped countries is exposed to financial risks stemming from overly fluctuations in exchange rates and possible governmental interventions. International construction business has to overcome or at least mitigate the risks arising from financial conditions. Dealing with financial risks requires an optimal strategy to be chosen and applied. As a matter of fact, it is nonsense to categorize countries into three groups as developed, developing and undeveloped and determine a strategy to be applied in accordance with this categorization. Since this is a very general categorization, each country and sometimes even each location in a country may have its own unique financial conditions. Financial strategy is to be chosen, developed and applied in accordance with local conditions. This reminds the concept of glocalization; running business in accordance with both local and global considerations.

Financial strategy of an international construction enterprise may even be to reject an investment at the very beginning of the project, in the phase of feasibility analysis. Financial conditions of a location are to be investigated thoroughly. For example,

inability to transfer profits due to local governmental restrictions is a crucial local financial factor effective on investment decision at the beginning. Another example can be invalidity of local currency in international trade. This is going to bear out several problems to be overcome for protection of the investment. Risk and reward proportion is to be found out.

Developing a financial strategy depending on local conditions or in other words adapting to local considerations may require regulation of financial sources. An international construction company's wealth comprises of cash, invested lands, equipment and personnel, facilities and materials. The company is to regulate the levels of its wealth in accordance with its short term and long term investments. New investments are going to require finance in cash at the beginning and the company is going to determine a strategy whether to use cash reserves at present, dispose of equipment and investment lands or borrow. Even the amount of cash to be barrowed for an investment and where from to barrow it are to be decided considering the local factors of the investment. Obtaining the sources of finance from sponsors, partners, local or home country finance suppliers or internationally developed financial institutions fully depends on an integration of global and local financial considerations.

Another financial factor effective on the business can be the incentives provided by local governments. Negotiations on this subject may even be possible in some locations. Regulation of taxes, rates for loans, subsidies and many others forming incentives are to be considered locally. It is a common practice that local governments in developing and undeveloped countries promote inward investment especially in currencies that are valid with a low rate of inflation in world trade (Howes and Tah, 2003).

Consequently, glocalization appears to be a better strategy in the selection of a financial strategy to be applied, as well. Pure globalization in financial strategy may lead to pass up the chance of acquiring much more profit, since local considerations may host positive advantages. Pure localization in financial strategy may end in a redundant investment, since interaction of global finance cannot be ignored. Therefore, business is to be conducted considering both local and global factors.

## 7.4 Human Resources and Supply of Materials and Equipment

Management and recruitment of human resources is a very crucial factor in international construction in terms of productivity and profitability. Profitability is the consequence of a successfully completed project within the specified time and budget. Management of human resources requires skills concerned with the ability to understand behaviors of human. Advantage of an international construction lies in a better developed relationship between all level managers and employees, since the outcome is going to be a great productivity.

There are two main factors effective on the management of human resources in international business. One of them is the culture of local employees and the other is the local legislation for employment. Human resource management strategies of the local subsidiary established to run the business in the name of global construction company are to be adapted in accordance with local culture. Local legislation is going to have direct impact on the strategy as well. All the practices executed and all the procedures followed must be held consistent with local legislation.

As a result of the impact, each different location is to be considered differently in managing and maintaining human resources. Local legislation is going to determine the boundaries of employees' rights, health and safety issues and employment procedures. Such issues are not only going to be relevant to local employees but also going to be relevant to foreign employees to a great extent, because non-discrimination among employees is an ethically accepted term spreading worldwide.

Nevertheless, consideration of local culture and legislation about employment is not going to lead the head office of the international enterprise to ignore its global strategy and business policy. All the processes and practices implemented about human resources are going to be held in a balanced manner considering local restrictions and global policies. Such a strategy is just the same as seen in glocalization strategy. Otherwise, international construction company is whether going to go out of its global scope or run into an unsuccessful business.

Another resourcing factor crucial in international construction is the supply of materials and equipment. Construction industry is the leading sector of world

economy since it hosts several subsectors. The majority of these subsectors comprise of the productions of materials and equipment required in a construction project. Resourcing of these items is a part of feasibility analyses and implementation of construction projects.

Types and qualities of materials and equipment have an important effect on the quality of the output and satisfaction of the client can be obtained by this quality assurance. Construction projects are complex and dependent on several factors. Technological developments of construction materials and equipments are expanding globally. Therefore, it is not easy to complete a construction project with exact materials, in exact quality standards and in low costs. An appropriate system in supply management is to be developed in order to achieve supply process.

Suppliers from home country, suppliers from other countries or local suppliers are choices of sources for construction materials and equipment. Local conditions revealing the availability of materials and equipment producers have to be researched and pointed out. Considering logistics as a contributive factor to the cost, supply from short distances is going to be a better choice. However, it is not itself a sufficient property to make a decision. Quality and production costs are the main selection criteria.

Another local condition related to materials and equipment is the determination of quality and specifications by local legislation. Although specifications and quality are predetermined by the client in advance, restrictions and requirements of local legislation are to be clearly digested.

Resourcing is one of the crucial components in an international construction business. Glocalization strategy requires adaptation to local conditions meanwhile considering global factors. Resourcing activities, human, materials or equipment, are affected by local conditions comprehensively. Success in the completion of an international construction project within the specified time, budget and quality can be obtained by implementing glocalization strategy in resourcing.

## 7.5 Marketing

International marketing is an important part of an international construction enterprise's overall strategy. A locally operating construction company focuses only on local basis; however an international company has to integrate local marketing actions with global strategies. After such integration, the international company is going to be in a more advantageous position regarding competitiveness.

Marketing strategy of construction companies may seem to be a controversial issue considering its project based structure. Project basis of construction process brings out the predetermination of the client. The controversial issue is what marketing is for when the client is predetermined. Marketing in international construction is basically focusing on the allowance of the subsequent project. In other words, marketing in international construction begins with the seeking of new works in the international market.

Expanding into foreign markets may give construction companies good profits. Moreover, construction companies may meet better conditions in foreign market than that in domestic market. Whatever it is the reason of expansion, Howes and Tah (2003) states that 'the prime factors to be considered during the market evaluation will include: need and potential, financial and economic considerations, political and legal factors, socio-cultural forces, degree of competition, freedom to trade, codes and practices and life cycles.' It can obviously be seen that each prime factor for market evaluation is one part of local considerations.

When international involvement is at a high level, marketing efforts are transferred to local subsidiaries by home company headquarters via authorization transfer. Marketing strategies to be applied are adapted according to the related marketing place. Coordinating and integrating of marketing strategies between local and global factors is going to determine the level of successful expansion in the world market. Strategy is mainly about classification of services, products or materials according to their applicability for construction in local or global markets. Figure 7.4 shows how classification can be made.

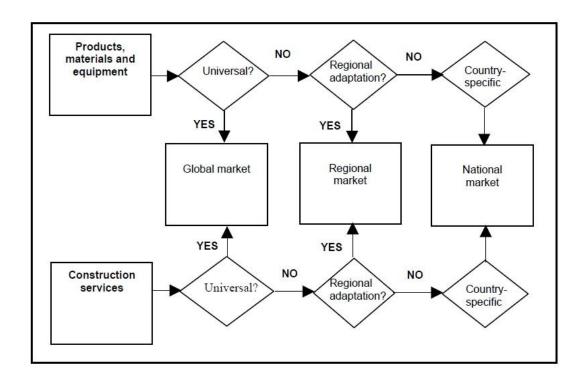


Figure 7.4. Market classifications of construction services, products, materials and equipment (Howes and Tah, 2003)

The ultimate purpose of marketing is to seek for business opportunities and to be in a competitively more advantageous position than rival enterprises operating on the same location. In order to maintain the advantageous position, a long term global marketing strategy remaining unchanged in basic principles but a flexible marketing strategy offering small shifts inasmuch as local demands is to be developed. That is nothing other than glocalization concept.

#### **CHAPTER 8**

## DETAILED EVALUATION OF GLOCALIZATION IN INTERNATIONAL CONSTRUCTION

Literature review on the concept of Globalization as a business strategy obviously reveals the fact that considering any international construction expanding across borders as following globalization strategy means ignorance of local factors. However, it is not the case. Any international construction enterprise running business out of its home country develops a business strategy unique to the location of the implied project. Above all, construction business is project based, thus effects of the local conditions of the project cannot be disregarded.

In order to better understand glocalization as a business strategy in international construction, a detailed evaluation of construction process is to be held. A detailed overview of construction process, pointing out specific factors effective on the whole process, can be made by the help of construction risk management researches. Risk assessments are made by various methods and the purpose is whether to make a go/no go decision at the beginning, to mitigate or totally overcome the risky factors. To provide a risk assessment and lead to a right decision several risk factors are found out and evaluated. It can obviously be seen that all these risk factors together combine the whole of construction business. Therefore, usage of risk assessment researches pointing out risk factors of international construction is going to be a better choice to evaluate glocalization strategy in international construction process.

The main goal of construction enterprises is to expand in the international construction market. Glocalization strategy requires adaptations to local considerations while maintaining global implementations. Therefore expansion process of an international construction company is to be evaluated through pointing out risk factors hosting local considerations.

#### **8.1 Basic Factors of International Construction Process**

Overview of international construction business in terms of generalized components provides a strategic understanding of glocalization strategy application. However, international construction is a complex and differentiated type of business involving several detailed factors. Finding out all factors and categorizing them in a commonly accepted order is not possible due to the project dependence of construction. Since each project involves unique characteristics, effective factors may change. Nevertheless, looking through the researches made for directly or indirectly finding out effective factors, several efficacious findings emerge.

One of the researches providing a wide range and detailed categorization of risk factors effective on international construction is the model developed by Hastak and Shaked (2000). The model is developed for risk assessment and can be used in the preliminary steps of project evaluation. It can be used for analyzing overall risk and make a decision for entry to foreign markets. However, what can be referred to this research about glocalization is that it gives a detailed categorization of factors effective on international construction process.

All risk indicators involved in an international construction project are listed and categorized according to levels. Categorization consists of macro (country) level, market level and project level. This categorization is about generalization from strategic to field level in other terms. The top general level is called country level. However, it does not mean that the other two lower levels do not involve local considerations. As it was mentioned before, construction process requires a hierarchical management organization consisting of organizational (strategic), project, operational and field levels. It was already mentioned that project management teams are transferred authorization due to their nearness to local conditions. Taking decisions of adaptations to local considerations as a necessity of glocalization strategy may be executed by all levels. Therefore, all hierarchical levels indicated by Hastak and Shaked (2000) are to be reviewed.

Table 8.1 shows all risk indicators and their categorization of possible source to be identified by local or global considerations.

Table 8.1. Risk indicators and possible sources (adapted from Hastak and Shaked, 2006)

	DIGK DIDYGATOD	SOURCE OF THE INDICATOR CAN BE IDENTIFIED BY ANALYZING	
	RISK INDICATOR	GLOBAL CONSIDERATIONS	LOCAL CONSIDERATIONS
MACRO (COUNTRY LEVEL)	Political continuity	✓	✓
	Attitude toward foreign investors and profit		✓
	Nationalization/expropriation		✓
	Enforceability of contracts	✓	✓
	Government incentives		✓
	Monetary inflation	✓	✓
	Economic growth	✓	✓
	Bureaucratic delays		✓
	Communication and transportation	✓	✓
	Professional services other than construction		✓
	Hostilities with neighboring country or region	✓	✓
	Dependence on or importance of major power		✓
LE	Fragmented political structure		✓
RY	Fractionalization by language, ethnic and regional		,
INT	groups		<b>√</b>
201	Restraints to retaining power  Mentality including nationalism, corruption and		✓
0 ((	dishonesty		✓
CR	Social conditions		✓
MA	Societal conflicts		✓
	Instability because of no constitutional changes		✓
	Actual laws versus practices for repatriation of capital		✓
	Current account balance		✓
	Capital flow	✓	✓
	Foreign exchange reserves		✓
	Gold and other reserves		✓
	Dept as GDP converted to US dollars	✓	✓
	Capacity service debt		✓
	Extent of deficit/surplus		✓
	Sources of revenue and major spending		✓
	Investor's technological advantage	✓	
,	Technology protection system	✓	
VEI	Market suitability for advanced technology		✓
MARKET LEVEL	Availability of basic construction technologies and equipment	✓	✓
KE	Type of partnership	✓	✓
1AF	Types of contracts	✓	✓
	Enforceability of construction contracts	✓	✓
	Procedure for bidding and design approvals		✓

Table 8.1. (Continued) Risk indicators and possible sources (adapted from Hastak and Shaked, 2006)

Availability and quality of local contractors		<b>√</b>
Availability of construction materials		<i>'</i>
Availability of skilled and unskilled workers		<i>✓</i>
Labor cost/productivity		<i>'</i>
Availability of equipment and parts		<i>,</i>
Medium and long term financing for projects	<b>√</b>	
Tax and nontax incentives in construction industry	<u> </u>	./
		· /
Special construction industry index Interaction of foreign management with local contractors	<b>√</b>	<b>√</b>
A/E/C firms client or owner relationship	✓	<b>√</b>
Competitive/negotiated bidding	<b>√</b>	<b>√</b>
Current market volume in core competency	<u> </u>	<b>√</b>
Future market volume in core competency		✓ ·
Bidding volume index		· ·
Problems in technology transfer and implement	<b>√</b>	· ·
Retention of technological advantage	· · · · · · · · · · · · · · · · · · ·	•
Possibility of contractual disputes	<b>,</b>	
Problems in dispute settlement due to country's laws		<b>√</b>
Shortage of skilled and unskilled workers		✓
Availability of special equipment		<b>√</b>
Delays in material supply	✓	✓
Delay in design and regulatory approvals	✓	✓
Defective design, error and rework	✓	
Work change order		<b>√</b>
	✓	<b>√</b>
Difficulties to meet construction programs Unforeseen adverse ground conditions Bad quality of materials		<b>√</b>
Bad quality of materials	<b>√</b>	<b>√</b>
	<b>√</b>	<b>✓</b>
Financing difficulties because of tax or capital movement restrictions	·	✓
Financing difficulties because of currency exchange rate	✓	✓
Drop in project revenue	✓	✓
Difficulty in converting local currency to foreign exchange		✓
Construction manager	✓	
Third party delays	✓	
Safety	✓	✓
Weather conditions and other causes of delay		✓
Physical damage to project by riots, terrorist act, and so forth		✓

The basic meaning of glocalization strategy is to be recognized thoroughly. Glocalization is the practice of conducting business according to both local and global considerations. Table 8.1 figures out the fact that except a few indicators each detailed factor effective on the process of international construction involves local considerations to be found out and the business is to be adapted by variations in act. Finding out the source of any indicator, decision makers plan and execute the counter step. The counter step may be to draw back for those indicators that risks cannot be overcome or mitigated. Another counter step may be to take action in accordance with relevant global and local considerations to overcome or mitigate risks. Whatever is done is going to be in consideration of glocalization strategy.

Another research providing a list of effective factors is done by Han and Diekmann (2001). This research aims to form a systematic ground for go or no go decisions for international construction projects. Han and Diekmann (2001) states that, 'The globalization of the construction industry provides tremendous opportunities for contractors to expand into new foreign markets. However, international construction involves all of the uncertainties common to domestic construction projects as well as risks specific to international transactions.' Obviously, globalization of international construction cannot consent ignorance of local considerations.

Globalization of an international construction company enhances competitiveness in the world market. However, entry decision is difficult due to complex and varying factors effective on the process. International projects host uncertainties stemming from the project based structure of construction. Projects are unique to the location that it is held on. Differentiated location brings together different conditions for economic, legal, political and cultural aspects. Any failure to consider these conditions is going to lead to a fade in business.

Another classification of factors effective on international construction and separation by global or local considerations can be seen in Table 8.2.

Table 8.2: Risk related factors and possible sources

(adapted from Han and Diekmann, 2001)

		SOURCE OF THE RISK CAN BE IDENTIFIED BY ANALYZING	
	RISK RELATED FACTOR	GLOBAL CONSIDERATIONS	LOCAL CONSIDERATIONS
	Expropriation		✓
POLITICAL	War/not	✓	✓
	Government control		✓
	Repudiation		✓
	Government subsidy		✓
	Relationship with government	✓	✓
	Government act & regulation		✓
2	Currency exchange	✓	✓
ECONOMIC	Inflation		✓
NO.	Burden of financing	✓	✓
E	Tax discrimination		✓
7	Cultural differences		✓
CULTURAL/LEGAL	Language barrier		✓
	Different applicable law		✓
UR/	Different dispute resolution	✓	✓
]_T	Force majeure	✓	✓
	Protection of proprietary information		✓
CH./ CONSTRUCTION	Difference in geography		✓
E	Labor issue; skill, strike etc.		✓
IRU	Material availability		✓
.SN	Subcontractor availability		✓
22 /	Different standard		✓
H.	Different measurement system		✓
TE(	Domestic requirement		✓
	Lack of management skill	✓	
	Lack of experience	✓	
	Warrantee issue	✓	✓
OTHER	Import/export regulation		✓
OTI	Technology transfer	✓	✓
	Lack of infrastructure		✓
	Public resistance		✓
	Environmental issues	✓	✓

## 8.2 Evaluation of Glocalization through International Construction Process

Basic factors effective on a construction business process can be classified into two groups as controllable and uncontrollable ones. Dikmen and Birgönül (2004) made up a list of factors that show the criteria that effect attractiveness of a project and competitiveness of a company. 'Attractiveness is assumed to be more related to the factors that are out of the direct control of a company; thus controllable factors at the project level that would significantly affect project success are not considered among input criteria. Project success factors such as project management are excluded from the list as it is assumed that if the contract is awarded to a construction company, all necessary actions will be taken to increase the project success.' Table 8.3 shows the possible sources of uncontrollable factors.

Table 8.3: Possible sources of uncontrollable factors in an international construction project (adapted from Dikmen and Birgönül, 2004)

ATTRACTIVENESS CRITERIA OF	SOURCE OF THE CRITERIA CAN BE IDENTIFIED BY ANALYZING		
AN INTERNATIONAL CONSTRUCTION PROJECT	GLOBAL CONSIDERATIONS	LOCAL CONSIDERATIONS	
Economic prosperity of host country		✓	
Host country risk (political, legal and financial)		✓	
Cultural/religious similarities	✓	✓	
Distance between home and host country	✓	✓	
Attitude of host government to foreign contractors		✓	
Construction demand in host country		✓	
Size of project		✓	
Type of project		✓	
Technical complexity of project		✓	
Type of client (government or private sector)		✓	
Availability of funds for project	✓	✓	
Contract type		<b>√</b>	
Experience of company in similar works	✓		
Existence of strict time limitations		✓	
Existence of strict quality requirements		<b>√</b>	
Intensity of competition		✓	

It can obviously be seen that uncontrollable factors in an international construction project fully (except only one factor) depends on local conditions of the project. Ozorhon et.al (2007) state that 'the risks associated with construction business may be split into those that are related to the management of internal resources and those that are prevalent in the external environment. Internal factors are relatively more controllable and vary from project to project. External risks are relatively uncontrollable, but they need to be continually scanned and forecasted in order to develop company strategies for managing their impact.'

Controllable factors require a counter step that is taken to change the cause. In other words, possibility of occurrence of the cause can be fully or to an extent decreased by applying the necessary action. However, for uncontrollable factors, no action can be applied to change the possibility of occurrence of the cause. Factor is going to remain the same in terms of possibility till the end of the process. Nevertheless, it does not mean that there is not a counter action to be applied. This time, a counter step can be taken to recover from the effect or to give up.

No matter the factor is controllable or uncontrollable, necessary actions are to be taken in order to overcome the case by considering global and local considerations. This is simply the requirement of glocalization strategy. Tables 8.1, 8.2 and 8.3 reveal one similarity to be identified. Local considerations of one unique international construction project are effective on the process to a great extent, even more than global considerations. One point is to be noted that company specific factors are deemed to be global considerations because the international construction enterprise is a global actor conducting business internationally.

Figure 8.1 represents how glocalization as a business strategy can be applied during international construction process.

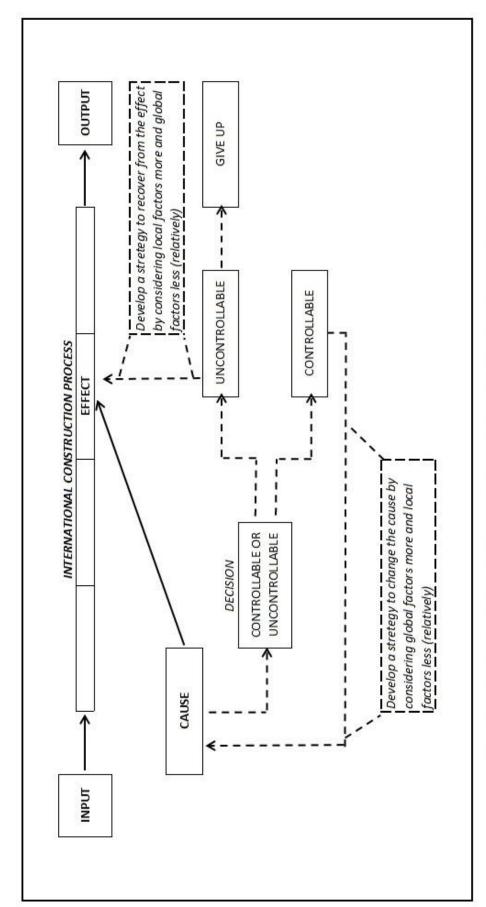


Figure 8.1. Application of glocalization as a business strategy in international construction process

#### 8.3 Benefits of Glocalization in International Construction

Since changing characteristics of the international construction market force, it is inevitable for an international construction company to be a glocalizing enterprise. Any international construction enterprise is to obtain the balanced adaptation of globalization and localization by giving required weights to each according to the specific environment of the construction process. Another definition of glocalization strategy would be the optimally and strategically application of globalization and localization strategies.

Globalization and localization strategies are never going to be the right strategy in international construction when they are facilitated alone. Glocalization is going to give the enterprise the chance of maintaining rooted in the international arena and bringing together successful completion of projects. The enterprise is going to be allowed to find out the optimum business steps to take considering global and local requirements together.

Glocalization simply means changing, activating an optimal business strategy and managing the whole process by this strategy. When the construction process is managed well, glocalization is going to be a growth factor for the international construction enterprise.

Righteous application of glocalization is going to fill the lacking points of globalization and localization. Any type of defense of locals in terms of opposition to globalization due to ethnic, cultural or any local characteristics is going to be terminated. Any type of underdevelopment coming out as a consequence of pure localization is also going to be terminated.

Great and well built expansion of the international construction enterprise in the world market is going to be facilitated by glocalization. Glocalization strategy cannot be defined in a determined exact manner. It is to be analyzed, planned, developed, controlled and put into action, thus it is going to bring a great development to the construction enterprise running business internationally.

#### 8.4 Drawbacks of Glocalization in International Construction

Glocalization as a business strategy in international construction does not have any drawbacks unless implemented properly. Proper implementation of glocalization lies under the optimal balancing of globalization and localization strategies. Therefore, drawbacks of glocalization cannot be different from the drawbacks of pure globalization or pure localization implementation.

Over emphasizing on global considerations, forwards the international construction company to face difficulties in standardization of the construction process in accordance with the local conditions of the project. This is simply because each different location has different conditions and some locations are even more conservative for local considerations and are resistant to changes. Due to this factor, a globally accepted strategy cannot be applicable on a specific location.

Regarding a unique type of an international construction process, global considerations may lead to several problems because of changing conditions.

An international construction enterprise is naturally going to have a home base, culture and nation. Besides, these factors are going to be effective on the business strategy to be applied to an extent. However, intentionally or unintentionally imposing of such characteristics to different locations may be rejected by locals.

Although globalization may seem to be a desired strategy to be applied in construction business, the outcomes may be regrettable ending in failures. It is to be realized that a globally accepted actuality is never going to satisfy every actor. Adapting the strategy according to local requirements instead of standardizing the strategy by approximation is going to be a better choice to realize the aim of satisfying every actor or dealing with construction risks in other words.

Implementation of localization more than the required extent and missing out the balance may also lead to several failures in glocalization strategy. Adapting to local conditions does never mean splitting away from global considerations. Any globalized development is to be localized. Otherwise, developments and improvements in construction industry cannot be fallowed.

It was noted before that glocalization strategy brings back additional costs relevant to adaptations in the strategy. Therefore, a correct analyzes of pros and cons in terms of profit or loss is to be carried out very well. As it can be seen Figure 8.1, one counter step of glocalization strategy in international construction process is to give up. There are several researches pointing out strategies for go or no go decisions in the international construction market. Consequently, decision of entering into a market at the very beginning of launching an international construction business is to be conducted under requirements of glocalization strategy, as well.

#### **CHAPTER 9**

#### RESEARCH METHODOLOGY

Application of glocalization as a business strategy in international construction is principally stated in previous chapters. Figure 8.1 is a summary of this process. At the initial stage of the process, the cause that is effective on the international construction process is determined whether it is controllable or uncontrollable. The cause to be controllable or uncontrollable only changes the balance of considering local or global factors. Additionally, there is a giving up alternative for uncontrollable causes. Giving up decision is obviously about entry (go / no go) decision. Research is mainly about quantitatively but relatively identifying impacts of local considerations on the international construction process. By the help of these quantitative but relative comparisons of impact scales, a better decision making process in international construction investments can be followed and thus glocalization strategy can be carried out.

In order to realize this purpose, a web based questionnaire is developed to figure out the extent of local considerations' impact on construction sub strategies. The research is dependent on the perception of international construction experts. These experts are delicately chosen considering their extensive knowledge and experience in international construction business. Likert type of rating questions are created in order to compare attitudes of participants.

The executed questionnaire can be seen in Appendix-A. This chapter explains how the questionnaire is developed, the details of it and how the responses are to be evaluated. Research findings and analysis of the results are discussed in the next chapter.

#### 9.1 Profile of The Respondents

Since the research is mainly dependent on the perception of respondents, it is crucial to define the respondent profile to figure out the viability of their answers. Profile of the respondents is the first part of the questionnaire and is developed in order to highlight the experience and knowledge level of the respondents.

General questions about the respondents are prepared to portray respondents' profile and eliminate if necessary. There are three questions to be answered in this part of the questionnaire. The first two questions are focusing on the personal information of participants, whereas the last question is about the companies that respondents are currently working.

The first question is about the duration of the respondents' personal experiences in international construction business. Experience in a business is exactly a matter of time spent in the area and therefore is a good indicator of experience and knowledge level. It is a common practice that most international construction experts go through this business after a period of domestic business. Even if not, managerial positions are not given directly at the beginning of a career.

The second question is about how the respondents define their position in the company. There are three possible answers and one of them is an indicator of elimination criterion. It was already stated in the previous chapters that both in project and strategic management levels, decisions forming glocalization strategy are taken. Therefore, both of the respondents in project and strategic level are going to fit the targeted profile for the questionnaire. Any respondent, who is in project management level and having an experience of 1-5 years in international construction, can be deemed to be viable. However, when the respondent define his position in the company as something other than strategic or project management level, this is going to reveal the fact that he is not deemed to have adequate experience and knowledge to give a viable answer. Thus, the answers of that type of participant are to be eliminated.

The third question is about the companies. Companies running international construction business accumulate knowledge and experience as a corporate entity.

Accumulated experience and knowledge are able to be utilized by people especially in managerial positions. Therefore, although duration of the company's international construction business activities can not be a criterion of elimination, it can be an indicator lifting the effectiveness of respondents' viability.

In the first part of the questionnaire which country or region questions are not asked, since glocalization strategy in international construction is not researched for a specific location and several different locations can be targeted. The main purpose is to find out common points.

#### 9.2 Development of a Matrix Questionnaire

The purpose of the questionnaire is to relatively identify impacts of local considerations on major international construction sub strategies and to state this outcome in a quantitative exposition. Perceptions are dependent on expert opinions, thus a matrix questionnaire is developed to measure their approach against international construction process.

Second part of the whole questionnaire is making up the core and trying to access expert opinions by the help of rating questions. A questionnaire which ends up in a matrix shaped table is developed. There are several local considerations and there are several sub strategies as well. Participants are asked to rate the impact of each local consideration on each sub strategy applied in an international construction process.

Possible answers for ratings compose of five options; which are very low, low, medium, high and very high. If there were less than five options it would have been difficult to compare the results since the outcomes would not be distinctive. If there were more than five options it would have been difficult for the participants to decide on the impact level of each combination. Therefore five rating options for each combination seem best to fit the purpose.

There are totally 8 local considerations and 10 sub strategies. As it can be seen in Appendix-A, 8 questions, which are for each local consideration, are created. However, overall part comprises of 80 combinations asked to rate.

#### 9.2.1 Selection of Local Considerations

Selection of local considerations is the most important part of this research. As it was already stated in Chapter 8, a detailed overview of construction process, pointing out specific factors effective on the whole process, can be made by the help of construction risk management researches. Local considerations can easily be selected by pointing out risk factors hosting local considerations. A local consideration is something to consider for overcoming or mitigating risks. That is the reason why international construction risk management literature is able to fill all the gaps in ordering local considerations.

As it was reviewed in Chapter 8, local considerations are not a few. Thus, it is not practical to ask participants to rate each detailed consideration. Nevertheless, local considerations can be grouped into 8 major sections in order to simplify rating. 8 major sections of local considerations and what they comprise of are as follows:

#### > LOCAL FINANCIAL CONDITIONS

Government incentives

Monetary inflation

Economic growth

Current account balance

Capital flow

Foreign exchange, gold and other reserves

National debt

Sources of public revenue

Labor costs

Capital movement restrictions

Availability of local funds

## > LOCAL SOCIAL AND CULTURAL CONDITIONS

National similarities

Religion and language

Attitude toward foreign investors

Mentality of corruption or dishonesty

Population density and wealth distribution

Societal conflicts

Availability of skilled or unskilled workers

General perception for local workers' productivity

Interaction of foreign management with local contractors

# > LOCAL DEVELOPMENT LEVEL AND TECHNOLOGICAL CONDITIONS

Communication and transportation

Professional services other than construction

Suitability for advanced technology and transfer

Availability and quality of basic construction technologies, equipments, construction materials and local contractors

#### > LOCAL GEOGRAPHICAL CONDITIONS

Ground conditions

Distance between the location and home country

#### > LOCAL CLIMATIC CONDITIONS

Approximate weather conditions of the specific location.

#### > LOCAL POLITICAL CONDITIONS

Political continuity

Hostilities with neighboring country or region

Dependence on or importance of major power

Political structure

Discrimination by language, ethnic or regional groups

Nationalization and expropriation

#### > LOCAL LEGISLATIVE CONDITIONS

Enforceability of contracts

Bureaucratic delays and availability of unconstitutional changes

Actual laws versus practices

Procedures for approvals

Import export regulations

Settlement of disputes regarding country's laws

Health and safety issues

Quality requirements

## > LOCAL MARKET CONDITIONS

Construction demand

Competition level

Current market volume in core competency

Future market volume in core competency

As it can be seen in Appendix-A, components of each local consideration is wholly stated at the beginning of the questions in order to draw a mental picture on the participants. Therefore, they are allowed to thoroughly understand the content of each section and rate in accordance with that.

#### 9.2.2 Selection of Sub Strategies in International Construction

After pointing out what to consider in terms of locality, sub strategies in international construction which presents the counter steps to take are to be selected. Strategy in any business is a combination of decisions, counter steps or alterations. Business strategy in international construction can be privatized and divided into sub groups. As it is valid for local considerations; sub strategies in international construction are also to be held in a limited number but pointing out principal ones, in order to allow the practicality of the questionnaire. Categorization of sub strategies in international construction business can be as follows:

- > ENTRY DECISION (GO/NOGO)
- > ORGANIZATIONAL DEVELOPMENT
- > CONTRACTUAL ISSUES
- > FINANCIAL ISSUES
- > PLANNING
- > DESIGN
- > CONSTRUCTION TECHNIQUES
- > EMPLOYMENT
- > RESOURCING
- > MARKETING

Each sub strategy is somehow mentioned in the previous chapters in terms of defining international construction and application of glocalization strategy in international construction business. All of them are hosting decisions, counter steps or alterations.

Additionally, it is to be stated that Entry decision (go / no go) is to be evaluated on its own. If the decision in this sub strategy is no go, then all the other sub strategies become inoperative. However, Entry decision cannot be deemed out of sub strategies because it was already stated in the previous chapters that this crucial decision is a part of glocalization strategy. Figure 9.1 reveals the independence of Entry Decision (go / no go) from other sub strategies.

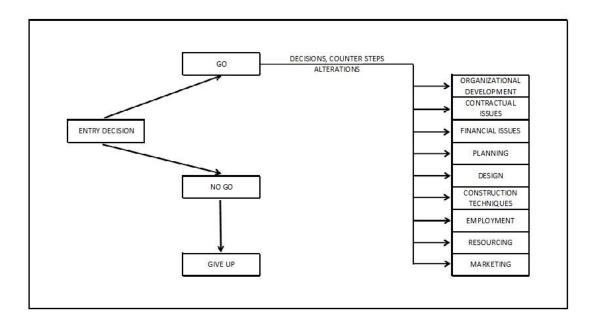


Figure 9.1: Sub strategies in international construction

#### **9.2.3 Evaluation of Responses**

Rating of impact levels for each combination is aimed to be compared by Likert type of multiple choice questions. 'It was noticed that a great number of the five-point statements, i.e. "the multiple choice" or "strongly approve" statements (in each case the subject being offered five alternatives from which to choose), yielded a distribution resembling a normal distribution' (Likert, 1932). Therefore, creation of five choices multiple questions presenting a normal distributed scale is the best alternative to measure expert opinions.

The choices for all multiple questions are the same, thus it is allowed to combine all participants' responses. Besides, statements in the choices are expressions of expected impacts rather than facts, so differentiated but pointing out a common point in a normally distributed manner is expected.

For the purpose of scoring, a numerical value is assigned to each possible choice. Values from zero to four are assigned to each alternative and are valid for all questions. The zero is for one extreme and the four is for the other extreme choice.

	Very Low	Low	Medium	High	Very High
Quantitative Value	(0)	(1)	(2)	(3)	(4)

A participant's response to each combination is given a score and then all participants' scores are combined by finding out the mean average. At the end of this evaluation, a matrix table showing out relative comparisons for expert opinions on each combination (local considerations versus sub strategies) emerges.

Comparison scales are identified and categorized as follows:

Very Low to Low: 0.00 - 0.99

Low to Medium: 1.00 – 1.99

Medium to High: 2.00 - 2.99

High to Very High: 3.00 - 4.00

The matrix table is expected to present relatively the extent of each local consideration's impact level on each sub strategy applied in an international construction business. All these results are expected indirectly to indicate that the impact of local considerations is at a considerably high level and cannot be disregarded, and additionally directly to indicate:

- The extent of each local consideration's impact level on each sub strategy,
- The extent of each local consideration's impact on the whole process,
- The extent of each sub strategy's exposure level to all local considerations.

Consequently, all these quantitatively stated results are to be commented verbally to define the way in to run international construction business. Since glocalization strategy is figuring out the main idea of considering local and global factors in a balanced approach, the results are expected to give an idea about the degree of considering local factors in a detailed sort.

#### CHAPTER 10

#### RESEARCH FINDINGS

International construction business requires a meaningfully developed business strategy to achieve major goals. Internationality of this sector is the reason why glocalization strategy is the most clear business strategy to apply. As it was mentioned in previous chapters, glocalization strategy mainly depends on considering global and local factors together and in a balanced manner. This process is applied by decision makers taking part in the whole strategy. Therefore research is dependent on the attitude of experienced decision makers, who proved to be experts.

Development and evaluation of the questionnaire study was explained in Chapter 9. Application of the questionnaire to the defined experts, who are decision makers in international construction business, brought out expected results showing the significance of local factors consideration. Besides, the results indicate and highlight the relative level of impacts, which can be taken into account while making decisions.

#### **10.1 Profile of The Respondents**

The research is mainly dependent on expert opinions. Therefore, it is important to portray the respondent profile to figure out the viability of their answers.

Profile of the respondents can indicate the experience and knowledge level of the respondents. However, the slight differences in profiles cannot be taken into account in the evaluation of Likert type questionnaire. The reason for this lacking is that it is not possible to assign impact factors showing the level of respondents' experience and knowledge level. Thus, their impact levels on viability of the answers cannot be decided.

Consequently, all participants of the questionnaire are assumed to be having an equal level of experience and knowledge level. Profile of the respondents is evaluated for the purpose of figuring out that the participants are in the range of the targeted profile.

Questionnaire study is applied to selected people working for international construction companies in a managerial position. Application of the research is made via a web based form that was sent as a link through electronic mails.

Since the research is about a business strategy, a decision making process in other words; the most crucial point is that the respondents have to be in managerial positions. As it was stated before and can be seen in Appendix-A, the second question of the first part of the questionnaire is an elimination criterion for selecting targeted participants. Participants who defined their positions in the company as "other" rather than "strategic management level" or "project management level" are eliminated. Besides, participants who did not fully fill the questionnaire are also eliminated. After the elimination, the total number of participants is 45.

Personal experience requires significant amount of time to be spent in a business. Due to this fact, the participants were asked to state the amount of time they worked in international construction business. Figure 10.1 shows the experience level of the participants in international construction business in terms of time.

The majority of the respondents have an experience of 6 to 10 years in international construction business. As it was already stated, having an experience of 1 to 5 years does not affect the viability of the responses since the common practice is that people are not allowed to work in managerial positions in international construction in case they do not have any experience in domestic projects in advance or spend longer time in other positions in international projects. Therefore, it can be assumed that participants having an experience of 1 to 5 years are among targeted experts.

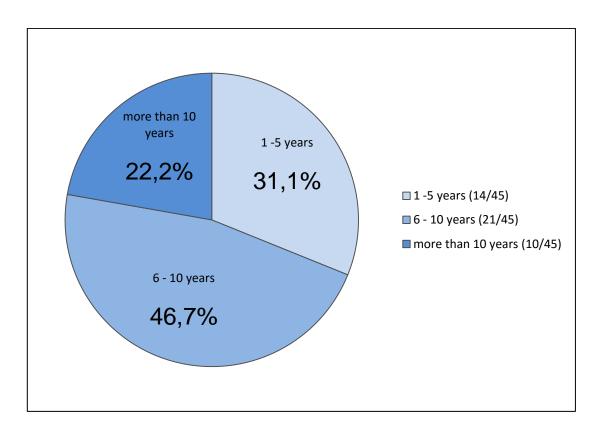


Figure 10.1: Experience level of respondents in terms of time spent in international construction business

Position of the participants in the international construction company is one another crucial factor in defining targeted experts. Participants were asked to define their positions in their current international construction company and the distribution of the responses can be seen in Figure 10.2. Management levels in international construction business revealed the fact that whether the position is in strategic or project level; decisions regarding local considerations and consequently glocalization strategy are taken by both.

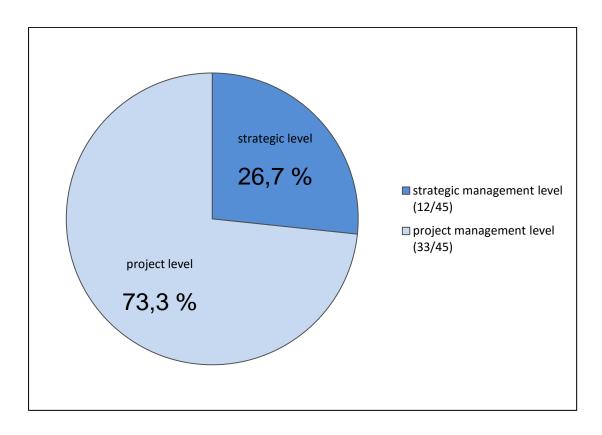


Figure 10.2: Managerial level of respondents

Company based knowledge and experience is a raising factor in business strategy development. People in managerial positions benefit from their companies' knowledge and experience either formally or informally. Therefore, the duration of the respondents' current companies in international construction business can be an additional indicator of targeting participants truly. Respondents' current companies' durations in international construction business can be seen in Figure 10.3.

It can be seen that the majority of the respondents' companies have been running international construction business for more than 20 years. However; since international construction business requires a considerable amount of effort and complexity in development, assumption is that all of the companies play a significant role in enhancing participants' knowledge and experience level.

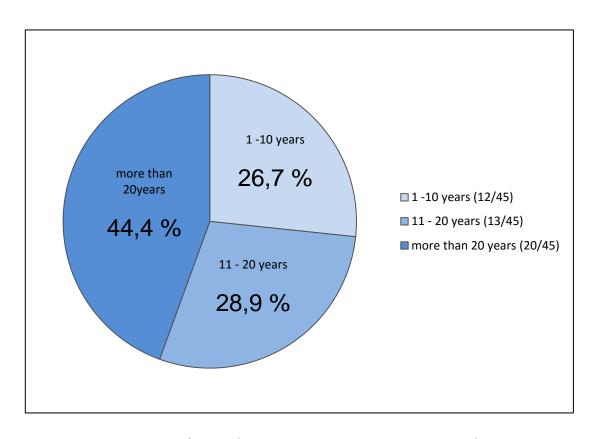


Figure 10.3: Duration of respondents' current companies in international construction business

# 10.2 Perception of Respondents towards the Extent of Local Considerations' Impact on Sub Strategies

Second part of the questionnaire involved rating questions. The participants were asked to rate the impact of each local consideration on each sub strategy applied in an international construction project.

Evaluation of the results was stated in Chapter 9. Likert type of questions allowed the results to be turned into quantitative statements. Since all 80 combinations of local factors and sub strategies had right the same type of rating answers, they could be combined and resulted in a matrix table.

Summary of the results can be seen in one unique table in Table 10.1. The numerical values in boxes are the mean averages of given answers by experts. Likert R. (1932) states that; 'in order to evaluate and relatively compare given answers in this type of a questionnaire, the numerical values of given answers are either to be added or to be calculated to present the mean average'.

All boxes in the table are printed in different colors in order to present the scale of the numerical values. Scale is used to convert numerical values into verbal meanings. Although the answers of multiple choice ratings comprise of five alternatives, scale of the results comprises of four categories. This is just because of the fact that numerical values of results lay between two degrees or in other words lay in a range.

The summary table is an indicator of the respondents' perception towards the extent of local considerations' impact on business sub strategies applied in an international construction process. It is to be restated that all the given results are dependent on opinions of experts who were delicately chosen considering knowledge and experience level in international construction business.

Glocalization strategy requires considering global and local factors together, in a logically balanced manner and to a determined extent. As it was shown in Figure 8.1; after figuring out whether the cause is controllable or uncontrollable, a strategy is developed either to change the cause or to recover from the effect depending on this decision. Eventually, changing the cause or recovering from the effect can only be done by decisions, alterations or counter steps applied on sub strategies by considering global and local factors to an extent. The purpose of this research is to figure out a relatively stated indicator for decision makers to find an answer to the question 'to what extent and in which relative order are local considerations to be considered?'

Table 10.1 is the summary of experts' opinions on each combination depending on their experience and knowledge. However, a detailed presentation for each combination can explicitly reveal relatively lined up prioritization for factors and strategies.

Table 10.1. Respondents' perception towards the extent of local considerations' impact on business sub strategies in international construction process Very Low to Low (0,00-0,99) High to Very High (3,00-4,00) Medium to High (2,00-2,99) Low to Medium (1,00-1,99) SCALE: MARKETING 3,20 2,84 2,44 2,31 1,98 1,93 1,31 2,22 BESOURCING 2,29 3,22 2,31 3,22 2,62 2,22 2,44 2,02 EMPLOYMENT 1,96 2,78 1,96 2,91 2,71 2,42 1,64 3,00 **LECHNIQUES** CONSTRUCTION 2,33 3,13 2,78 1,4 1,38 1,80 1,67 2,82 DESIGN 1,69 2,22 1,13 2,47 2,53 3,02 1,27 DNINNYJd 2,60 2,47 2,53 2,69 2,89 1,71 2,18 1,91 SZUES 2,56 3,47 2,00 2,89 3,04 2,27 2,84 3,11 FINANCIAL 2,56 2,13 2,96 SZINES 2,89 2,27 2,69 3,49 2,42 CONTRACTUAL DEVELOPMENT JANOITASINADRO 2,33 2,16 2,69 2,24 2,18 1,60 2,00 2,62 (09 ON/09) ENLYN DECISION 2,89 3,33 2,04 1,62 3,33 3,00 3,44 LOCAL FINANCIAL CONDITIONS LOCAL POLITICAL CONDITIONS LOCAL CLIMATIC CONDITIONS LOCAL SOCIAL AND CULTURAL OCAL MARKET CONDITIONS LOCAL DEVELOPMENT LEVEL LOCAL GEOGRAPHICAL AND TECHNOLOGICAL LOCAL LEGISLATIVE CONDITIONS CONDITIONS CONDITIONS CONDITIONS MPACT

In order to develop a better strategy of glocalization, decision makers can benefit from the prioritization as shown in the graphics stated in Figure 10.4 and Figure 10.5. Figure 10.4 presents impact levels of each local consideration on sub strategies and the sequence of importance levels, whereas Figure 10.5 presents exposure levels of each sub strategy to local considerations and sequence of importance levels.

#### ➤ Local Financial Conditions:

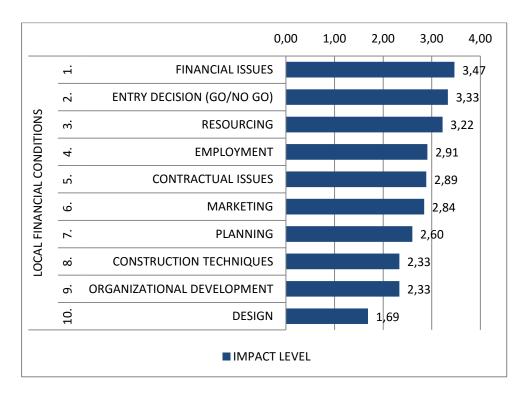


Figure 10.4. Impact levels and sequence of importance for each local consideration

#### ➤ Local Social and Cultural Conditions:



# ➤ Local Development Level and Technological Conditions:

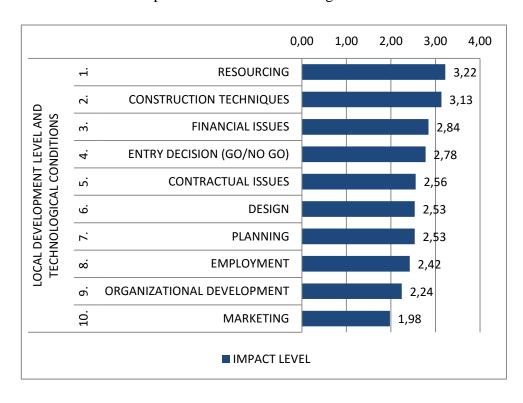
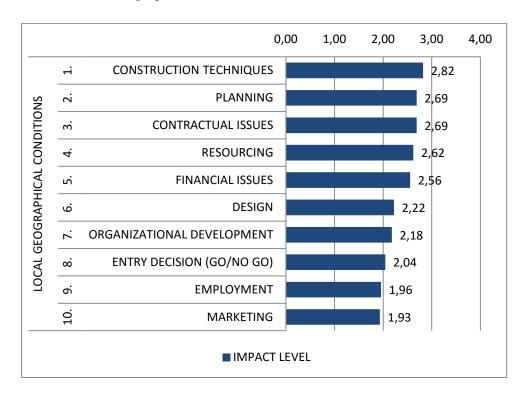


Figure 10.4. (Continued) Impact levels and sequence of importance for each local consideration

# ➤ Local Geographical Conditions:

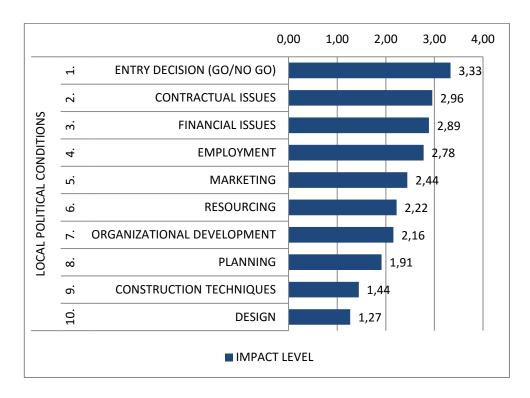


#### ► Local Climatic Conditions:



Figure 10.4. (Continued) Impact levels and sequence of importance for each local consideration

#### ➤ Local Political Conditions:



# ➤ Local Legislative Conditions:



Figure 10.4. (Continued) Impact levels and sequence of importance for each local consideration

#### ➤ Local Market Conditions:

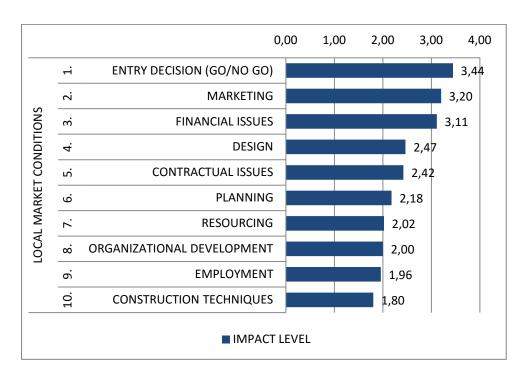


Figure 10.4. (Continued) Impact levels and sequence of importance for each local consideration

# > Entry Decision (Go/No Go):

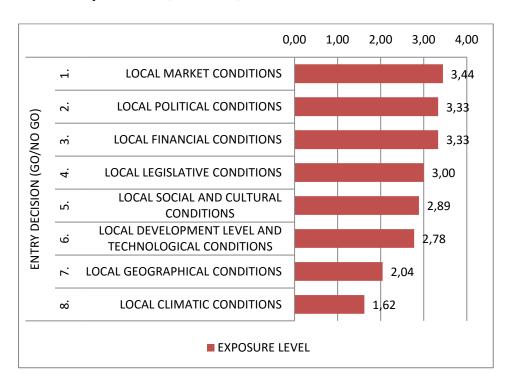
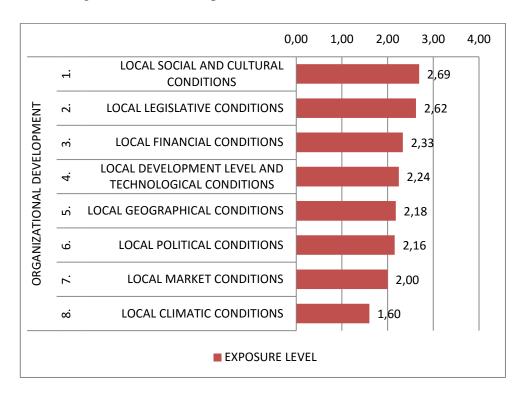


Figure 10.5. Exposure levels and sequence of importance for each sub strategy

# Organizational Development:



#### ➤ Contractual Issues:

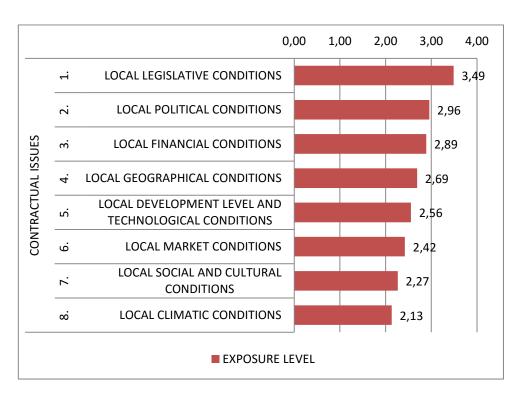
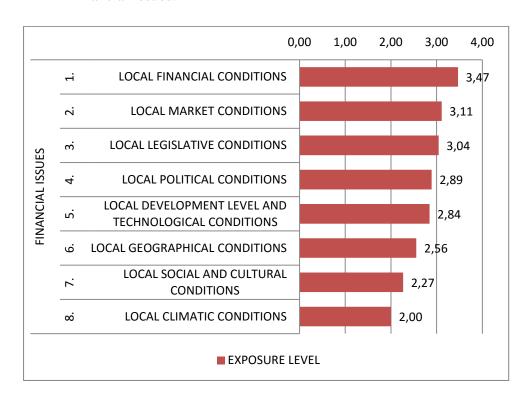


Figure 10.5. (Continued) Exposure levels and sequence of importance for each sub strategy

#### ➤ Financial Issues:



# ➤ Planning:

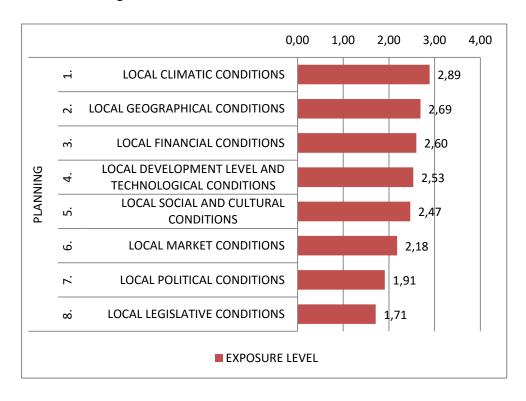
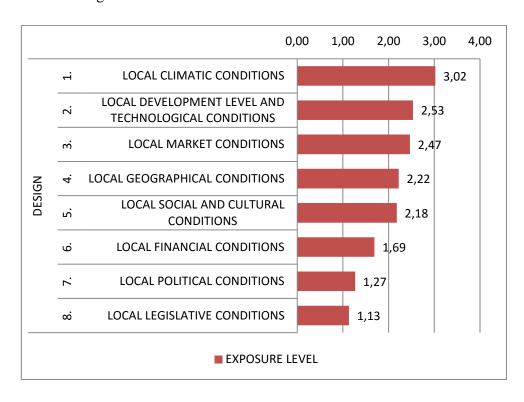


Figure 10.5. (Continued) Exposure levels and sequence of importance for each sub strategy

# Design:



# ➤ Construction Techniques:

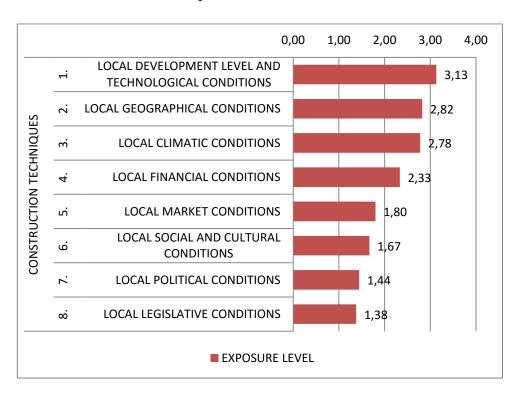
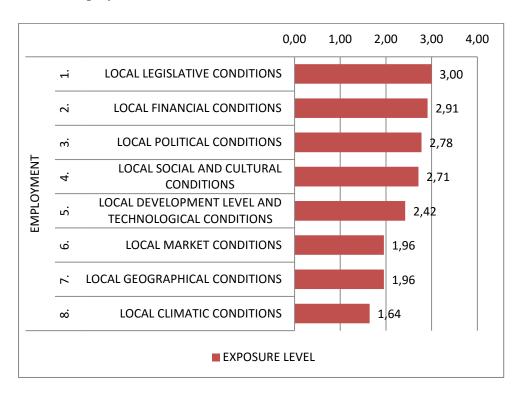


Figure 10.5. (Continued) Exposure levels and sequence of importance for each sub strategy

# > Employment:



# > Resourcing:

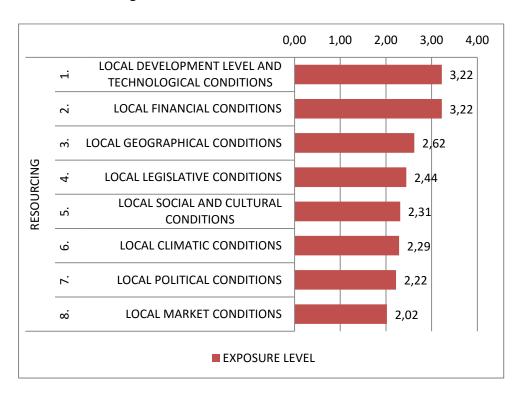


Figure 10.5. (Continued) Exposure levels and sequence of importance for each sub strategy

#### ➤ Marketing:

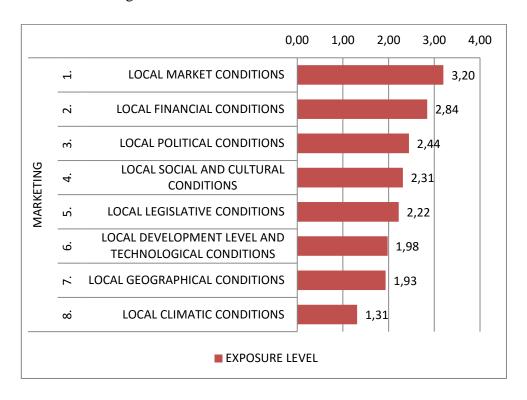


Figure 10.5. (Continued) Exposure levels and sequence of importance for each sub strategy

#### 10.3 Sequence of Local Considerations' Impact Scale

A logical path way for the decision making process in international construction can be created by reviewing impact and exposure levels for each combination of local considerations and sub strategies. Additionally, relatively stated impact levels for local considerations on the whole process can be an indicator of generalization for the importance of local considerations. Evaluation of impact levels for the whole process can be evaluated by taking all of the sub strategies into account together and figuring out a numerical value for one unique international construction process. In order to compare local considerations relatively, the values can be lined up. Obtained result of this evaluation presenting the sequence of local considerations' impact scale on the whole international construction process can be seen in Figure 10.6.

Presentation clearly reveals that all local considerations have an impact level ranging between 2.00 and 3.00. This range can verbally be stated as 'medium to high'.

Therefore; according to expert opinions, all local considerations have an impact of more than medium level and this fact cannot be disregarded in international construction process.

The most effective consideration is the financial conditions, whereas the least effective consideration is the climatic conditions of the location. The others are lined up as can be seen in Figure 10.6. Numerical values for impact levels may seem very close; however the detailed presentations for each combination reveal the fact that impact of local considerations vary from one sub strategy to the other.

Generalization of impacts on the whole international construction process cannot create a pathway for the decision making process, but it seems to be a clear evidence for the glocalization strategy concept. A general understanding for the extent of considering local conditions can be obtained.

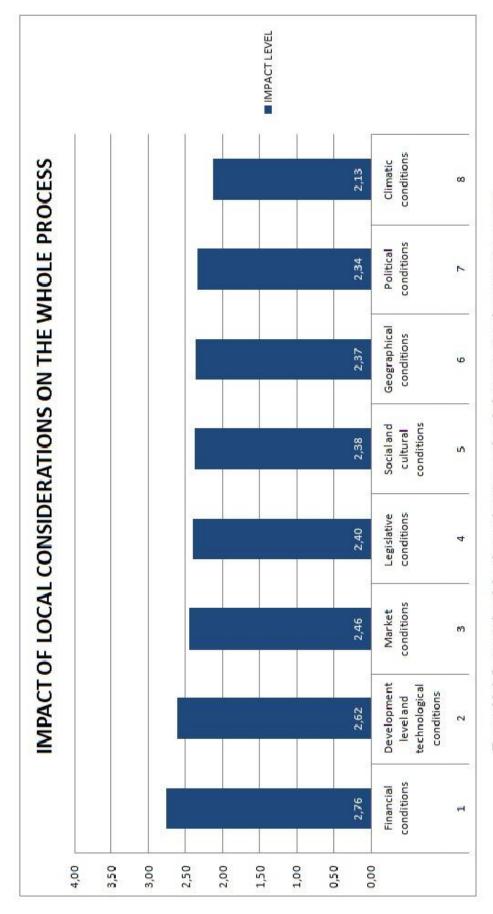


Figure 10.6. Impact of each local consideration on the whole international construction process

# 10.4 Sequence of Sub Strategies' Exposure Scale

Another presentation of generalization for the results of this research may be to figure out the exposure levels for each sub strategy considering all of the local conditions together. A relative comparison of sub strategies in international construction can be presented by the way. The sequence of sub strategies' exposure to all local conditions scale can be seen in Figure 10.7.

As it is expected, numerical values for exposure levels range between 2.00 and 3.00 as well as impact levels. Therefore; it is to be stated that, expert opinions reveal that any sub strategy in international construction process is exposed to local considerations more than medium level.

The most exposed sub strategy is entry decision, whereas the least exposed one is design. The others are lined up as can be seen in Figure 10.7.

Each sub strategy comprising of several decisions, alterations and counter steps are exposed to local conditions to a great extent. Therefore, glocalization strategy is to be applied in accordance with this exposure at each step of the international construction process.

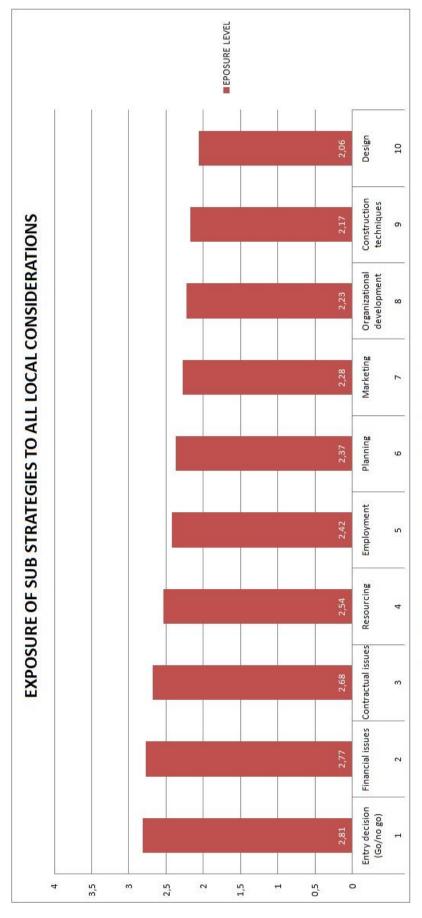


Figure 10.7. Exposure of each sub strategy to all local considerations

#### CHAPTER 11

#### **SUMMARY & CONCLUSION**

### 11.1 Summary

"Glocalization", a combination of the terms "Globalization" and "Localization", is an alternative business strategy not only for manufacturing industries but also for international construction business. Successful expansion in the world market is to be achieved by a well developed business strategy in accordance with today's conditions. International construction, regarding effective global and local factors, requires an integration of these factors in order to develop a Glocalization strategy to run international business successfully.

Initial objective of this study is to make a clear and extensive definition of Glocalization in international business. The extensive definition of Glocalization strategy, involving all possible approaches, reveals the fact that Glocalization is applicable in International construction business as well as in other industries. Final objective of this study is to go one step further into details and figure out the extent of local conditions' impact on international construction and present a general understanding of how to apply the strategy.

Literature review of this research depends on two major parts. One is for figuring out the extensive meaning of Glocalization and thus is related to literature on international business which is not focusing on a specific sector. The other is for drawing a general picture of international construction in order to integrate glocalization strategy with international construction and present applicability, thus is related to literature on international construction.

It can obviously be seen that Glocalization as an alternative and newly developed strategy for international business is not extensively researched for international construction. The reasons behind this lacking are the difference between international construction and other industries, and the general perception for the meaning of Glocalization strategy. International construction has a project by project basis whereas manufacturing industries are mostly dependent on mass or batch production. Besides, majority of the construction projects involve a predetermined client whereas there are potential purchasers in other industries. General perception of Glocalization strategy is about the produced item at the end of the process therefore seems best to fit manufacturing industries. However, the extensive meaning of Glocalization is regarding the whole process, which is about the conducting of international business in accordance with both global and local considerations.

The process based approach for glocalization, which comprises of the extensive meaning, requires an overlook through the business process. No matter it is domestic or international, the major components of any type of business is valid for international construction. Management, finance, resourcing, execution and marketing are combinations of several decisions. All these decisions form up the whole process and are to be taken according to Glocalization strategy. Although there are two major managerial positions in international construction, which are project and strategic levels, it can easily be figured out that both levels require taking decisions regarding the strategy.

Organizational development in international construction is provided by targeting an optimal application of Glocalization strategy as well. Common practice in organizational development is to establish local subsidiaries in order to address different local positions. Therefore, all regarding decisions are allowed to be taken more truly. Authorization transfer and similar crucial points of details are also to be evaluated in accordance with this fact.

A detailed evaluation of international construction process is made possible by the help of researches made for international construction risk management. Risks involved in an international construction process include global and local considerations that can be named as sources. They are to be considered, since application of Glocalizaton strategy requires so. In order to develop the best strategy, the extent of these considerations' impact is to be followed.

For the purpose of figuring out the extent of local considerations' impact on international construction business, a research depending on expert opinions is made. Experts are delicately chosen from strategic and project level managerial positions. Local conditions which are effective in an international construction project and sub strategies comprising the whole of the process are sequenced and asked for evaluation. Finally a relative comparison of impact factors is allowed. A general understanding for the extent is given.

#### 11.2 Major Findings

The initial objective of this research was to present the applicability of glocalization strategy in international construction. Moreover, it is revealed that this strategy is already in use by decision makers in the process. Since international construction business cannot be dreamed regardless of local conditions impact, it is an expected essence.

Glocalization is applicable in international construction business as well as in other sectors. All detailed phases of international construction as a process is integrated with glocalization strategy.

Entry decision is the first sub strategy to be implemented at the very beginning of the international construction process. As it was stated in previous chapters, this sub strategy is to be evaluated on its own due to its independence from other sub strategies. Regarding the results of expert opinions on entry decision, it can be seen that this sub strategy has the highest exposure level to all local conditions among other sub strategies. Feasibility analyses of an international project requires considering all local conditions to a great extent. Market conditions, political conditions, financial conditions and legislative conditions of a location have priority in consideration, since exposure levels for them are between high and very high.

Organizational development of an international construction enterprise is an important indicator for the fact that glocalization strategy is already in practice. Establishment of subsidiaries is mostly due to their nearness to local factors.

According to expert opinions, organizational development is mostly exposed to local social and cultural conditions. Although it is exposed to local conditions less than most of the sub strategies, it is not possible to implement glocalization strategy without a proper establishment of local subsidiaries and a properly balanced authorization transfer.

Contractual issues are one of the most important sub strategies depending on the basic nature of international construction. No project can be applied without contracting and impact of local conditions cannot be disregarded. As it can be expected, the most impact to contractual issues is regarding local legislative conditions. Exposure level is very near to very high level. Considering all local conditions together, expert opinions reveal that contractual issues are exposed to local conditions similar to the levels of entry decision and financial issues. All of them are considerably high taking into account the phases of the process.

Financial issues in an international construction project are exposed to local conditions at the highest level after entry decision. Experts' attitude is that local financial conditions have a deep impact on financial issues. The components of financial conditions comprise the most crucial risks in an international construction project. Dealing with financial risks requires an optimal strategy to be chosen and applied. According to expert opinions, optimal strategy requires consideration of local financial conditions at most.

Planning is considerably at a low level in exposure. Participants of the questionnaire ranked some of the local conditions' impact on planning as between low and medium. This result is probably due to the flexibility of planning. As it can be expected, the highest impact is provided by local climatic conditions. The second highest impact is provided by local geographical conditions. Both of them have a common characteristic that they are not predictable to some extent. Therefore planning has to be altered regarding these conditions during the whole duration of the process.

In the previous chapters design was mentioned regarding the output based approach for glocalization. Expert opinions are in parallel with the asserted statements. Local climatic conditions have the highest level of impact on design. Although local climatic conditions have a considerably high impact on design, other local conditions are at lower levels of impact. As a consequence of this, design has the least level of exposure regarding all conditions together.

Construction techniques are dependent on local development level and technological conditions at most. Geographical and climatic conditions come after that. Social, political and legislative conditions of the location have a low impact on construction techniques.

Employment is management and recruitment of human resources and provides productivity and profitability. Experts' tendency is that employment is exposed to local legislative conditions at most. This is probably because local legislative conditions have a strict limitation on recruitment process. Since profitability is the main purpose of the whole project, local financial conditions appear to be the other crucial factor in employment sub strategy. This is due to the interaction of finance and employment. Considering the sequence of other sub strategies employment's exposure is in a medium level. However, employment is a significant sub strategy that contributes to the success of the project.

Resourcing of materials and equipment is exposed to local development level and technological conditions more than high level. Logically, the best alternative for resourcing is finding the sources from the nearest place. Availability of required materials and equipment in the location is dependent on the development level and technological conditions. Since the most important components in resourcing can be stated as quality, quantity and price; expert opinions presenting the relative importance is logical.

It was stated in the previous chapters that the ultimate purpose of marketing is to seek for business opportunities and to be in a competitively more advantageous position than rival enterprises operating on the same location. Normally, expert opinions reveal that marketing strategy is exposed to local market conditions at most. Construction demand and competition level in the location shape marketing strategy to a great extent. Financial, political and social conditions also have a considerable

amount of impact on marketing. Taking into account all local conditions together and sequencing all sub strategies, exposure level of marketing is in a medium level.

Consequently, it can be said that glocalization strategy is already valid for international construction business. The purpose of this research is to give extensive and detailed methodology to apply this strategy. Following the sequence and relative comparisons of impact and exposure levels of sub strategies and conditions, a more accurate decision making process can be held.

This research figures out a relatively stated indicator for decision makers in international construction process to find an answer to the question 'to what extent and in which relative order are local considerations to be considered?'

#### 11.3 Recommendations for Future Studies

This thesis points out a relative comparison and a general understanding for the extent of local considerations' impact on international construction business sub strategies. Consequently, a pathway for the application of glocalization strategy, which is the most crucial one, is allowed. However, interactions between local considerations and interactions between sub strategies are not revealed. A possible future study figuring out the impact levels by considering the interactions can be done.

Considering local conditions of international construction business is implied in this research. However, Glocalization strategy requires consideration of both local and global factors. A future study regarding global considerations additionally can be made. Besides, a relative comparison of global and local considerations can be figured out for the purpose of defining the general extent of the balanced manner implied in Glocalization strategy.

Furthermore, a practical research for foreign construction companies conducting business in Turkey or Turkish construction companies conducting business in foreign countries can be made via case studies and thus considerations of glocalization strategy can be revealed in a realistic manner rather than a theoretical one.

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## APPENDIX A

## **QUESTIONAIRE**

## PROFILE OF THE RESPONDENT

1.		is the duration of your personal experiences in international
	const	ruction business?
	O	1-5 years
	O	6-10 years
	O	more than 10 years
2.	How	do you define your position in the company now?
	O	Strategic management level
	O	Project management level
	O	Other
<i>3</i> .	How	long your company has been in the international construction
	busin	ess?
	О	1-10 years
	O	11-20 years
	O	More than 20 years

# THE EXTENT OF LOCAL CONSIDERATIONS' IMPACT ON BUSINESS STRATEGY IN INTERNATIONAL CONSTRUCTION PROCESS

Please rate the impacts of each local consideration on the sub strategies applied in an international construction process.

**1. LOCAL FINANCIAL CONDITIONS** are government incentives, monetary inflation, economic growth, current account balance, capital flow, foreign exchange, gold and other reserves, national debt, sources of public revenue, labor costs, capital movement restrictions, availability of local funds, etc.

### **IMPACT OF LOCAL FINANCIAL CONDITIONS**

		Very Low	Low	Medium	High	Very High
•	Entry Decision (go/no go)	О	O	О	О	О
	Organizational Development	O	O	O	О	О
	Contractual Issues	O	O	O	O	O
GIES	Financial Issues	O	O	O	O	O
ATE	Planning	O	O	O	O	O
STR	Design	O	O	O	O	O
SUB	Construction Techniques	O	O	O	О	О
<b>0</b> 1	Employment	O	O	O	О	О
,	Resourcing	О	О	О	О	О
•	Marketing	О	О	О	О	О

2. LOCAL SOCIAL AND CULTURAL CONDITIONS are national similarities, religion, language, attitude toward foreign investors, mentality of corruption or dishonesty, population density and wealth distribution, societal conflicts, availability of skilled or unskilled workers, general perception for local workers' productivity, interaction of foreign management with local contractors, etc.

## IMPACT OF LOCAL SOCIAL AND CULTURAL CONDITIONS

		Very Low	Low	Medium	High	Very High
-	Entry Decision (go/no go)	0	O	О	О	О
-	Organizational Development	O	О	O	О	О
	Contractual Issues	O	О	O	О	О
GIES	Financial Issues	O	O	O	O	О
ATE	Planning	O	O	O	O	О
STR	Design	O	O	O	O	О
SUB	Construction Techniques	O	O	O	O	О
<b>σ</b> γ.	Employment	O	О	O	О	О
-	Resourcing	О	О	О	О	О
-	Marketing	0	О	О	О	О

3. LOCAL DEVELOPMENT LEVEL AND TECHNOLOGICAL CONDITIONS are communication and transportation, professional services other than construction, suitability for advanced technology and transfer, availability and quality of basic construction technologies, equipments, construction materials and local contractors, etc.

## IMPACT OF LOCAL DEVELOPMENT LEVEL AND TECHNOLOGICAL CONDITIONS

		Very Low	Low	Medium	High	Very High
	Entry Decision (go/no go)	О	О	О	О	О
	Organizational Development	O	О	O	O	О
	Contractual Issues	O	О	O	O	О
GIES	Financial Issues	O	О	O	O	О
ATE	Planning	O	O	O	O	O
STR	Design	O	O	O	O	O
SUB	Construction Techniques	O	O	O	O	O
<b>J</b> 1	Employment	O	O	O	O	О
	Resourcing	O	O	O	O	О
	Marketing	0	О	О	О	О

**4. LOCAL GEOGRAPHICAL CONDITIONS** are ground conditions, distance between the location and home country, etc.

## $\frac{\textbf{IMPACT OF LOCAL GEOGRAPHICAL}}{\textbf{CONDITIONS}}$

		Very Low	Low	Medium	High	Very High
	Entry Decision (go/no go)	О	О	О	О	О
	Organizational Development	О	О	О	О	О
	Contractual Issues	O	O	O	O	O
TEGIES	Financial Issues	O	O	O	О	O
ATE	Planning	О	O	O	О	О
STR	Design	O	O	O	O	O
SUB	Construction Techniques	O	O	O	O	О
<b>0</b> 1	Employment	O	O	O	O	O
	Resourcing	O	O	O	O	O
	Marketing	0	O	O	O	O

**5. LOCAL CLIMATIC CONDITIONS** are approximate weather conditions of the specific location.

**IMPACT OF LOCAL CLIMATIC CONDITIONS** 

		Very Low	Low	Medium	High	Very High
-	Entry Decision (go/no go)	O	O	О	О	О
-	Organizational Development	O	O	O	O	О
	Contractual Issues	O	O	O	О	О
TEGIES	Financial Issues	O	O	O	О	О
ATE	Planning	O	О	O	О	О
STRA	Design	O	O	O	О	О
SUB	Construction Techniques	О	О	О	О	О
<b>σ</b> γ.	Employment	О	O	O	O	О
•	Resourcing	О	О	О	О	О
_	Marketing	O	O	O	O	O

**6. LOCAL POLITICAL CONDITIONS** are political continuity, hostilities with neighboring country or region, dependence on or importance of major power, political structure, discrimination by language, ethnic or regional groups, nationalization and expropriation, etc.

**IMPACT OF LOCAL POLITICAL CONDITIONS** 

		Very Low	Low	Medium	High	Very High
-	Entry Decision (go/no go)	О	O	О	O	О
-	Organizational Development	О	O	O	O	О
	Contractual Issues	O	O	O	O	О
TEGIES	Financial Issues	O	О	O	О	О
⋖.	Planning	O	O	O	O	O
STR	Design	O	O	O	O	O
SUB	Construction Techniques	O	O	O	O	O
	Employment	O	O	O	O	O
	Resourcing	O	О	O	O	О
	Marketing	O	O	O	O	O

**7. LOCAL LEGISLATIVE CONDITIONS** are enforceability of contracts, bureaucratic delays, availability of unconstitutional changes, actual laws versus practices, procedures for approvals, import export regulations, settlement of disputes, health and safety issues, quality requirements, etc.

IMPACT OF LOCAL LEGISLATIVE CONDITIONS

		Very Low	Low	Medium	High	Very High
	Entry Decision (go/no go)	О	О	О	О	О
	Organizational Development	O	О	O	О	О
<b>~</b>	Contractual Issues	O	O	O	O	О
GIE	Financial Issues	O	О	O	О	O
ATE	Planning	O	O	O	O	O
STR	Design	O	O	O	O	O
NB	Construction Techniques	O	O	O	O	O
S	Employment	O	О	O	О	O
	Resourcing	O	O	O	O	O
-	Marketing	O	O	O	O	O

**8. LOCAL MARKET CONDITIONS** are construction demand, competition level, current and future market volume in core competency, etc.

IMPACT OF LOCAL MARKET CONDITIONS

		Very Low	Low	Medium	High	Very High
•	Entry Decision (go/no go)	О	О	О	О	О
	Organizational Development	O	О	O	О	О
<b>~</b>	Contractual Issues	O	O	O	O	O
GIE	Financial Issues	O	O	O	O	O
ATE	Planning	O	О	O	О	О
STR	Design	O	О	O	O	O
SUB	Construction Techniques	O	О	O	О	О
	Employment	O	О	O	O	O
	Resourcing	O	O	O	O	O
-	Marketing	O	О	O	О	О