

# **Is it too difficult to have symbolic knowledge in tourism sector for regional development?**

## **Some firm level empirical results from Antalya Region**

Murat Ali Dulupçu  
Onur Demirel  
Onur Sungur

Süleyman Demirel University, Turkey

### **ABSTRACT**

While knowledge economy has been decisive on regional development, it is mainly examined through the lenses of technical innovation and analytical knowledge, leaving non-technical innovation relatively unexplored. However non-technical innovation today covers wide range activities of the service sector including the tourism. Due to its dynamic nature, less dependency on technology and intensive human orientation, tourism sector has been targeted by both developed and underdeveloped regions to foster economic development.

As a part EC funded Framework Project (EURODITE) this paper explores non-technical innovation processes and the evolution of symbolic knowledge in a particular Mediterranean destination, namely Antalya. In Antalya the massive shift in incoming tourists from European toward CEEC and Russia enforced the firms to take necessary precaution in order adapt to the knowledge needs of which mostly consisted of symbolic knowledge. The responses include vertical and horizontal integrations among the firms and unprecedented labour mobility which have supported adaptation of different business models and strategies, services and on-site-services like language, cuisine, interior design, entertainment activities. These combinatorial knowledge needs are correlated with the profile of new markets namely, *cream de cream*, ultra rich class (e.g. customers for thematic hotels), mass tourism (e.g. 4S, but with a Russian modification), cultural tourism. Unlike analytical and synthetic knowledge symbolic knowledge activities necessitate adjustment to local and regional circumstances although most of the knowledge adaptation and transfer seem simple. Nonetheless the market structure of tourism sector in Antalya displays an irony concerning the symbolic knowledge regarding market intelligence: generally, the domestic tour operators and hotels are bounded to international operators through an asymmetrical relation. Knowledge (about customers, market research) is generated somewhere else but exploited or used locally. Domestic companies do not have the ability to control and direct the market; instead it becomes a must for them to accept the demand which is directed to them. Thus vertical and horizontal integrations become a vehicle for knowledge transfers likewise labour mobility. Due to market dominancy, competition determines the knowledge relations but the variety of tourism activities necessitates cooperation among supplementary services which are subject to knowledge canals at local level unlike the knowledge pipelines at the international level. On the other hand we observe that the scientific and educational organizational activities that support the knowledge transfers are relatively poor, most probably due to combinatorial and composite nature of symbolic knowledge. Finally, the paper also explores the mechanisms which cause anchoring and mobility of knowledge.

**Keywords:** Non-technological knowledge, symbolic knowledge, knowledge anchoring, tourism sector, Antalya

## Introduction

Regional development has been major concern of both policy makers and scholars from various disciplines although it has been always difficult to define a single remedy for regional development. During the past two decades researchers have tried to identify models and modes of regional development as illustrated and summarized in the studies of Moulaert and Sekia (2003), Simmie (2005) and Lagendijk (2006). The mainstream discussions seemed to be focused on proximity, governance, capitalistic relations, externality/spillovers, and mostly on relational assets which include wide range of activities from networking to untraded dependencies. However the recent concern turns to knowledge economy, but it is difficult to trace knowledge activities, not only the creation of knowledge but also the capturing mechanisms of knowledge, namely knowledge anchoring.

This paper, depending on a large scale EU funded framework project -namely EURODITE, departs from this argumentation, knowledge anchoring. One may identify at least three rationales for such an attempt. First, knowledge activities have been highly mobilized and knowledge has become central issue for regional development. This preposition enables distant knowledge interactions as well as close knowledge spillovers. Correspondingly the ways and means of capturing mobile knowledge has become as important as generating the knowledge itself. Thus regions should seek not only to attract knowledge producing activities but also the activities which knowledge may stay, articulate, be learned and reproduced in a territory. Second, policy makers have begun to focus on knowledge economy as in the case of Lisbon Agenda or Lisbon 2020. This political concern, of course, closely related with the idea that regional competitiveness can be achieved through a strong knowledge base in particular territory. Third, we observe a rising importance of non-technical innovation and knowledge activities in the service sector although scholars' major interests have been on the *hard* type innovation and knowledge.

While knowledge economy has been decisive on regional development, it is mainly examined through the lenses of technical innovation and analytical knowledge, leaving non-technical innovation relatively unexplored. However non-technical innovation today covers wide range activities of the service sector including the tourism. Due to its dynamic nature, less dependency on technology and intensive human orientation, tourism sector has been targeted by both developed and underdeveloped regions to foster economic development.

This paper explores non-technical innovation processes and the evolution of symbolic knowledge about Russian tourists and luxury hotels in a particular Mediterranean destination, namely Antalya. In Antalya the massive shift in incoming tourists from European toward CEEC and Russia enforced the firms to take necessary precaution in order adapt to the knowledge needs of which mostly consisted of symbolic knowledge. The challenging aspect of the paper is that it argues that a single knowledge change in a particular firm may cause a significant and similar change in a whole territory through articulation of that knowledge. For that reason the impact of knowledge change at the firm level, namely firm knowledge dynamics, coincides with territorial impact that is territorial knowledge dynamics. By employing knowledge biography methodology we aim to trace the symbolic knowledge on Russian tourists and luxury hotels. By doing so, one may classify more efficient policy options for regional development through knowledge capturing and articulation.

### 1. Innovation in Service Sector: Technological vs. Non-Technological Innovation

One of the classifications about innovation is the distinction of technical and non-technical innovation. While technical innovation is simply defined as a technological invention or creation in the field of engineering, non-technical innovation is used to express innovations in other fields (Dengbo et al, 2008). Compared to technical innovation, there is no one complete theory of sufficient studies about non-technical innovation. Yet, studies on non-technical innovation currently soar.

The first reason of the classification of the concept of innovation as technical and non-technical innovations is about the role that technology plays in the process of innovation. Technological innovation is the concept used for the development or utilization of original technologies such as new technical knowledge or an invention. By contrast, non-technological innovation means utilisation of a new business administration method or a new organisational concept without any necessity of technological change (Schmidt and Rammer, 2007).

Technological approach of innovation has been criticized for many reasons. First of all, it may be suggested that technological approach of innovation is for manufacturing sector and could not explain the innovation at the services sector (Hipp and Grupp, 2005; Hipp et al, 2000). Secondly, innovation activities of firms do not merely mean the development of new technologies. It also means the re-organisation of routines at the firms and adaptation to new conditions, some activities of internal organisation activities, external relations and sale-marketing-advertisement (Baranano, 2003; Boer and During, 2001). Thirdly, it is highlighted in various studies that it is necessary to combine product, process and organisational innovations in order new ideas to be transferred and in order new business opportunities to be changed into market successes (Tidd et al, 2001; Cozzarin and Perzival, 2006). Additionally, Griffin and Hauser (1996) emphasize the importance of the combination of R&D, technological innovation and new marketing approaches (in other words, non-technological innovation). All these criticisms indicate that in order to see the overall innovative activities of all firms from all sectors the concept of innovation should be enlarged so as to encompass non-technological innovation. Because non-technical innovation is at least as important as technical innovation (in some cases more important) in certain cases or sectors (Dengbo, et al, 2008).

While a mere technological approach to the concept of innovation could be seen at the 1993 and 1997 issues of the Oslo Manual prepared by the OECD, it is seen that this approach has evolved at the 3<sup>rd</sup> Edition published in 2005 and two new innovation definitions have been included. In addition to product and process innovations these new innovation categories are; i. organisational innovation and ii. marketing innovation. Accordingly;

*“A marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.” (OECD, 2005: 172)*

*“An organisational innovation is the implementation of a new organisational method in the firm’s business practices, workplace organisation or external relations.” (OECD, 2005: 180)*

## **2. Knowledge Dynamics and Symbolic Knowledge in Tourism Sector**

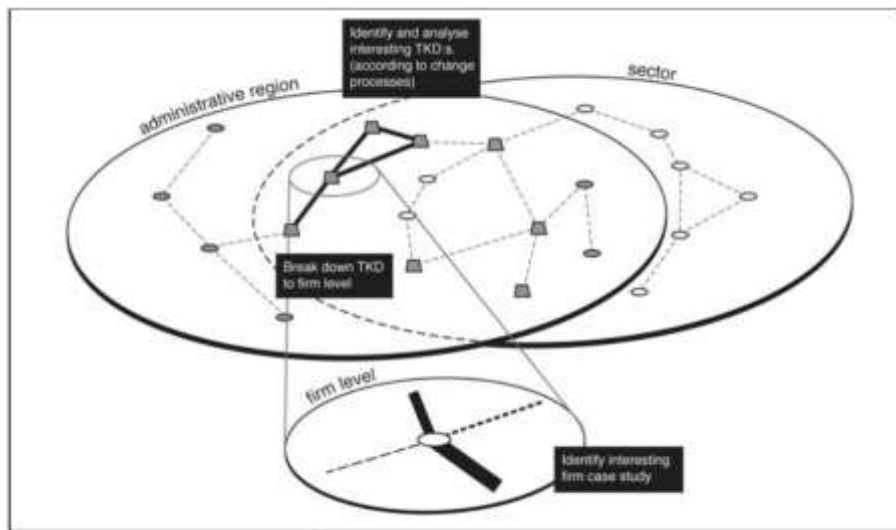
### **2.1. Knowledge Dynamics and Symbolic Knowledge**

While non-technical innovation is vital in many businesses apart from manufacturing, it is a result of mixture of activities. Therefore the process that leads us to innovation is rather complex. The Eurodite project focuses on knowledge processes and the “knowledge within economic networks which is embodied in people, their relations and their instruments”. So that one can put light on innovation including non-technical innovation.

Knowledge Dynamics can be defined as interactions between various actors/agents such as public-private firms, local-regional institutions, intermediary organizations, educational and research organizations. In other words, the knowledge dynamics refers to the knowledge spill-overs in the firms, between firms and in the region (Crevoisier et al, Eurodite Guidelines, 2007). These actors may involve directly or indirectly in the processes of the production, diffusion and the use of knowledge in the innovation process (Kaiser and Liecke, 2006). They may also provide specific resources for the establishment of knowledge stocks and the maintenance of knowledge flows. Shortly knowledge dynamics is the *geographical patterns of knowledge exchange*, networks and interactions between different actors *key actors may include firms, higher education institutions, chambers of commerce, local and regional authorities*. The *geographical focus* stresses the importance of the regional level but emphasises that interaction is not constrained to an administrative regional level but multiscale and potentially including important interactions at great distances (Halkier et al., 2010: 20).

We can analyze knowledge dynamics both in the territorial level and firm-level. Theoretically, there is a strong relationship between territorial knowledge dynamic (TKD) and firm-level knowledge dynamic (FKD). TKD refers to the analyzing knowledge dynamics at the territorial level. FKD is the researching of the knowledge dynamics at firm level. While TKD gives us an idea about the transformation which occurs in the region, FKD becomes the centre of this TKD and plays role as a receptor node. A contextual link must be established between TKD and FKD. Figure 1 summarizes this interaction between TKD and FKD.

**Figure 1 - The Relationship between TKD and FKD**



In order to justify knowledge dynamics more clearly we have to identify knowledge types, stages and processes. Knowledge may be defined as a cognitive process of human brains and that is generated and used in personal and collective interactions in various contexts. In order knowledge types and stages to be grasped there can speak off two conceptual frameworks, namely knowledge taxonomy (the SAS model – synthetic, analytical, symbolic knowledge) and three phases of knowledge development (exploration, examination and exploitation).

The knowledge types encompassed in SAS model are *synthetic knowledge* which is used to produce ‘engineering’ related instrumental, context specific and practice-related solutions to human problems; *analytical knowledge* which is fundamentally scientific and is used to understand and explain features of the natural and social world; and finally symbolic knowledge which deals with the creation and communication of cultural meanings, symbols, ethics and aesthetics. The three SAS knowledge types are defined by processes through which knowledge is developed and by the criteria for evaluating its usefulness / purpose (functionality criteria for synthetic knowledge (via learning by doing and interaction), codified explanation and evidence for analytical (via formal, scientific processes including social and humanistic sciences) and meaning criteria for symbolic (via open-ended creative and artistic thinking, performance and interaction)). Synthetic knowledge is mainly tacit and context specific but also has an important codified element. Analytical knowledge is to a large extent mobile and transferable across space. Symbolic knowledge is also tacit as it depends on the social and cultural context and is often not directly transferable in geographical space. Among these three types of knowledge, the lowest number of studies belongs to symbolic knowledge (Halkier, et al., 2010).

Three phases of knowledge development originally depend on the original model of twin-concept (exploration and exploitation) developed by J. G. March (1991). According to him, exploration is a process of finding new economic opportunities in order to make profit and contain search and discovery activities and risk taking. Knowledge in this phase is limited with some uncertainties and requires dealing with risks, because economic returns are systematically less certain in comparison to knowledge in the exploitation phase. Cooke (2006) suggests examination as the third phase in between exploration and exploitation. The examination phase, including testing, experimentation and validation activities is aimed on improving the knowledge content towards its appropriateness for commercial value added.

**Table 1 – Characteristic of Knowledge Taxonomy and Phases of Knowledge**

	Analytical	Synthetic	Symbolic
<b>Exploration</b>	Contract research Contract development	Experimental engineering Pre-design	Market research Scouting Open space
<b>Examination</b>	Testing and validation	Feasibility studies Prototyping Design	Market estimation Proof of concept Strategic Consulting
<b>Exploitation</b>	Patenting	Series-production readiness	Marketing campaign Branding

**Source:** Strambach et al, (2008).

Lastly, we can make a final distinction regarding knowledge: cumulative and combinatorial knowledge. The cumulateness of knowledge means the necessity of gathering knowledge from various fields together. Composite (combinatorial) knowledge on the other hand means the unique synthesis of separate modules.

In knowledge dynamics model anchoring and mobility are the two sides of coin. Knowledge mobility refers to the movement of knowledge from one location to another. On the other hand knowledge anchoring refers to knowledge coming from outside a region, which somehow ‘sinks in’ and is re-circulated within the region. By this we mean processes by which knowledge is used by other firms/institutions within a region (not just the one that found/adopted the knowledge from an external source). This might include developing the new knowledge, or recombining it with existing knowledge, as well as general diffusion within the region (Halkier et al., 2010: 60).

Recent research has argued that knowledge anchoring can come about in a number of different ways that combine mobile knowledge dynamics and regional knowledge dynamics. This means a range of different potential interactions between a regional ‘context’ and existing regional knowledge base and one or more elements of external knowledge.

The four channels and examples of the knowledge inflow and recirculation processes are given in the following Table.

**Table 2 - Knowledge Inflow and Recirculation Channels**

Events	Workplace/labour market mobility	Acquisition of codified knowledge	Interactions between firms
<ul style="list-style-type: none"> <li>• Conferences</li> <li>• Industrial fairs</li> <li>• Seminars</li> <li>• Meetings of professional organisations</li> </ul>	<ul style="list-style-type: none"> <li>• Moving to new employer</li> <li>• Freelancers and consultants</li> <li>• KIBS activities</li> <li>• Secondments/training in different workplace</li> </ul>	<ul style="list-style-type: none"> <li>• Online research</li> <li>• Reading publications</li> <li>• Licensing</li> <li>• Buying patents</li> </ul>	<ul style="list-style-type: none"> <li>• Supplier/client relations</li> <li>• Collaborative pre-competitive research</li> <li>• Co-development of products</li> </ul>

## 2.2. Tourism Sector: Knowledge and Innovation

Tourism sector has great significance both in Turkey and in the world with its economic and social contributions. According to United Nations World Tourism Organisation, tourism is one of the largest industries and the largest services sector in the world with a volume of 856 billion Dollars in 2007. 6% of total trade and 40% of total services sector are caused by tourism sector (UNWTO, 2008; 2-3).

Currently, knowledge economics is perceived as similar to technology. However knowledge economics involves all kinds of knowledge and the learning, examination, interpretation and dissemination of this knowledge are crucial. Especially when tourism sector is handled, symbolic knowledge that includes design, learning and creativity and transcending analytical knowledge based on fundamental research and synthetic knowledge based on engineering, is confronted.

The most important features of tourism products are that they are *multi-faceted* and they encompass many different services. There are three crucial points at the exploration of the basic features of

production chain at tourism sector. Firstly, at tourism sector, as in other service sectors, *intangible products* that cannot be tested at the environment of a laboratory before production are produced. Secondly, tourism products are produced and consumed simultaneously. Thirdly, the services that form tourism products are heterogeneous. In this context, tourists basically demand the following services (Halkier, 2005: 7):

- Transportation and travel services via private or public transportations enterprises
- On-site services offering the opportunities such as food/beverages, sheltering and accommodation
- On-site activities including specific activities such as museum visits, religious/sacred place visits, congress participation, nature walk

Because of the aforementioned specific features of tourism sector, the product creation process and the exposure of the role of knowledge and its significance seem to be complex due to the reasons mentioned below (Halkier, 2006: 7):

- The determination of the limits of economic activities at tourism sector is much more difficult than at other sectors.
- Because of the heterogeneous nature of tourism products or as it encompasses many other sectors (transportation, accommodation, food-beverage, entertainment, etc.) the tourism sector is considerably different than other sectors.
- Not much study has been made about innovation and knowledge processes at the tourism sector.

### **3. Methodology**

In this paper we have employed knowledge biography methodology to investigate emerging knowledge dynamics in tourism sector in Antalya. Knowledge biography approach is used to identify flows of knowledge in and around the innovative activities of firms. It is a useful way to characterize observable types of firm's knowledge activities. In-depth-interviews are preferred in the investigation of knowledge flows within firms, between firms and other actors. It must be noted that knowledge biography is not the firm biography. Knowledge can flow outside of the firm and innovations emerge out of societal interactions inside the firm and outside. From this point of view, knowledge biographies include not only firms but also other organizations in the regional context.

In order to analyse firm level and territorial level knowledge dynamics which have born from the huge increases in incoming tourists from Russia and Slavic countries, 41 interviews were made with relevant persons / institutions / organisations in Antalya region between August 2007 and June 2008. We found a particular firm as an initiator and accelerator of this so-called Russian tourism. Rixos Premium Belek was identified as the main actor and receptor node in the emerging knowledge dynamic in the region. We may say that territorial and firm level knowledge dynamic somehow coincides with Rixos Premium Hotel.

After Rixos Premium Belek has approved cooperation in the research of Rixos's knowledge biography, detailed interviews were begun in February 2009. Ten persons were involved in our knowledge biography interviews and detailed interviews were completed in March 2009.

### **4. Tourism Sector in Antalya: Some Unique Characteristics**

Turkey ranked in the 9th place in the world with 20.3 million incoming tourists in 2005 while this figure was only 5.3 million tourists and Turkey occupied 24th place in 1990. The growth rate of tourism sector in 2008 was 13% against the world average of 3% and 26 million tourists have visited Turkey with revenue of more than USD 21 billion. Although 40% of tourists who came to Turkey preferred to stay in Antalya, it is calculated that 60% of the tourism revenue is generated in Antalya yet tourists visiting Antalya have stayed longer compared to other parts of Turkey. Actually the number of 5 star hotels and resorts in Antalya are higher than the same figure for whole Spain. The Ministry of Culture and Tourism has licensed 903 accommodation facilities, 63 of which are holiday

villages with a total of 161 thousand rooms and 347 thousand beds as of 2006. In addition to the ministry licensed touristic facilities, there are municipality registered hotels and boarding houses. And if these are included total bed capacity reaches to 400 thousand. Antalya has 40% of whole Turkey's touristic accommodation capacity. The increase rate of this capacity is above Turkey's average. Naturally, the investment in tourism sector takes the first place. Although there is ongoing discussion on mass tourism among various actors in Antalya that somehow the mass tourism imprisons tourists in hotels, the number of 5 star hotels is still increasing. Both private and public sectors are now complaining of mass tourism. The representatives of both sectors claim that it (mass tourism) does not generate enough income to other regional entities apart from hotels and tour operators. However '5 star' bed capacity has already fostered mass tourism and existing accommodation facilities obviously show that it is impossible to change mass tourism into another type of tourism – at least in the short run. Yet, the efforts to generate diversity in tourism are accelerating by public and private actors. In this context all knowledge activities are parallel with this demand to diversify tourism in Antalya.

Historically Antalya has not always been a tourism destination. As figures confirm, in the region half of the labour force is employed by the agricultural sector. Therefore being a traditional agricultural area until the 1980s, Antalya has never had a chance to test the impacts of industrialization. It is not, thus, satisfactory to analyze the region from the perspective of either old-fashioned industrial districts (Fordist) or the TIMs of the 1990s (post-Fordist). The mixture of service and agriculture sectors in the economy created dynamic relations among regional actors and it is rather difficult to follow stable connections. The rural-urban division can sometimes be utilized for branding and sports tourism and for other tourisms. For instance, tourists work in organic farms in the form of 'experience economy' (in rural part tourists receive training, sports, image, and culture etc in a package) and they are not paid for work, they pay to work. So that experience economy can have a chance to show up itself not only in haute couture (Harley Davidson) but also in agrarian economy (strawberry harvest tourism package-environmentalist image-).

Some striking elements of tourism in Antalya can be summarized as follows:

- There is an agglomeration of accommodation in the region (nearly 400 thousand beds). However some aspects of the supply chain are still missing such as processed food supply, hotel furniture and equipment etc. Anyway one can speak off a tourism cluster in Antalya without any accurate policy support.
- In the region one can find all scales of tourism facilities. However, parallel to the rise of 4S tourism main market share goes to 5 and 4 star hotels, resorts, and holiday villages. The market is controlled by large European tour operators but incoming operators play an important role in the market as well.
- The investment in the tourism sector has been undertaken in an unplanned way. Due to absence of regional level planning, the choice between being a resort and a destination has not taken intently but accidentally. Additionally science and education system supports medium level skills and do not produce sufficient academic outputs to direct and assist regional development policy. Moreover the existing plans of public bodies do not refer to each other.
- After the 2000s the province is experiencing intense efforts for transcending typical form of a Mediterranean resort. This has doubled the dynamism of the region.
- After Istanbul, Antalya is in the second place in terms of foreigners' recruitment in tourism sector. Labour mobility has increased competencies mobility along with knowledge transfers.
- Size matters in tourism sector in Antalya. Contrary to TIMs, the regional-sectoral nexus acknowledges firms' size both in clustering and networking.
- Although there has been vast amount of infrastructure investments especially after 2002, there is still a gap in the public infrastructure yet it is obviously difficult to meet the demands of annually increasing tourist numbers (one example of absence of regional planning or the presence of centralism and mismanagement is the Gazipaşa Airport -the second airport in the province- which has been built in an inappropriate area where larger aircrafts cannot land on)

- There is an emerging structure evolving from government to governance particularly after the law on the strategic planning of public bodies in 2005 but it is still very premature. The provincial governor is at the heart of regional governance. However, the dynamism of tourism sector paved way for many professional and sectoral associations in the region (like AKTOB-Union of Mediterranean Touristic Hotels and POYD-Professional Hotel Managers Society) which can be regarded as positive steps toward governance.
- Hotels and resorts owned by basically four types of origins: (1) national investors (mostly from Istanbul and Ankara) whom formerly worked as contractors of large public investments, (2) foreign investors of tour operators who seek for vertical integration, (3) local investors and finally (4) foreign investors from Russia, Turkic and Slavic origins (A very recent example is Mardan Istanbul Palace, owned by an Azeri originated Russian, Telman Ismailov. This hotel only by itself has attracted more than 400 millions USD FDI and has opened in summer 2009. It is said that this hotel will take the distinguished place of Rixos Premium Belek, -our case in this paper- and will challenge Burj El-Arab in Dubai). The price competition in 4S tourism has turned into thematic hotel services in recent years.
- On the one hand the rapid changes in the region; on the other the nature of tourism sector necessitates the utilization of combinatorial knowledge. There is an asymmetry in the processes symbolic knowledge between local and international companies in which the latter exploits the former.

Lastly, we have to mention the speed of tourism sector. The sectoral trends have given dynamism to the region: vertical and horizontal integrations, mergers and acquisitions on the one hand, enormous labour mobility on the other. The market changes (e.g. Russian investors and tourists) and product differentiation (on-site-actions like discos, rafting etc) enforce private sector to react very rapidly. For that reason, it is rather difficult to analyze knowledge flows and define stable intra-firm and extra-firm relations.

We have to make a clear distinction between Antalya and its counterparts. First, Antalya has joined lately to mass tourism compared to Portugal, Greece and Spain. Second, up to very recently the tourism facilities in the region have been trying to be price competitive. Third, the cultural and historical marketing and promotion of the region has played second string to 4S. Finally, the urban characteristic of Antalya has been premature compared to Barcelona or Athens and never been able to substitute the image of Istanbul.

As a recipient country, Turkish citizen very narrowly benefit from tourism compare to other Mediterranean destinations. Particularly this is a result of un-proportionality; the market structure of tourism sector in Antalya displays an irony: generally, the domestic tour operators and hotels are bounded to international operators through an asymmetrical relation. Knowledge (about customers, market research) is generated somewhere else but exploited or used locally. Domestic companies do not have the ability to control and direct the market; instead it becomes a must for them to accept the demand which is directed to them. However, this does not mean that no knowledge is generated locally. The nuance is that there exist a visible difference between locally produced knowledge and internationally given and utilized knowledge, and mostly both of them are developed independently. Since the local companies do not acquire or obtain precise knowledge from international 'masters' and from regional and national knowledge institutions, they generate and use the related knowledge by themselves through labour mobility, participating in fair/exhibitions, formal and informal local/intra knowledge exchanges or informal interaction with the customers. Then, it could be said that intraregional knowledge exchange employs (open) channels but international knowledge exchange remains (or have to remain) in the (limits of closed) pipelines. An interesting result of dominant power of European tour operators in markets is that shopping centres like jewellers and carpet shops pre-finance the hotels by paying a certain amount per shop visiting tourist – an alternative compensation created by regional players.

## **5. Firm-level Empirical Results from Antalya Region: Firm Knowledge Dynamics and Symbolic Knowledge**

Emerging conceptualization on knowledge dynamics is closely related with knowledge mobility and knowledge exploitation. Antalya region, in this context, serves us as a fruitful case yet it includes knowledge anchoring and mobility:

1. The territory faced with massive change in tourism activities.
2. These changes contain mainly symbolic knowledge related activities.
3. The initiator of knowledge dynamics at the territorial level has also created knowledge dynamic at the firm level. Thus as a receptor node a firm can shape regional knowledge dynamic at the territorial level.
4. Finally the region can question the possibility of how to exploit knowledge dynamics for regional development.

In this line in the following section we analyze both territorial and firm level knowledge dynamics in Antalya region through the lenses of symbolic knowledge related to new tourism demand in Antalya, namely Russian and Slavic originated tourism. As a recent and huge regional change, the tourism centred territorial knowledge dynamics in Antalya consists of acquiring/extracting codified knowledge about Russian history, socio-cultural features and Russian life style for actors involved in tourism sector in order to direct and increase the demand of Russian tourists to Antalya. The radical increase in the number of CEEC originated and Russian tourists and correspondingly the response of the tourism related actors through redesigning customer oriented services constitute the general outlook of knowledge dynamics. The knowledge dynamics also includes reciprocal exchange and/or bilateral transfers of symbolic knowledge in which tourism business model of Antalya was first copied from Europe, then transferred from Europe to Russia and then matured for the Russian demand and created a customer oriented approach. Obviously the knowledge dynamics is a so-called demand (market)-driven Knowledge Dynamics which has forced the region and regional players to take necessary precautions to compete against other Mediterranean destinations. In this specific case, knowledge dynamic is all about symbolic knowledge. Unlike other knowledge types, symbolic knowledge necessitates more face-to-face relations and rather composite since it depends on actors rather than knowledge itself.

### **5.1. The Background: Change in Demand and the Necessity of New Symbolic Knowledge**

The tourism sector in Antalya has been traditionally oriented to European markets, and not only the hotels and tour operators in the region but also the local SMEs related to tourism have structured their facilities and business models accordingly. Symbolic and synthetic knowledge, related to the tourists' behaviours (like reservation types, languages, animation activities, food and beverages, disco music, restaurant services, hotel room designs, consumer satisfaction, market research, even hotel architecture), have developed correspondingly for the European tourists, particularly for Germans, Dutch and Britons. However since 2000 the number of the tourists coming from the Russian Federation has increased by 20% on average annually and since 2003 this figure has been 50% for Slavic countries (Antalya Commodity Exchange, 2006). In relation to huge growth rates in the numbers related to these countries, we observe also increases in the number of incoming tourists from two Turkic countries, namely, Azerbaijan and Kazakhstan because of (1) linguistic demand (Russian) deriving from hotels and tour operators and (2) the historical and socio-economic relations between the two origins. Moreover, these growing markets have whetted especially Kazakhs' and Russians' appetite, and the acquisitions and new investments in tourism accommodation (5 star and ultra-inclusive hotels and resorts) are taking place by these two origins.

These radical increases in the new markets have enforced tourism businesses to take necessary precautions. Recently three key types of (symbolic) knowledge areas namely, hardware, software and orgware (adapting from Halkier's (2007) terminology) have begun to change in 5 star hotels (and tour operators) and in tourism sector in general. In terms of *hardware* knowledge, the new categories of hotels such as ultra-luxury and the thematic hotels are constructed via either imported foreign or via famous national architects (Jeannerat and Crevoisier (2008) underline the rise of luxury sector).

Regarding the *software*, the knowledge for language and market networks is generated by labour mobility or by participating knowledge exchange events such as MITT (Moscow International Travel and Tourist Exhibition). Lastly, the *orgware* transformations are taking place by acquisitions, new animation teams or by redesigning of existing attractions (on-site-actions) for Russian tourists.

As mentioned above, traditionally the tourism sector has generated and exploited the knowledge on the European markets. It seems impossible that the necessary knowledge about the new markets will be developed in the same way. The knowledge dynamic in this vein ultimately comes from customer orientation and characteristics of Russian and CEEC tourists which organizationally and fundamentally affected the tourism sector. Obviously the knowledge is composite, yet the market is new and there is no accumulated knowledge related to this new market. The composite knowledge of this type created by the merge and synthesis of different modules of knowledge such as socio-cultural habits, languages, consumer preferences, shopping styles, hotel room design demands and market structure. The movement of knowledge related to Russian customers and markets follows informal pathways and creates informal networks. The relationships are mainly dependent on face-to-face contacts and the market structures in both countries are considerably elastic and do not have certain templates, especially in terms of contracts. A Turkish businessman may sign a huge tour contract at a dinner invitation after face-to-face contacts. One of the critical aspects is that the business models of Turkish firms are more similar to Russian ones compared to Europeans. Normally, trust and reciprocity are demanded from both Turkish and Russian companies. However, the instability of macro economy and uncertainty of business environment are valid for both sides which make them further similar. For example while the European tourists and operators prefer early reservation, Russians prefer last minute tours. Thus composite knowledge might sometimes increase transaction costs. However, recent increased competition forces Russian tour operators to make early reservations. This is an interesting mechanism: as the large European tour operators buy and build hotels and resorts in Antalya, their business models (for example behaving and acting in a more certain business environment) affect Russian tour operators and they benchmark European early reservation attitude.

Particularly the symbolic knowledge on the operations in Russia embedded in Turkish companies operating in Europe helped these to gain competitive advantage in Russian markets and the importance of European markets relatively decreased. The actors of this transformation in the market are the Europe- and Russia-centred tour operators.

Turkish companies have already learned how to operate in the European markets. The transfer and adaptation of this knowledge to Russian counterparts and market is done by two basic actors: the first is powerful European tour operators dominating European market and the second is relatively small and weak Turkish tourism operators.<sup>1</sup> The firms dominating European market, utilizes the embedded knowledge in Antalya region to gain competitive advantage and they also build hotels and resorts and moreover they buy some facilities through vertical integration (Karabulut, 2008). These companies have the symbolic knowledge about Slavic countries and Russia. However, there are companies which can by-pass larger European and Turkish firms and creating their own marketing channels. These relatively small companies directly employ Russian, Kazakh and Moldavian personnel for marketing activities. The success of these companies in Russian market is shaped by the entrepreneurial capacity of top managers. They participate in tourism fairs in Berlin and Moscow and present themselves, their hotels and resorts. As they manage to sign contracts with larger operators they strengthen their informal relations and move to more formal relations. Apart from participating international fairs, small firms invite internationally known businessmen operating in the tourism sector to Antalya. Antalya originated firms also invites tourism agents (on the average having 1000 customer potential) for marketing workshops. In these workshops each hotel finds a chance to present its facility. Afterwards agents send salespersons for signing contracts. These contracts are most important sales channel for Turkish companies.<sup>2</sup>

We can summarize symbolic knowledge mobility and anchoring as follows:

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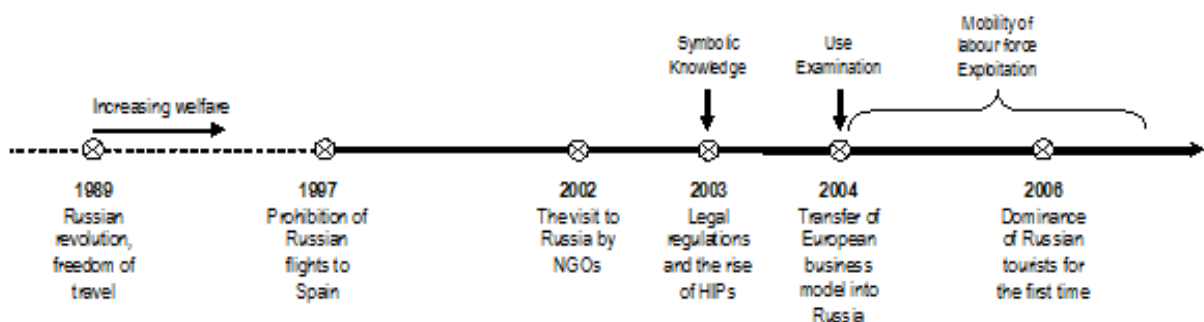
<sup>1</sup> The tour operators can be divided into four groups: large European companies, only incoming large Turkish operators, more specialized small operators and Russian-CEEC oriented large companies. New investments and acquisitions, partnerships are the common tools for market knowledge. (WTTC, 2001)

<sup>2</sup> Interview with Erkan Yıldırım, Rixos Sales Director, dated March 5<sup>th</sup>, 2009.

- There are three non-technical knowledge dynamics: (1) business models (including FDI flows among Europe, Turkey and Russia), (2) knowledge related to customer services (language, cuisine, animation and entertainment, on-site-actions etc.), (3) on-site-services (including emerging architectural trends)
- Scientific and educational organizational activities that support the KD are relatively poor, most probably due to combinatorial and composite nature of symbolic knowledge. Some schools only provide medium level professional skills along with linguistic education.
- These combinatorial knowledge needs are correlated with the profile of new markets namely, cream de cream, ultra rich class (customers for thematic hotels), mass tourism (4S, but with a Russian modification), cultural tourism.
- Among regional players, actors connected to the market mechanism seem to be decisive (hotels, operators, small and medium-sized operators, etc.).
- Due to market dominancy, competition determines the knowledge relations but the variety of tourism activities necessitates cooperation among supplementary services which are subject to knowledge canals at local level.
- Labour mobility, fairs and exhibitions, and the complexity of on-site-actions and services are decisive in determining mobility and anchoring.
- We conclude that the demand driven market change was resulted with the necessity of combinatorial knowledge in customer services and business models and strategies which raised intra-regional and international labour mobility which may be regarded as one of the determinants of mobility and anchoring.

The historical relationship of Russia with Turkic originated countries, leads complicit knowledge transfer reciprocally. On the one hand the knowledge about Antalya is transferred to Russia through pipelines, on the other hand knowledge on Russian tradition and culture anchored in Antalya. The relative success in Russian market might be attributed to cultural similarity between two countries. After freedom of travelling had been released, the historical and cultural connections became operative.

**Figure 2 - Evolution of Russian Tourism: Time Line and Milestones**



Although it emerged from a market/demand change, the increases in Russian and Slavic tourists affected not only the supply of tourism services, but also the marketing strategies of the business and even Antalya. This knowledge dynamic has specific implication for symbolic knowledge:

- The knowledge processes work but exploration and examination stages are very short, sometimes absent. For instance, the huge maneuvers in markets reinforce both operators and hotels to react so rapidly and they have to by-pass or shorten first two stages. Therefore examination and exploitation stages sometimes merge.
- Labour mobility and embrained knowledge flows are the key to combinatorial knowledge. Combinatorial knowledge implies more than knowledge, it includes competencies which are also embrained like knowledge. We can say that the successful organizations in the territorial

knowledge dynamic are the ones who can rapidly reach to the symbolic knowledge via labour mobility.

- In Antalya the combinatorial knowledge is central to knowledge dynamics, but this does not mean unimportance for the cumulative. However we have noticed that the cumulative knowledge cannot solve core problems or create alternatives. For instance, customer satisfaction surveys in the region are sometimes assessed by the researchers from Akdeniz University but these assessments do not provide solutions for the problems.
- We argue that it is good to have education oriented institutions rather than research institutions when the combinatorial knowledge plays central role. Such teaching orientations can response short-term training needs.
- The learning environment of combinatorial knowledge largely differs from cumulative knowledge. As the combinatorial knowledge in tourism sector evolves and changes so rapidly, it is very difficult for the institutionalized bodies to follow up those changes, particularly in Turkey because of highly bureaucratic and centralized structures.

**Table 3: Knowledge Groups and Features**

Knowledge Groups	Actors	Process	Effects	Proximity?
<b>Linguistic knowledge</b>	Tour operators, linguistic vocational schools, hotels, foreign labour force, Turkology Institutes in Russia	Intensive Russian interest towards Turkey from 2002 on.	Foreign labour force immigrated to Turkey (Kazakhs, Moldavians, Euro-Turks) <b>ANCHORING?</b> ; regional knowledge contextualization	<b>YES/NO</b> • Language education necessitates face-to-face interaction. But immigration?
<b>(Early reservation ) business model</b>	Russian and European originated tour operators <i>Absence of chain hotels?</i>	Implementation of early reservation business model of Europe in Russia. OGER Tour, Anex Tour, Tez Tour	<b>Re-scheduling of Russian fairs</b> (MITT-Moscow International Exhibition-Travel and Tourism, Intur Market-Fair organized by Russia Government), efficient capacity usage in Antalya <b>march-may</b>	<b>NO</b> • Benchmarking from other countries • Fair participation opportunities • Business model importation is possible.
<b>Socio-cultural knowledge</b>	Cookers, house-keepers, entertainment teams & animators, interior designers, Welcoming personnel, animators of kids' club.	Rapid increase in Russian and Slavic tourists has caused the need for such knowledge usage since 2004	Complete change in menus, knowledge of kid songs, Russian, Turkic Republicans and German immigrants' <b>employment (OGER) – Increased number of HIP Hotels</b>	<b>YES?</b> • Such knowledge necessitates a forerunner knowledge resource imported. • Increased labour mobility. <b>Reciprocal learning: cooks?</b>

## 5.2. Symbolic Knowledge and Firm Knowledge Dynamics: Empirical Findings

From a general point of view the territorial knowledge dynamic is based on symbolic knowledge that Antalya region has transferred from Russia. Antalya region is a magnet for socio-cultural knowledge of Russian lifestyle from Russia. At the same period of time quasi-synthetic knowledge on early reservation business model is transferred from Europe to Russia. Antalya has started to make a new customer oriented service concept dominant by integrating these two knowledge types and thanks to this it has also accelerated this process by firm knowledge dynamics.

From 1980s the region has been one of the most widely preferred destinations by Europeans, especially by Germans, in the world. The situation has started to alter in 2000s and the number of Russian tourists has outpaced the German tourists. The necessities, preferences, life-styles, and most remarkably the income structure of this new customer group substantially differ from European

customers. Therefore, there was the need to transform the facilities, personnel, on-site-activities, language, cuisine, entertainment activities and so on. This caused a dichotomy: those facilities aiming mass tourism and those hotels welcoming *cream de cream* customers. The 4S type highly competitive mass tourism type tourism has caused prices to drop drastically. The price competition in 4S tourism has turned into thematic hotel services in recent years and investors have tended to HIP.

Since the local companies do not acquire or obtain precise knowledge from international ‘masters’ and from regional and national knowledge institutions, they generate and use the related knowledge by themselves through labour mobility, participating in fair/exhibitions, formal and informal local/intra knowledge exchanges. Then, it could be said that intraregional knowledge exchange employs (open) channels but international knowledge exchange remains (or have to remain) in the (limits of closed) pipelines. As mentioned by both Halkier (2007) and Cooke (2007), ‘trial-and-error’ as a knowledge and learning activity takes place in such a symbolic knowledge generation, thus ‘learning by failing’ has a central role in the knowledge processes in the tourism sector in Antalya.

A particular firm has played a significant role in this learning process. It is interesting to say that a firm may alter knowledge base of region both as an initiator and as a receptor node of the knowledge mobility. In this line this section particularly examines RIXOS PREMIUM HOTEL and the diffusion of HIP hotels in Antalya, and hence the diffusion of a new tourism concept, HIPs. Highly individual place (HIP) is a new service concept based on the integration of all inclusive system into a boutique hotel.

Hotels in Antalya territory holding the experience of these two systems (boutique hotel and all inclusive system) have internalised the HIP model in a very short time by integrating boutique hotel and all inclusive system. RIXOS hotels are among these hotels integrating these two systems. *The integration of these two concepts in Antalya Region coincides with the diffusion of personalised service concept for Russian tourists.* Therefore, it would be meaningful to examine RIXOS’s exploration and examination of HIP model in Dubai and exploitation in Antalya Region.

The RIXOS hotel-chain was initiated in 2001 with an individual hotel management. That hotel was a three-star one but the firm commenced to make various plans to proceed in the field of tourism by new hotels. The first five-star hotel management experience of the firm was realised by the acquisition of a hotel –Papillion Aisha- in Tekirova, Kemer. Then, the new diffusion/growth strategy of the management has turned to be building hotels through land allocations<sup>3</sup>. By establishing Sembol İnşaat (Registration number: 33848) management team working together in the field of tourism started to construct their own hotels on the lands allocated to them.

The RIXOS Group has applied the method not only in Antalya Region but also in Dubai. It transferred the land allocation method to the hotel they build on the land that belongs to Sheikh Muhammed Bin Rasid El Makdum (Dubai crown prince). Unlike the case in Turkey, the construction of the hotel was under the responsibility of El Makdum. The unique role of RIXOS in this project was the management of the hotel. This was the point for RIXOS to compose organizational culture in a tourism business. Behind closed doors the political relations of the management of RIXOS group have been of vital importance, just like the case in Turkey.

The relations with either Dubai or Kazakhstan turned the formal governance of RIXOS Group (with agreements and contracts), into a governance system based on trust and political relations. Mr. Erdoğan (the Prime Minister of Turkey) took Fethah Tamince, who planned to invest big amounts in Antalya region, and his team to Dubai during his visits there, which gave an opportunity for RIXOS Group to examine HIP hotel management concept that gradually develops and appeals to wealthy tourists. Dubai is the place where symbolic knowledge concerning the content of HIP hotel management, qualifications of the enterprise and architecture of the buildings are anchored and insider learning has taken place.

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<sup>3</sup> Land allocation method means a contract with the land owner who intends to invest in tourism in the aimed territory. The hotel construction is carried out by the contractor firm and the land owner is given a share out of the profit every year. However; management, operation and construction of the hotel completely belong to the management of the contractor firm.

The idea to transfer the knowledge of the luxury service production in Dubai –anchored knowledge– was brought to agenda during Erdoğan’s visit and it was decided to work through on this issue. By an agreement signed during his visit; the management of the hotel, constructed in a land belonging to El Makdum, was given to RIXOS Group. Governance based on agreement and contract forms the beginning of exploration phase of HIP knowledge. The hotel completely designed in compliance with the architecture in Dubai.

Thereafter, the RIXOS Group has transferred symbolic knowledge belonging to food, design, hamam (Turkish bath) and luxury of Ottoman culture for this transfer to be realised, it is remarkable that knowledge is mobile and Dubai has a high combination capacity of all this knowledge. Therefore RIXOS Group, with its management experience in Dubai, gets familiar with HIP model knowledge anchored in the region by trial and error learning -empirically -and it mediates the combination of these two knowledge types (HIP from Dubai and thematic from Turkey) by transferring its own thematic knowledge into Dubai. Consequently, the firm obtains the knowledge from Dubai. Luxury service production pertaining to Dubai requires the combination of knowledge pertaining to many extra-regional territories. In the following phases RIXOS Group would provide the combination of knowledge by transferring this production and marketing knowledge to Antalya from Dubai.

**Table 4 - FKD1 Phases, Knowledge Types and Actors**

PHASES	KNOWLEDGE TYPE	CHANNEL	ACTORS
<b>Phase 1</b> 2001-2005	Production of services and marketing	Political support and guidance of Turkish Government, UAE visits, Informal implicit knowledge (Fettah Tamince)	Petro-dollar (Arabic capital) Construction Companies in Dubai Wealthy Customers
<b>Phase 2</b> 2005-2008	Production of services and strategic knowledge	Political support of Turkish Government and implicit contracts	Political support and guidance of Turkish Government
<b>Phase 3</b> 2007-	Marketing and strategic knowledge	Participation in fairs Country visits Feedbacks and requests from customers	Wealthy Customers Tour Operators (Tez Tour) Fairs (Germany and Russia) Jet set

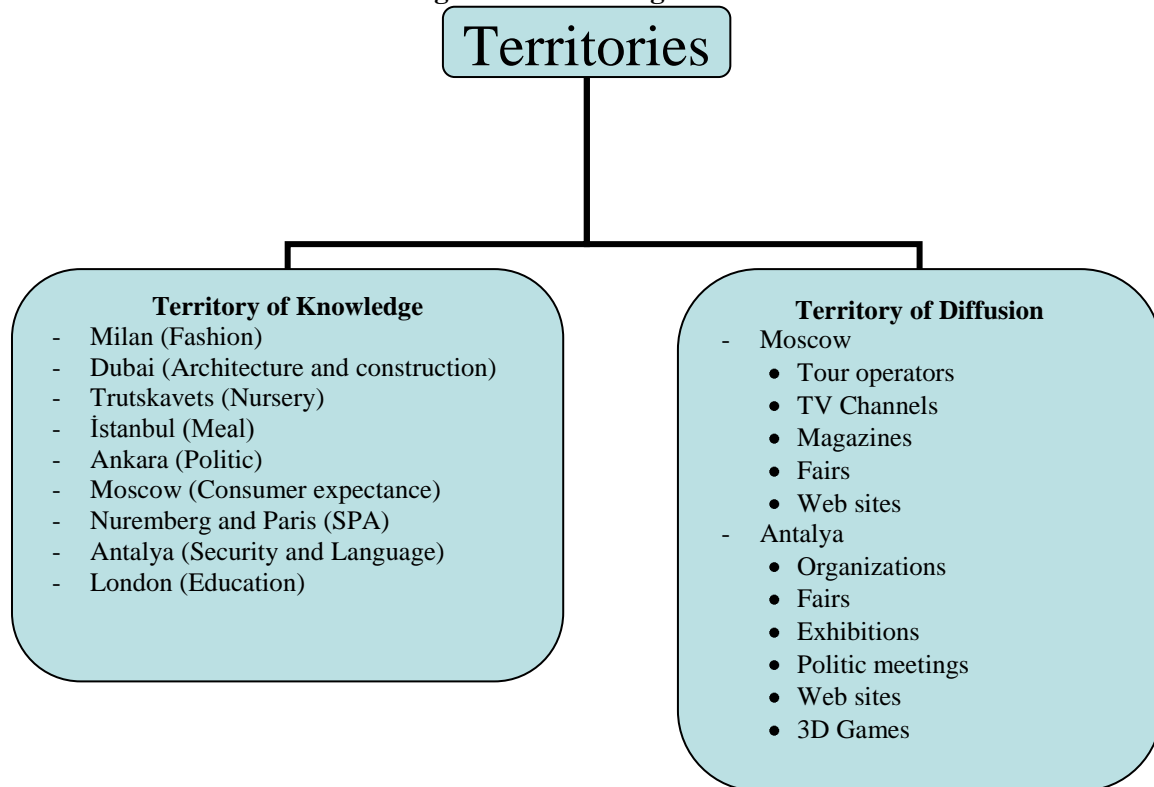
RIXOS PREMIUM BELEK, the focus of the study, was constructed as a resort hotel 30 minutes away from Antalya International Airport. Sembol İnşaat, one of RIXOS group’s own companies, became a part of the hotel construction. The hotel is situated on a 400,000-square metre land. It has a sand coastline of one kilometre. 3,500 square metres for the pool and 12,000 square metres for the park were used. It has a bed capacity of 1,700. Under normal circumstances, 4 big 5-star hotels with 4,000 beds can be built on such a land. That is, people are dispersed around in such a way that there comes out an atmosphere as if the hotel was vacant; there becomes no jam anywhere. This is the most important issue making RIXOS different from the other hotels. In the construction of the hotel imitation concept, conducted by many other hotels, was not conducted here; instead just luxury service concept was aimed. Dubai is the place where this knowledge has been anchored. Moreover RIXOS experienced this service concept in its hotel in Dubai. For instance, in Antalya Belek Region, there are hotels that aim at the people preferring the palace architecture and demanding to have a vacation in a palace atmosphere. (e.g. MNG Group) RIXOS Group intersects the luxury service with authentic architecture by choosing luxury consumption and luxury income group as the target group due to the experience gained in Dubai. Like luxury consumption, authentic architecture and design knowledge are also transferred from Dubai.

RIXOS Group was obviously successful in gathering and capturing knowledge generated elsewhere such as Dubai and Ukraine. The political networks of Fettah Tamince incorporate great deal of implicit knowledge for tourism sector as well (e.g. land allocation from the Ministry). These knowledge types attained by mainly informal relations in closed and social environments are exploited in order to satisfy the expectations of customers. Fettah Tamince has been present in high society in

many regions in the world by means of these relations. It has already been stated that he has started to the business by a jewellery store in Russia. Mr. Tamince, staying in Russia for a long time, learned where the wealthy Russians go, what they spent money on and what they like doing. Similarly, he has had knowledge about the spending patterns of the wealthy people in Kazakhstan, Ukraine and Dubai following the enterprises of the RIXOS Group.

The knowledge on spending patterns of wealthier people was attained by Fettah Tamince via informal communication channels does not have a tendency towards either localization or spillover. Thus long-distance interactions actually can include informal knowledge.

**Figure 3 - Knowledge Territories**

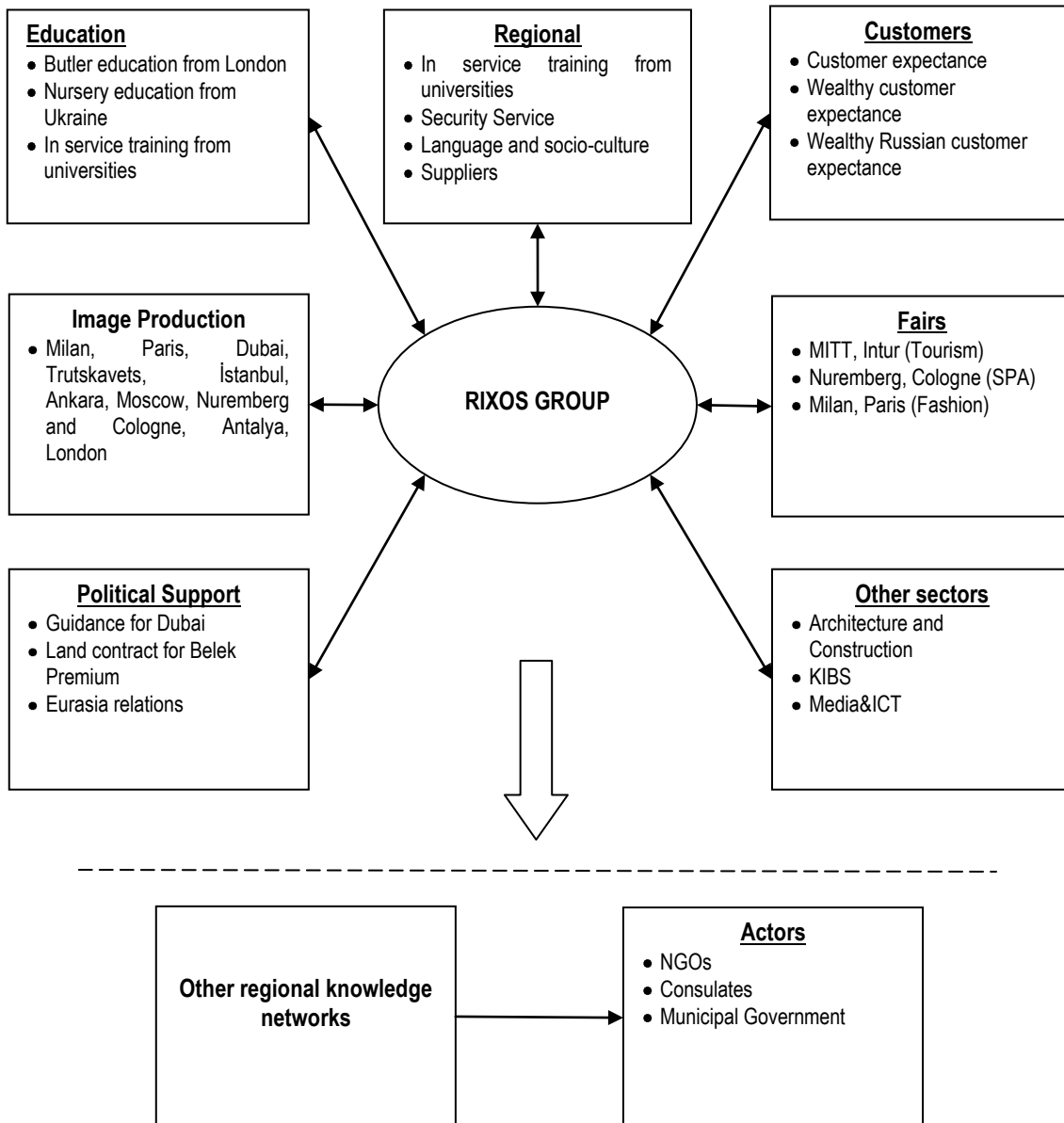


Symbolic knowledge combined by RIXOS for customer expectations can be examined under seven headings:

- Focus on Children: Transfer of Ukranian young ladies having pedagogy education to Antalya.
- Focus on Russian Characteristics and Animation: Through high labour mobility having knowledge on jewellery and leather.
- Focus on cuisine: Transfer of one of the chief cooks of Çırağan Palace (İstanbul), Ahmet Ateşoğlu and the training of cooks in Russia.
- Focus on SPA: Through fairs of Nursing, Therapy, Care + Professional Patient Care in Nurnberg and International Trade Fair for Sauna, Pool, and Ambiance in Cologne; necessary knowledge transfer for healthcare products through its office in Paris for skin care and cosmetic products; labour holding anchored knowledge in massage centre of the SPA is transferred from Far East and knowledge of massages exploitation such as Thai, Bali, Hint, Classical, Hawaii and Aromatherapy; a yoga master from India, a body-lift expert from Thailand and stone therapist from Bali are employed.
- Focus on wealthy customer: Through the training of all butlers and employees, employment of foreigners with an apprenticeship system.
- Knowledge of Language: Foreign language speaker employees,

- Customer-oriented theme: Through the transfer of the system conducted in Dubai.

**Figure 4 - Possible Knowledge Relations**



The customers constitute one of the external knowledge networks of the firm. Target group of the firm is wealthy customers. Highly personalized service concept is symbolic knowledge created in Far East and Dubai. Arabic capital concentrating on Dubai enabled the development of new knowledge for the world. Dubai using this knowledge efficaciously in seven-star hotels becomes diffuser of this knowledge. Diffusion occurs completely in an unplanned and generally in an implicit way. RIXOS group has gained this knowledge implicitly from Dubai where it has established strong political informal relations. Exploration phase of this symbolic knowledge, the first one of the development phases of RIXOS, has started through the connections established by Fethah Tamince. Here, knowledge is new for RIXOS Group. Implicit knowledge has been substantially attained by practice and experience. In order to obtain this knowledge, management of Ottoman Palace Hotel in Dubai has been acquired as a result of face-to-face negotiations with the emir of Dubai. Moreover, Turkish government has also attended to these negotiations. In the following process, explicit and implicit knowledge has intertwined (complicit). Symbolic knowledge can be said to be absorbed in this phase so that it can be exploited in the following phases. Knowledge of how the necessary image has formed for HIP model is based on the knowledge of service production coming from long distance.

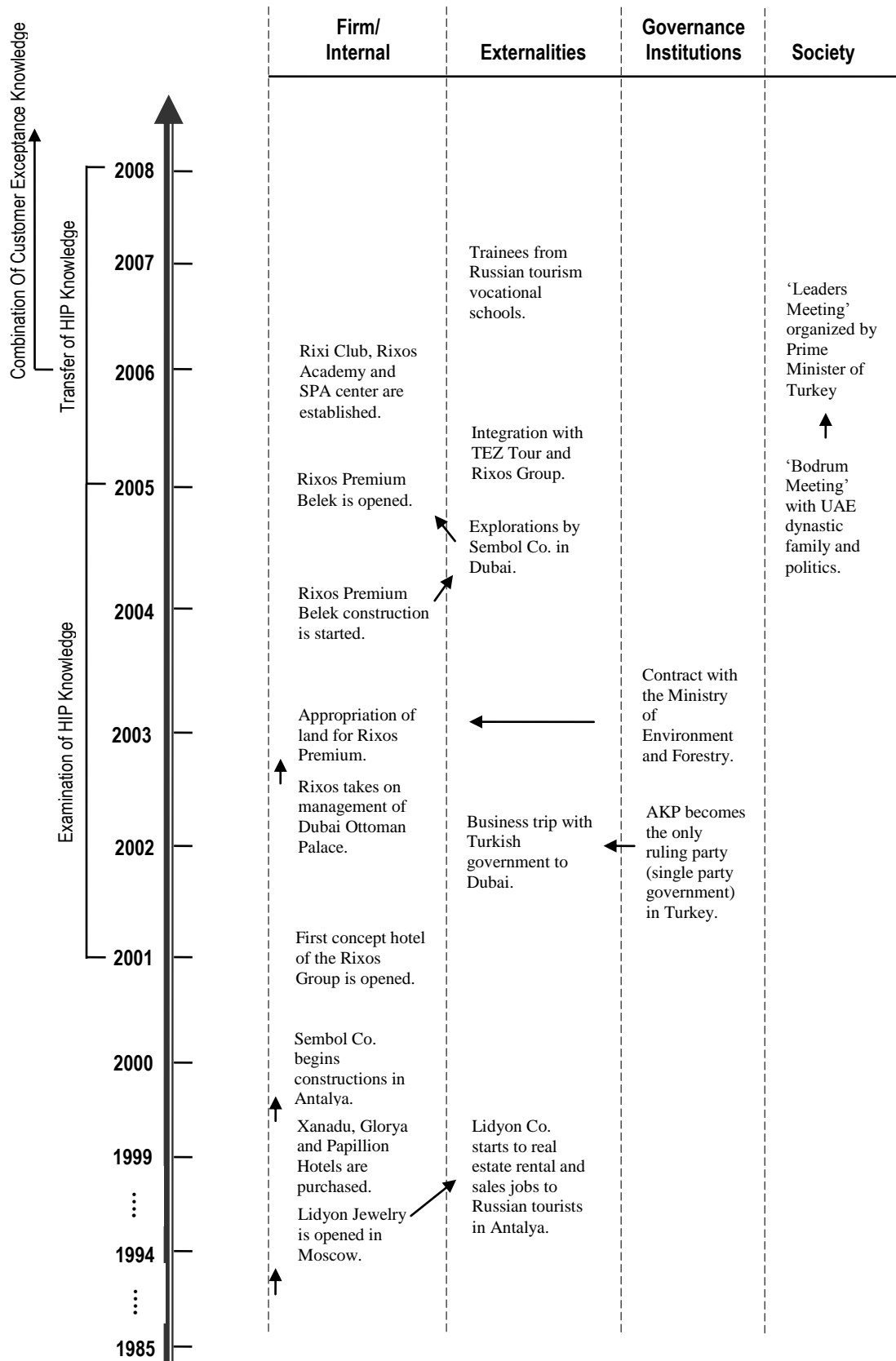
Knowledge categories, such as how to constitute SPA centre, who to work, how to train the labour in terms of departments, where to purchase the properties required for the departments and how to select them, are transferred from distance.

RIXOS group exploring this symbolic knowledge in the first phase has gone through the examination phase in RIXOS PREMIUM BELEK built in Antalya in 2005. The second phase, duration of which is three years, is the test phase about the applicability of knowledge in Antalya. This phase is a phase of forming an image like the one in Dubai. Customer expectations attained by Fettah Tamince implicitly intertwines with service production knowledge obtained from different territories. (e.g. Milan, Paris, London, Istanbul). Therefore, explicit and implicit knowledge form complicit knowledge by intertwining. Knowledge types exploited in the phases of image forming and testing in Antalya are composites as they are formed by combination of knowledge in different disciplines and functional areas. Not only does the knowledge come implicitly from the distance but also it is attained implicitly in the proximity. Knowledge attained from the regional sources such as the security of villas and knowledge of languages is considered as examples for this.

The last phase is the exploitation of knowledge in the firm and diffusion of it. Diffusion of knowledge incorporates the diffusion of image. Here, the aim of knowledge diffusion is to strengthen the position of the firm and to increase the reputation of it. The phase of knowledge exploitation brings along the share of knowledge with the other actors in the territory. Share of the knowledge with the other actors occurs by implicit knowledge within the proximity. In the region, hotels testing the HIP model by the relational proximity attained by practice have been opened. Diffusion in the distance mostly has the purpose of publicity and occurs by means of codified knowledge. Spillover realizes through TV, magazine advertisements, websites and 3D simulations.

The main support for the firm knowledge dynamics has been provided by political environment. Therefore, governance/policy context constitutes the area where political incentive is provided. The strategy of concentrating on Middle East and making use of Arabic capital is the main path in the development of business strategy of the firm. In the latter phases, guidance and facilitation attempts of the government are remarkable.

**Figure 5 – Knowledge Biography**



## Conclusion

We can highlight some critical findings:

- Similar to the shortness of the learning time-span, the adaptation should be rapid in order to response market changes. The learning is generally subject to trial-and-error yet the time-span is insufficient. As the time-span is short, formal educational institutions are not able to organize themselves accordingly, particularly public education institutions. Instead, private education institutions have some capabilities to tackle with the pace and time. In our field of research we found that some hotels have established their own schools. In other words we observe that a powerful science base is not a must for a region to develop, instead capturing mobile knowledge and gathering various knowledge domains-institutions-targets together are the recent trend for solving the problem of regional development in the context of knowledge economy. That is to say, symbolic knowledge does not favour science and education system, thus tourism firms are less dependent to universities.
- At the territorial level we have found a development based on distance learning. At the firm level we have also observed distant knowledge interactions. However, at the firm level, labour mobility becomes more crucial in terms of knowledge transfers and proximity becomes effective in the learning process. For instance, knowledge flows such as architectural knowledge from Dubai, the knowledge on the SPAs from Germany, knowledge on fashion from Italy, are the cases for distant knowledge interactions. However, in capturing and learning *nursery* knowledge from Ukraine and *butler training* knowledge from London the recruitment process is decisive thus close local relations are needed in the learning process of very specific knowledge interactions. Architectural knowledge may be learnt at a distance but nursery knowledge is culturally embedded and necessitates face-to-face relations. In this regard we can say that the degree of symbolic knowledge determines the choices between distant-close learning.
- The knowledge biography confirms that composite knowledge can be generated or used through interactions with various resources not only from a single source. Therefore mobility is a kind of a must for the existence of symbolic knowledge if it is combinatorial. In our case mobility has been raised from three fundamental sources. Firstly, as a part of firm's strategy, the mergers and joint ventures act as vehicles for knowledge flows. Secondly, labour mobility, particularly for specific knowledge types, supports the development and sustainability of the HIP concept. Lastly, business partnerships along with fairs and exhibitions also cause knowledge flows.
- Firm level knowledge dynamic was nourished by knowledge activities which were born of different and various territories and this knowledge has been combined at the regional level, in Antalya. Thus the firm's ability to combine knowledge inflows is the most important result of our field research. Unfortunately this ability derived from individual activities and relations. From theoretical point of view it is rather difficult to indentify combinatorial capabilities, up to now it seems more talent type.
- In the firm knowledge dynamics, the firm has acquired knowledge from both intra- and extra-regional resources. The knowledge analyzed in biography has both region- and sector-specific features. Knowledge related to Russian culture, lifestyle and language exploited regionally and at the firm level by RIXOS Hotel, for instance in-service-training courses on Russian language and culture are given within the firm. Sector specific knowledge has been obtained from the regions which are specialized on HIP model like Far East countries and Dubai. The RIXOS has accessed these external knowledge domains via informal canals and individual efforts in order to implement HIP model in its facility.
- In our cases symbolic knowledge learning process mostly depends on imitation of the knowledge created outside the firms and even it is extra-regional. External learning is central to our findings. There are a couple of reasons for such an absence of symbolic knowledge (base) in the region and in the firms. Firstly, artistic and creative capabilities are relatively undervalued both in the firms and in the region. This is the result of national structure. Public policies prioritized hard infrastructures according to the socio-economic development level of the country and the region.

Parallel to this, centralized education and science systems are sometimes unable to see regional and local opportunities, and when they see or be aware of opportunities their response to them is too late. Secondly, symbolic knowledge shows composite or combinatorial features in which knowledge accumulation only partially supports further knowledge generation. Therefore the support of science and education system is limited. We observe that education system is crucial in sustaining and developing symbolic knowledge but in Antalya this support is clearly not sufficient to catch up the training demands originated from the firms. The dynamism of tourism sector is difficult to follow up for a traditional (centralized) education system like the one in Turkey. For the sustainability of symbolic knowledge tourism sector needs more open, multi-linguistic, warm, cheerful and strong communicative skills for the workforce. Third, we have to keep in mind national business environment although globalization and sometimes knowledge economy tell us not to do so. Clientalism or political networking may be utilized for knowledge flows in Turkey. Thus firms may find investments in symbolic knowledge unnecessary. We have also found that political networking can be used for capturing symbolic knowledge.

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