

# Investigating the Situated Culture of Multi-Channel Customer Management: A Case Study in Egypt

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## ABSTRACT

This paper investigates the influence of national culture on customers' behavior and customers' choice of channel through the customer life cycle stages. An exploratory in-depth single case study in a multinational organization in Egypt was conducted. Specifically, 31 in-depth interviews were conducted with members of staff in marketing, IT, retail and customer services departments, and external prospects/customers. Based on an interpretive approach, the authors have articulated a situated cultural approach based on structuration theory to identify the cultural dimensions that have provided an understanding of the cultural influence on customers' channel choice. The results highlighted that verbal, human interaction, traditional shopping, and cash based were the themes for customers' channel choice through the four stages of customer life cycle. The results also show that the customers' channel choices were linked to the following Egyptian cultural dimensions: collectivism, market price relationship, emotional, power distance, low trust, uncertainty avoidance, and universalism.

## KEYWORDS

Case Study, Channel Management, CRM, Customer Channel Choice, Customer Lifecycle, Egypt, National Culture, Situated Culture, Structuration Theory

## 1. INTRODUCTION

The introduction of new channel to customer services, such as telephone and the Internet, is becoming widespread (Hughes, 2006; Gómez & Pérez, 2018; Ameen & Willis, 2019). Peltola et al., (2015) have claimed that, change in customer behavior towards increased use of digital services throughout the buying process drives retailers to rethink their services.

Through the proliferation of channels and ways to engage in these channels, customers today have an unprecedented range of options to individualize their customer journey, (Barwitz & Maas, 2018). Contemporary shoppers engage in a mixture of real-life and digital activities combining events in brick-and-mortar stores with online and mobile browsing (Peltola, et al., 2015; Ameen, Willis & Shah, 2018).

However, there is a few research studies that have examined the influence of national culture on the customers' channel choice throughout customer life cycle (Choi and Park, 2006; Schrodera and Zaharia, 2008; Telci, 2010; Kumar & Pansari, 2016; Khan et al., 2017; Bertrandie & Zielke, 2017;

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Madichie et al., 2017; Watson et al., 2018). Gómez & Pérez, (2018) have recommended to further studies in other countries as their study focused on three German speaking countries in Europe.

This paper explores the influence of national culture on the customers' channel choice throughout customer life cycle. A case study approach has been articulated to analyze multi-channels customer management of a telecommunication multinational organization operating in Egypt. A conceptual framework of multi-channel customer management is utilized to examine the challenges to overcome the variance of customers' preferences, expectations, perceptions and behaviors. A number of theoretical and practical implications have been proposed.

The paper is constructed in a logical flow, in the next section, section two, we have provided the background literature of introducing a new channel for the customer management, in section three we have discussed the research phenomenon, which is about the influence of national culture on the customers' channel choices, in section four we have presented the conceptual model and the analytical technique to explore cultural influence on the phenomenon, in section five we have proposed the research methodology adopted in this study, in section six, we have provided the data analysis, in section seven we have discussed the findings, and in section eight we have concluded the paper with the implications and limitations.

## 2. THE ADOPTION OF NEW CHANNEL

Direct marketing retailers have traditionally mailed catalogues and provided consumers with order channels such as mail order and call center (David Sheppard Associates, Lin et al., 2018; Li et al., 2019, Cheng et al, 2019; Xiao & Li, 2019). With the advent of the Internet channel, the direct marketing retailers have reported a 'channel shift' toward Internet-based orders (Rhee, 2010; Raguseo, 2018; Wollenburg et al., 2018). They have also perceived that maintaining a call center would be much costlier than the Internet channel, and encouraged their customers to use the Internet order channel (Rhee, 2010; Medichie, 2011; Beheshtian-Ardakani et al., 2018). Some scholars have thought that the Internet channel would dominate the direct marketing purchases owing to its availability, convenience and information source. However, we have observed over a decade of Internet usage that the Internet channel never eliminated the other channels in direct marketing (Rhee, 2010; Kim & Kumar, 2018).

Other marketing studies investigate the contribution of channel to the firm's revenue and loyalty. Kumar & Venkatesan (2005) have showed that customers who shop across multiple channels provide higher revenues and higher share of wallet and are more active than those who shop through one channel. However, their study does not investigate the channel usage behavior that will make the customer a multi-channel shopper. Shankar, Smith, & Rangaswamy (2003) have found that loyalty to a service provider is higher when it is chosen online versus offline.

Also, some other studies explore channel cannibalization. Biyalogorsky & Naik (2003) have found that online sales do not significantly cannibalize retail sales and that the firm's online activities build long-term online equity. Dleersnyder, Inge, Gielens, & Dekimpe, (2002) have stated there is little evidence that the introduction of a newspaper website cannibalizes circulation of the print version. However, these studies do not consider under what conditions the Internet channel will not cannibalize the sales of other channels (Rhee, 2010).

Verhoef & Donkers, (2005) have highlighted that for a financial services provider, customers acquired through different channels differ with respect to retention rate and cross-buying behavior. However, their study does not investigate what channels the customers use after they are acquired.

Ansari, Mela, & Neslin, (2008) have discovered that the Internet has negative relationship with a firm's future sales and that the catalogues have a positive effect on the purchase inertia. They also found that this negative impact of the Internet on demand can be mitigated by the firm's marketing activities.

The previous studies have showed that there is a trend that customers' preferences, expectations, perceptions and behavior varied across different channel through their life cycle, therefore in this

study we are focusing on exploring the customers' preferences, expectations, perception and behavior of various customer channels (Barwitz & Maas, 2018; Barratt et al., 2018; Du et al., 2018; Li et al., 2018; Ortlinghaus et al., 2019).

### **3. CUSTOMER CHANNEL CHOICE AND CULTURAL INFLUENCE**

Balasubramanian, Raghunathan, & Mahajan (2005) have suggested five goal factors that influence the consumers' channel choices at different stages of purchase process. They argue that psychological factors are important in the choice process. However, their study does not provide any empirical study to test the influence.

Ramaseshan, Bejou, Jain, Mason, & Pancras, (2006) identified Global Customer Relationship Management (GCRM) as the strategic application of the processes and practices of Customer Relationship Management (CRM) by firms operating in multiple countries that incorporates relevant differences in business practices, competition, regulatory characteristics, country characteristics, and consumer characteristics. The end goals of GCRM are: effective customer acquisition, retention, and development via up-selling and cross-selling across nations and cultures. Companies that seek to engage in GCRM will need to manage skillfully the interrelationships between the macro – country level and micro- individual customer level, that impact customer lifetime value in a global context (Ramaseshan et al., 2006).

Channel management is one of the CRM component much influenced by the behavior of customers in relation to its implementation and operation. Adoption of channel management form one country to another for a multinational organization is an interesting research phenomenon.

The vast majority of the extent of CRM literature assumes a western orientation (Berhad and Tyler 2002; Rostami et al., 2016; Wang, 2018; Agrawal & Mittal, 2019). Embedded in this orientation are western values of self-interest and self-gratification that differ from typical Eastern and Asian values of filial piety, delayed gratification, and loyalty to family. These differences in values impact a variety of customer-centric activities as well as design of the customer experience itself. To attract and retain valuable customers, the customer experience must be defined and understood within the cultural context. Bolton and Myers (2003) have stated that, "relationships with customers from collectivist societies result in stronger, more intimate, and more loyal relationships than do relationships with customers from individualistic societies." Cultural norms vary not only between western and non-western markets but also across different western markets (Ramaseshan et al., 2006).

Myers, and Tan (2002) have proposed that IS researchers interested in conducting research on culture and global information systems should adopt a more dynamic view of culture – one that sees culture as contested, temporal and emergent. They proposed a research agenda for global information systems that takes seriously the idea that culture is complex and multidimensional and can be studied at many different levels. It can be studied at the international (e.g. West vs. East), national, regional, and organizational levels of analysis (Fan, 2000; Agwu & Murray, 2018; Sohaib et al., 2019; Wang, 2019; Lee & Chen, 2019), and these levels are often interconnected and intertwined.

In this paper, the authors attempted to shed a light on the influence of national culture on the adoption of channel management to consider the customer channel choice through customer life cycle. The theoretical implications would provide an understanding of how culture influence customer's preferences, expectations, perceptions and behaviour. Also, the practical implications would help the managers of multinational organizations to adopt their multi-channel customer management based on an understanding of cultural aspects (Du, 2018).

Companies that strive to create value for customers across cultures face challenges in terms of both macro and micro factors. The macro factors involve differences that affect entire country or a region. For example, in some countries the customers in general prefer to do their shopping in shops rather than electronic shopping, or telephone shopping etc. However, that could be the opposite case in other countries where customers prefer mostly to do shopping online. The micro factors involve

individual consumers within the country or a region. For example, there are some countries where the general norm within the society that they do their shopping in traditional way using brick and mortar. However, within the same country we would find a group of customers, for example young generation, who may adopt online shopping even within a country where the traditional shopping is the most adopted (Hughes, 2006; Wu, Ke & Nguyen, 2018).

Ramaseshan et al., (2006) have identified three categories of factors that have affected the success of firms practicing CRM across national boundaries or cultures: The first external to the firm and arose from differences in customers' expectations, drivers of satisfaction, loyalty, profitability and customer value across countries or cultures. The second were also external and arose from differences in the competitive environments, technological infrastructure, political systems, and regulatory variations between countries around the globe. The third were internal to the company and arose from differences in the challenges faced by global firms in forming a customer-oriented organization, which already encountered challenges in the form of culture and power issues.

In this study, the focus is on the first category of factors, where CRM implementation and operation is influenced by differences in customers' expectations, preferences, and behaviour across countries. The focus is on the ecological or macro level, not the individual customer level or micro level. The study admits there are differences between individual customers and the potential influence on CRM implementation and operation. But, this study focuses on exploring the potential influence on CRM systems implementation and operation which is derived from the differences between customers' behaviors across countries.

CRM systems implementation and operation involve the interaction between the organization and its customers through customer channels / customer touch points, and customer transactions data captured in contact management systems for sales and services purpose. With the new technological customer channels, customer inquiries and transactions can come from a call center, the Internet, or many other channels. Capturing and sharing these interactions within an organization is a corporate strategic objective to assure efficient customer management. A well-designed contact management infrastructure allows a company to create a virtual contact center that centralizes information and makes it available 24 hours a day, seven days a week across all service delivery channels (Petersen et al., 2018).

One of the most dramatic trends in the retail environment has been the proliferation of channels through which customers can interact with firms. The Internet, kiosk, ATMs, call centers, home shopping networks, and catalogues, as well as bricks-and-mortar stores, are now commonplace means by which customers do their shopping activities. This proliferation has created a challenge for firms to manage this environment effectively and opportunities for academics to produce insights that can help to address these challenges. The field of "multi-channel customer management" has emerged as a result (Ngai, 2005; Neslin, Grewal, Leghorn, Shankar, Teerling, Thomas & Verhoef 2006; Neslin & Shankar, 2009; Wollenburg et al., 2018; Yrjölä et al., 2018; Barratt et al., 2018, Du et al., 2018).

Multi-channel customer management is one of the CRM components that is the focus for this study. Multi-channel customer management's aim is to manage customers touch points throughout customer lifecycle.

#### **4. CONCEPTUAL MODEL FOR MULTI-CHANNEL CUSTOMER MANAGEMENT**

The authors have developed the conceptual model based on two main parts; first the authors based on the previous literature of the management of multi-channel customer have adopted Neslin et al., (2006) framework to include the dimension of social influence on the adoption process; then in the second part the authors have demonstrated a conceptual model of the situated cultural approach to provide a practice lens to identify the cultural influence on the phenomena.

#### 4.1 Framework for Multi-Channel Customer Management Social Influence

Neslin et al., (2006) have identified six basic categories of factors which appear to determine customer channel choice: firm's marketing efforts, channel attributes, channel integration, social influence, situational variables, and individual differences. The focus of this paper is on social influence, because Nicholson, Clarke, & Blakemore, (2002); Keen, Wetzels, Ruyter, & Feinberg, (2004) and Verhoef, et al., (2005) found that customers' selection of channels is influenced by the belief that people similar to them use the same channel throughout customer lifecycle. In this study, the authors claim that national culture shared dimensions would influence the customers' channel choices through customer lifecycle on a macro level.

A framework for multi-channel customer management with the focus on social influence has been developed (adapted from Neslin et al., 2006). The framework joins the customer's and organization's decision processes. The customer progresses through four different phases: inform, interact/service, transact, and deliver/pay. For example, a customer may realize he/she needs a mobile phone service. The customer starts to collect information through different channels on different offers and various options. Then the customer may want to chat with an agent of the organization through various channels to clarify his/her understanding and answering his/her queries. Then the customer may go for the offer and makes the purchase, then he or she would pay and receives the delivery through different channels, the customer may redo one or many of these phases again and again until he/she leaves the organization.

Additional aspects of the customers' channel choices throughout customer lifecycle stages are crucial:

First, customer perceptions and preferences drive channel choice at the individual customer level -for example a customer may prefer to use the Internet for collecting information because of ease of use, but social norms and practices also influence customers at a macro level (Nicholson et al., 2002; Keen et al., 2004; and Verhoef, et al., 2005) – for example the customers in a specific country may prefer to use a store for payments and delivery because of the insecurity that the customers share about the Internet in that country.

Second, the customers learn from and evaluate their experiences, which feed back into the perceptions and preferences and reshape the norms and practices at the macro level and which will guide their next shopping task- for example a customer may use the Internet for search but as he/she couldn't find all answers they may then phone the organizations to find out more.

Third, in each shopping task during the customer lifecycle each time the customer must choose a channel from the available multi-channels provided by the organization. The customer may choose different channels in different tasks he/she performs. For example, one customer may prefer to search on the Internet for information, but also prefer to do the transaction through the organization store, while ask for customer services through the organization call center. Typically, the management decision process starts with data generated by the customer decision process. These data are at the macro level of customers – what channels did they use and for which purpose. Consistent with the emphasis on the customer, the organization's decision process is driven by such customers' macro level data. After the data has been assembled, the organization evaluates its channels. With this data in hand the managers can develop a multi-channel strategy (which channels to employ, how to design them, how to allocate resources across channels) and a marketing plan (pricing, assortment, service levels) for implementing the strategy. That is influenced as well by the organizational culture (norms/practices) and the organization's perception about customers' preferences.

Fourth, the customer's perception and preferences at the individual level or micro level will influence their choice of channel in various stages of customer lifecycle. Also, at the macro level the social norms and practices will influence the customers' choice of channel within a society. However, social norms and practices are influenced by the cultural values dimensions. In addition, the cultural values dimensions influence the organizational culture.

**Table 1. Structuration analysis to study Cultural influence on IS phenomena (Adapted from Walsham, 2002)**

Structure	<ul style="list-style-type: none"> <li>- Structure as memory traces in the human mind</li> <li>- Action draws on rules of behaviour and ability to deploy resources and, in so doing, produces and reproduces structure</li> <li>- Three dimensions of action/structure: systems of meaning, forms of power relations, sets of norms</li> </ul>
Culture	<ul style="list-style-type: none"> <li>- Conceptualised as shared symbols, norms, and values in a social collective such as a country</li> <li>- Meaning systems, power relations, behavioral norms not merely in the mind of one person, but often display enough systematic to speak of them being shared</li> <li>- But need to recognise intra-cultural variety</li> </ul>
Cross-cultural contradiction and conflict	<ul style="list-style-type: none"> <li>- Conflict is actual struggle between actors and groups</li> <li>- Contradiction is potential basis for conflict arising from divisions of interest, e.g. divergent forms of life</li> <li>- Conflicts may occur in cross-cultural working if differences affect actors negatively and they are able to act</li> </ul>
Reflexivity and change	<ul style="list-style-type: none"> <li>- Reproduction through processes of reutilisation</li> <li>- But human beings reflexively monitor actions and consequences, creating a basis for social change</li> </ul>

## 4.2 Situated Cultural Approach

The research paper is investigating the influence of culture on the implementation and operation of multi-channel customer management, and to do so, the authors have adopted a situated culture approach which is based on structuration theory (practice lens by Orlikowski, 2000, and Structuration analysis by Walsham, 2002).

A Structural analysis model (Weisinger, & Trauth, 2003; Ali & Brooks, 2008) has been developed to facilitate the understanding of national culture impact through exploring the situated culture perceived by internal and external actors within multi-channel implementation and operation for a multinational organization. The authors used two main components based on Structuration Theory which is proposed as a theoretical framework to investigate cultural aspects within IS discipline (Ali & Brooks, 2008). First, the authors articulate the ideas behind the practice lens for studying the use of technology, as proposed by Orlikowski (2000). Secondly, the authors used Structural analysis approach as detailed by Walsham (2002) – refer to Table 1. The authors argue that using a practice lens contributes to identifying the mediated shared structures between the actors through understanding the actions of the actors within the phenomenon. Then, using a Structural analysis approach contributes to identifying the cultural dimensions which are embedded in the identified mediated shared structures.

## 5. RESEARCH METHODOLOGY

Qualitative research methods were developed in the social sciences to enable researchers to study social and cultural phenomena. They help to understand people and social and cultural contexts within which they live. Examples of qualitative methods are action research, case study research, and ethnography (Myers & Avison, 2002).

While most of Hofstede-type studies, as the most cited cultural model within IS, have taken the quantitative approach, there are a few that have gone into the study with no predefined cultural archetypes (Myers and Tan, 2002). In this paper, we adopt the later approach, which investigates cultural influence on customers' channel choice with no predefined cultural archetypes using a qualitative Structural analysis approach instead.

Case study research is the most common qualitative method used in information systems (Orlikowski & Baroudi, 1991). Yin, (1994) has defined the scope of a case study as an empirical inquiry that investigates contemporary phenomena within its real-life context, especially when the boundaries between a phenomenon and context are not clearly evident.

The authors argue that an interpretive approach is more appropriate as the researchers articulate a Structural analysis approach (Ali & Brooks, 2008) to study cultural influence (Rose, 2002; Walsham, 2002). The power of Structuration theory to illuminate empirical situations has already been well demonstrated (Barley 1986; Brooks 1997; DeSanctis & Poole 1994; Jones & Nandhakumar 1993; Walsham 1993; Yates & Orlikowski 1992).

This study has followed an approach which includes identification of a wide selection of variables that are examined consistently within a multinational organization operating in Egypt as a single case study. Such an approach allows identification of culture factors which exhibit variance under different levels of performance outcomes of multi-channel customer management in a multinational organization.

As the focus of this research is to identify the cultural influence on multi-channel customer management in a multinational organization in Egypt; the authors have covered the different functional units (IT, Marketing, Sales, and Customer Services) in a multinational organization to minimize variance due to task related to each individual. The multinational organization under research in this paper, has already implemented and is operating multi-channel customer management systems. English was used as the language for conducting interviews in Egypt, however there were some parts which have been done in the native language (Arabic) and then have been translated.

The authors employed an interpretive approach which includes three different data collection techniques to conduct the case study e.g. semi-structured interviews, observations, and document and physical artifacts analysis. A case study protocol and interviewing agenda has been developed to conduct this research. Multiple resources were utilized to assure the validity of the research study. This includes: the interviewees are in different management levels (managerial and staff), the interviewees are in four different managerial functions (IT, Marketing, Sales, and Customer Services), the interviewees are from inside and outside the organization (customers, and staff), the authors observed the organization's internal and external work-related operations including analyzing different documents and physical artifacts of the multi-channel customer management systems. Data saturation has been implemented to assure data reliability for the case study (Yin, 1994).

The main data collection tool was semi-structured interview with staff and prospects/ customers of a telecommunication multinational company operating in Egypt. An interviewing agenda was developed as a starting plan for each group of interviews. The interviewees list includes the following:

- CRM manager;
- Systems architect;
- Web based systems admin;
- IVR administrator;
- Call routing administrator;
- CRM systems programmers;
- Sales force automation;
- Complain management;
- Fraud management;
- Remedy manager;
- Customer operations manager;
- Call centre agents (2 people);
- Marketing manager;
- Segmentation manager;
- Campaign manager;

- Advertising manager;
- Media manager;
- Sales manager;
- Sales agents (2 people);
- Customers (10 people).

Data has been transcribed and using content analysis technique, coding process has been conducted. The authors have developed Rich Pictures (as one of Soft Systems methodology research technique by Checkland, 1981) to demonstrate the interaction of customer with the organization in different stages of the customer lifecycle. Case Study themes/ patterns have been developed, then the cultural factors which influence the customers' channel choice have been extracted.

## 6. CASE STUDY DESCRIPTION

The case study is conducted in a multinational organization which traditionally operates in the telecommunication industry sector. For the confidentiality reasons the research calls the organization 'TELCORP'. TELCORP has launched its operations in over 25 countries worldwide. TELCORP-Egypt is the representative of the organization in the Egyptian telecommunications market. TELCORP-Egypt is linked to the headquarter of TELCORP in the UK through reporting to the regional office. TELCORP-Egypt staff have an interactive collaboration with the head office of TELCORP and the whole staff worldwide through an efficient TELCORP Intranet, where the staff shares the same mission, strategies, objectives, rules and organizational culture. Also, TELCORP organizes a number of events annually to assure the homogeneity of its staff culture and share views and experiences. Most TELCORP-Egypt staff (around 95%) are Egyptians, with very few foreigners from other TELCORP offices worldwide. Most non- Egyptian staff are at the top management level, for example, CIO, marketing director, customer services director.

As TELCORP Egypt has started to adopt a customer centric approach, a CRM team has been established since 2001, this team has been responsible of managing customer multi-channel and developing the customer related applications and systems. The team has mainly been developed from employees who have been working within the IT department. The CRM systems have been evolving according to the organization needs. They started with small system which managed the data required to operate customer services and progress on that. The growth of the market shares of customers and the requirement to manage millions of customers meant that the organization should start to look for a CRM solution with comprehensive CRM components and types. Therefore, the CRM team has started to develop a comprehensive CRM solution with the help of the Siebel cooperation. The planned CRM implementation strategy is a five-year plan with the objective to deliver the operating CRM component for customer contact management in the first year. The current CRM system is developed within the organization and it is maintained and adopted according to business needs.

### 6.1 Customer Multi-Channel Management

TELCORP-Egypt has developed a multi-channel customer management strategy which is new for the Egyptian market. The Egyptian market used to have one channel only for customer to contact any organization which is through their store or shop. The Egyptian market used to have the traditional shopping style, which is based on the existence of the staff and the customer in the same time and place (i.e. a physical contact point).

TELCORP-Egypt has over 2000 employees with two sites for the management staff and over 20 stores distributed in the main cities of Egypt. There are over 700 employees working for the call center and around 150 for the stores. TELCORP-Egypt also has a web site, although it is in the English language, which is not the native language for the Egyptian population (Arabic), with only



few staff able to maintain and manage the web site (two developers from the CRM team and two customer operations staff). TELCORP-Egypt has four main dealers who deal with smaller re-seller (shops and kiosks) of which there are thousands around the country. The customer could get access to the organization through its stores, call center/IVR (Interactive Voice Response), dealers, and the web site. Also, the customers could send SMS or emails; and they can send a postal mail or a fax to the head office. The customers could walk into the main office as well and access them through telephone lines.

## 6.2 Multi-Channel Strategy

The following areas highlight the channel strategy for TELCORP-Egypt.

### 6.2.1 Resource Allocation

TELCORP-Egypt has provided the following customer channels: 20 Store, 4 Dealer, Thousands of Shops and kiosk, Call Centre (24/7), IVR (4000 call at a time), Web site (English language), Email, Postal Mail, Fax, and Walk-in to the Head Office of TELCORP-Egypt.

### 6.2.2 Channel Coordination

TELCORP-Egypt charges low value users for using the call center channel. In addition, physical products can be delivered to customers inside the stores, at the dealers, the shops, and the kiosks. Products/services promotions are similar across TELCORP-Egypt's channels but dealers, shops, and kiosks do have special promotions. The TELCORP-Egypt's store is the only channel to have the whole range of TELCORP-Egypt's products and services.

## 6.3 Organizational Culture

TELCORP-Egypt has developed its organizational culture to be like TELCORP multinational organizational culture. The main features of this culture are:

- High level of professionalism: includes highly qualified employees, high level of technological environment, and high level of soft skills, team work environment, commitment, planning and others.
- Customer-centric: The focus within the whole organization is to satisfy customers.
- Integrated customer business model and integrated CRM.
- Satisfied customers: The organization's staff perceives their effort is successful concerning customer satisfaction.

## 6.4 Contextual Factors

This section summarizes the main contextual factors that influence the multi-channel customer management for TELCORP Egypt:

- **Legal and Regulatory aspects in Egypt:** The telecommunications industry is new for the Egyptian market. There are some restrictions on the market as the government manages the telecommunications industry. These restrictions affect competition, prices, and freedom of the market.
- **Social aspects in Egypt:** Egyptian society is very focused on family and the society builds on that. This greatly affects individual decisions and living approaches.
- **Economic factors in Egypt:** Egypt can be classed as a developing country and the national income is far from distributed optimally. The quality of standards of living is low, and a large percentage of the society wealth is below the average line.

- **Technological Infrastructure status of Egypt:** Egypt is undergoing a national strategic plan to implement electronic government and to increase the household PC diffusion, and Internet diffusion. However, as a percentage of the population of Egyptians the level of diffusion is below that of developed countries. Egypt still faces the problem of illiteracy, and technological illiteracy.

## 7. DATA ANALYSIS AND FINDINGS

The data analysis of the case study is presented in three sections, this includes: case study themes/patterns, Structural analysis, and cultural dimensions. The first part of the analysis is based on conducting content analysis technique, which concluded by identifying the themes/patterns of shared views between the actors throughout the customer lifecycle four stages. Then in the second part of the analysis, we have conducted a Structural Analysis of the four stages of the customer lifecycle, using Orlikowski's practice lens (2000) an interpretation of the actors' actions in each customer lifecycle stage within the context of multi-channel customer management can be derived. Last but not least, in the third section we have analyzed the emergent structures that have been modulated by the actors in each customer life cycle phase to drive the national cultural dimensions behind it, based on Structuration analysis by Walsham, (2002).

### 7.1 Case Study Themes/Patterns

In this section, the authors developed using content analysis technique and Rich Pictures, the different themes/patterns that represent each phase of the customer lifecycle, (as summarized in Table 2).

Walsham (2006) argues that 'coding' is a subjective process to some extent, because researchers choose the concepts to focus on. However, Walsham (2006) stated the researcher's best tool for analysis is his/her own mind, supplemented by the minds of others. Walsham (2006) stated that qualitative data analysis techniques through packages such as Nudist, Atlas, NVivo, can be a useful method to link themes to specific pieces of text or transcripts. However, the method has some major disadvantages (Walsham, 2006): It is very time consuming and is sometimes a form of displacement activity, in place of the harder work of generating themes in the first place; The software does not remove the need for thought, as the choice of themes remains the responsibility of the researcher; and there is a tendency, owing to the large effort of linking data to themes/patterns, to get 'locked in' to the themes/patterns as the only way to look at the data.

In this study, the 'coding' technique follows the research aim of this study. The research aim, as discussed, is to identify the cultural dimensions that influence the implementation and operation of multi-channel customer management. The authors analyzed the data to identify the reason behind the adoption of customers of a specific channel in various contacts with the organization through the customer life cycle (see Appendix A). Based on the codes identified of specific preferences, expectations, or behavior, the authors searched within the data for any cultural dimension(s) to explain such preferences, expectations, or behavior. Themes/patterns are developed based on sub-themes/sub-patterns (column 1 in Table 2) which interpreted as cultural issues within the research scope. These sub-themes/sub-patterns are then, categories in high level theme/pattern (column 3 in Table 2). Also, customer behavior and perception at various channels are interpreted into channel themes/patterns (column 4 in Table 2). Finally, for each customer lifecycle phase a preferable channel(s) are listed (column 5 in Table 2).

### 7.2 Structural Analysis

The authors conducted a Structural Analysis (Ali & Brooks, 2008) for each phase of the customer lifecycle. Using Orlikowski's practice lens (2000) an interpretation of the actors' actions in each customer lifecycle stage within the context of multi-channel customer management can be derived. Then, the authors used a Structural Analysis (following Walsham, 2002), to analyze

**Table 2. Case Study Themes/Patterns for customer lifecycle phases within multi-channel customer management for TELCORP-Egypt**

Customer Life Cycle stage	Theme	Sub-Theme	Channel Theme	Preferable Channel
Gathering Information	Social, Dependent	Family Links Educational System Social Aspects Technology barrier	Verbal	TV, Store, Dealer, Shop, Kiosk
	Emotional	Word of Mouth Verbal (Talkative)		
	Market Pricing Relationships	Society Welfare Quality Perception		
	Low Trust	Corruption Personal Relationship Monopoly New Market Past Experience with Public Services		
Communication and Services	Social, Dependent	Personal Relationships Technology barrier Low Expectations Educational system	Human Interaction	Store, Dealer, Shop, Kiosk, Call Centre
	Emotional	Verbal (Talkative)		
	Market Pricing Relationships	Price Sensitive Low Expectations		
	Low Trust	Distrust Unconfident Response Rate		
Transactions	Low Technological environment	Operational Systems Low Professionalism Physical Documents Security Issues Technology barrier Educational system	Traditional Shopping Physical Documents	Store, Dealer, Shop, Kiosk, Call Centre
	Basic Business Relationships	No Credit Record Data Availability and Accuracy Problem Inconsistency		
	Market Pricing Relationships	Low Competition Low perception of quality Low Expectations		
	Low Trust	Legal System Personal Relationships Corruption Low Expectations		
Payment and Delivery	Low Technological environment	Low Professionalism Physical Documents Security Issues Technology barrier Educational system Low Internet Diffusion	Cash Based	Store, Dealer, Shop, Kiosk
	Cash-Based Society	No Credit Record Data Availability and Accuracy Problem Distrust Word of Mouth Maturity of Business relations Technology Barrier		

the emergent structures that have been modulated by the actors in each customer lifecycle stage to drive the national cultural dimensions behind it (see Appendix B).

### 7.3 Cultural Dimensions

The authors summarized the interpretation of the cultural dimensions that have been highlighted through the Structural Analysis as influential on the actors' behavior within multi-channel customer management context (see Appendix C). The summary of these cultural dimensions is in Table 3. Cultural dimensions for each phase of the customer lifecycle (column 2 in Table 3) are derived from the Strcturational analysis. Cultural dimensions that perceived as influential on multi-channel customer management are then summarized (column 3 in Table 3).

## 8. CONCLUSION AND FUTURE RESEARCH

In this paper, it is argued that multi-channel customer management would provide the opportunity to analyze the influence of culture on customer behavior in different societies. Customers' behavior may be differentiated according to the individual or micro level, but it might also differ at an ecological or macro level of analysis. It could be concluded that verbal method for gathering information, human interaction in communications, traditional shopping for purchases and cash based for payment and delivery were the themes/patterns for customer channel choices through the four stages of customer lifecycle. It was identified that Egyptian society shares the following cultural characteristics as: collectivism; high market price relationship; emotional; high power distance; low trust, uncertainty avoidance; and universalism. It was further identified that these cultural dimensions shape the

**Table 3. Cultural Dimensions that influence the customer lifecycle within multi-channel customer management for TELCORP-Egypt**

Customer Life Cycle Phase	Culture Dimensions	Case Study Cultural Dimensions
Getting Information	Collectivism/Dependent	Collectivism/Dependent Market Price Relationship Emotional and Social Power Distance Low Trust and uncertainty avoidance Unprofessional and universalism
	Market Price Relationship	
	Emotional and Social	
	Universals	
Communications and Service	Market Pricing Relationship	
	Low Trust	
	Emotional	
	Universals	
	Collectivism/dependent	
Transactions	Power Distance	
	Emotional	
	Collectivism and dependent	
	Market Price Relationship	
	Low Trust and uncertainty avoidance	
Payment and Delivery	Unprofessional and universalism	
	Market Price Relationship	
	Low Trust	
	Low level of Professionalism	

customer choice in Egyptian environment when it is relevant to customers' channel choices through the customer lifecycle stages.

The evidence from this paper provides theoretical implications in the way that researchers articulate cultural studies within IS discipline. The cultural dimensions which have been identified throughout this case study highlight that some but not all cultural dimensions have showed influences on customer channel choice. These findings support the previous research by Ali, Brooks, and AlShawi (2008); Myers and Tan 2002; and Javidan et al., 2006 where they have questioned the comprehensiveness of previous archetypes cultural models.

This supports the call to conduct cross-cultural studies in IS discipline without predefined cultural archetypes which matches with the recommendation by Myers and Tan (2002). In future research, the authors intend to conduct more case studies in other countries to externally validate these cultural dimensions within other cultural context. The authors will use the constructs which will be identified through the various case studies to construct specific research hypotheses for theory testing and generalization using quantitative approach.

Practically, the findings imply that managers within multinational organizations should consider cultural aspects in the adoption of multi-channel customer management systems. As although there is the influence of the individual customer's preferences on the choice of the channel but there is an ecological influence that derived from the cultural aspects of the national culture. Moreover, telecommunication organizations should focus on adopting an integrative approach for multi-channel customer strategies that is capable of inducing cultural dimensions. This in turn can have a simultaneously positive effect on customer experience.

## REFERENCES

- Agrawal, S. R., & Mittal, D. (2019). Measuring CRM effectiveness in Indian stock broking services. *Journal of Global Information Management*, 27(1), 144–164. doi:10.4018/JGIM.2019010108
- Agwu, E., & Murray, P. J. (2018). Empirical study of barriers to electronic commerce adoption by Small and Medium scale businesses in Nigeria. *International Journal of Innovation in the Digital Economy*, 6(2), 1–19. doi:10.4018/ijide.2015040101
- Ali, M., & Brooks, L. (2008). A Situated Cultural Approach for Cross-Cultural Studies in IS. *Proceedings of the European, Mediterranean & Middle Eastern Conference on Information Systems (EMCIS08)*.
- Ali, M., Brooks, L., & AlShawi, S. (2008). Culture and IS: A Criticism of Predefined Cultural Archetypes Studies. *Proceedings of American Conference of Information Systems (AMCIS08)*.
- Ameen, N., & Willis, R. (2019). Towards closing the gender gap in Iraq: Understanding gender differences in smartphone adoption and use. *Information Technology for Development*, 25(4), 660–685. doi:10.1080/02681102.2018.1454877
- Ameen, N., Willis, R., & Shah, M. H. (2018). An examination of the gender gap in smartphone adoption and use in Arab countries: A cross-national study. *Computers in Human Behavior*, 89, 148–162. doi:10.1016/j.chb.2018.07.045
- Ansari, A., Mela, C. F., & Neslin, S. A. (2008). Customer channel migration. *JMR, Journal of Marketing Research*, 45(1), 60–76. doi:10.1509/jmkr.45.1.60
- Balasubramanian, S., Raghunathan, R., & Mahajan, V. (2005). Consumers in a multi-channel environment: Product utility, process utility and channel choice. *Journal of Interactive Marketing*, 19(2), 12–30. doi:10.1002/dir.20032
- Barley, S. R. (1986). Technology as an Occasion for Structuring - Evidence from Observations of CT Scanners and the Social-Order of Radiology Departments. *Administrative Science Quarterly*, 31(1), 78–108. doi:10.2307/2392767 PMID:10281188
- Barratt, M., Kull, T. J., & Sodero, A. C. (2018). Inventory record inaccuracy dynamics and the role of employees within multi-channel distribution center inventory systems. *Journal of Operations Management*, 63(1), 6–24. doi:10.1016/j.jom.2018.09.003
- Barwitz, N., & Maas, P. (2018). Understanding the Omnichannel Customer Journey: Determinants of Interaction Choice. *Journal of Interactive Marketing*, 43, 116–133. doi:10.1016/j.intmar.2018.02.001
- Beheshtian-Ardakani, A., Fathian, M., & Gholamian, M. (2018). A novel model for product bundling and direct marketing in e-commerce based on market segmentation. *Decision Science Letters*, 7(1), 39–54. doi:10.5267/j.dsl.2017.4.005
- Berhad, A., & Tyler, T. (2002). *Customer Relationship Management in Asia: A Cross-Cultural Case Study based on Aetna Universal Insurance*. Peppers & Rogers Group Asia.
- Bertrandie, L., & Zielke, S. (2017). The effects of multi-channel assortment integration on customer confusion. *International Review of Retail, Distribution and Consumer Research*, 27(5), 437–449. doi:10.1080/09593969.2017.1383292
- Biyalogorsky, E., & Naik, P. (2003). Clicks and mortar: The effect of online activities on offline sales. *Marketing Letters*, 14(1), 21–32. doi:10.1023/A:1022854017292
- Bolton, R. N., & Myers, M. B. (2003). Price-Based Global Market Segmentation for Services. *Journal of Marketing*, 67(3), 108–128. doi:10.1509/jmkg.67.3.108.18655
- Brooks, L. (1997). Structuration Theory and New Technology: Analysing Organisationally Situated Computer-Aided Design (CAD). *Information Systems Journal*, 7(2), 133–151. doi:10.1046/j.1365-2575.1997.00011.x
- Checkland, P. (1981). *Systems Thinking, Systems Practice*. Wiley.
- Cheng, L. C., Wu, C. C., & Chen, C. Y. (2019). Behavior analysis of customer churn for a customer relationship system: An empirical case study. *Journal of Global Information Management*, 27(1), 111–127. doi:10.4018/JGIM.2019010106

Choi, J., & Park, J. (2006). Multichannel Retailing in Korea Effects of Shopping Orientations and Information Seeking Patterns on Channel Choice Behavior. *International Journal of Retail & Distribution Management*, 34(8), 577–596. doi:10.1108/09590550610675912

David Sheppard Associates, Inc. (1999). *The New Direct Marketing: How to Implement a Profit-Driven Database Marketing Strategy*. McGraw-Hill.

DeSanctis, G., & Poole, M. (1994). Capturing the complexity in advanced technology use: Adaptive structuration theory. *Organization Science*, 5(2), 121–147. doi:10.1287/orsc.5.2.121

Dleersnyder, B., Inge, G., Gielens, K., & Dekimpe, M. G. (2002). How cannibalistic is the Internet channel? A study of the newspaper industry in the United Kingdom and the Netherlands. *International Journal of Research in Marketing*, 19(4), 337–348. doi:10.1016/S0167-8116(02)00099-X

Du, K. (2018). The impact of multi-channel and multi-product strategies on firms' risk-return performance. *Decision Support Systems*, 109, 27–38. doi:10.1016/j.dss.2018.01.009

Du, Y., Cui, M., & Su, J. (2018). Implementation processes of online and offline channel conflict management strategies in manufacturing enterprises: A resource orchestration perspective. *International Journal of Information Management*, 39, 136–145. doi:10.1016/j.ijinfomgt.2017.11.006

Fan, Y. (2000). A classification of Chinese culture. *Cross Cultural Management*, 7(2), 3–10. doi:10.1108/13527600010797057

Gómez, M. C. O., & Pérez, W. G. (2018). Communication as a Marketing Strategy: Cross-cultural Analysis of Young People from Mexico and Colombia Based on Demographic Segmentation. *Mediterranean Journal of Social Sciences*, 9(3), 173–183. doi:10.2478/mjss-2018-0059

Hughes, T. (2006). New Channels/Old Channels: Customer Management and Multi-channels. *European Journal of Marketing*, 40(1,2), 113-129.

Jones, M. R., & Nandhakumar, J. (1993). Structured development? A Structural Analysis of the Development of an Executive Information System. In Avison, Kendall & Degross (Eds.), *Human and Organisational Dimensions of Information Systems Development*. North-Holland.

Keen, C., Wetzels, M., Ruyter, K. D., & Feinberg, R. (2004). E-Tailers versus Retailers. Which Factors Determine Consumers Preferences. *Journal of Business Research*, 57(7), 685–695. doi:10.1016/S0148-2963(02)00360-0

Khan, I. U., Hameed, Z., & Khan, S. U. (2017). Understanding online banking adoption in a developing country: UTAUT2 with cultural moderators. *Journal of Global Information Management*, 25(1), 43–65. doi:10.4018/JGIM.2017010103

Kim, K. H., & Kumar, V. (2018). The Relative Influence of Economic and Relational Direct Marketing Communications on Buying Behavior in Business-to-Business Markets. *JMR, Journal of Marketing Research*, 55(1), 48–68. doi:10.1509/jmr.16.0283

Kumar, V., & Pansari, A. (2016). National culture, economy, and customer lifetime value: Assessing the relative impact of the drivers of customer lifetime value for a global retailer. *Journal of International Marketing*, 24(1), 1–21. doi:10.1509/jim.15.0112

Kumar, V., & Venkatesan, R. (2005). Who are the multichannel shoppers and how do they perform? Correlates of multichannel shopping behaviour. *Journal of Interactive Marketing*, 19(2), 44–62. doi:10.1002/dir.20034

Lee, J. C., & Chen, C. Y. (2019). The Moderator of Innovation Culture and the Mediator of Realized Absorptive Capacity in Enhancing Organizations' Absorptive Capacity for SPI Success. *Journal of Global Information Management*, 27(4), 70–90. doi:10.4018/JGIM.2019100104

Li, Y., Chen, Y., Li, Y., & Holland, C. P. (2019). Market Orientation, Alliance Governance, and Innovation. *Journal of Global Information Management*, 27(1), 1–18. doi:10.4018/JGIM.2019010101

Li, Y., Liu, H., Lim, E. T., Goh, J. M., Yang, F., & Lee, M. K. (2018). Customer's reaction to cross-channel integration in omnichannel retailing: The mediating roles of retailer uncertainty, identity attractiveness, and switching costs. *Decision Support Systems*, 109, 50–60. doi:10.1016/j.dss.2017.12.010

- Lin, X., Featherman, M., Brooks, S. L., & Hajli, N. (2018). Exploring Gender Differences in Online Consumer Purchase Decision Making: An Online Product Presentation Perspective. *Information Systems Frontiers*, 1–15.
- Madichie, N. O. (2011). A preliminary assessment of Middle East investments in sub-Saharan Africa: Insights from the mobile telecom sector. *Thunderbird International Business Review*, 53(1), 79–92. doi:10.1002/tie.20391
- Madichie, N. O., Mpofu, K., & Kolo, J. (2017). Entrepreneurship development in Africa: Insights from Nigeria's and Zimbabwe's telecoms. In *Entrepreneurship in Africa* (pp. 172–208). BRILL. doi:10.1163/9789004351615\_009
- Myers, M. D., & Avison, D. (2002). *Qualitative Research in Information Systems*. Sage Publications. doi:10.4135/9781849209687
- Myers, M. D., & Tan, F. (2002). Beyond models of national culture in information systems research. *Journal of Global Information Management*, 10(1), 24–32. doi:10.4018/jgim.2002010103
- Neslin, S., Grewal, D., Leghorn, R., Shankar, V., Teerling, M., Thomas, J., & Verhoef, P. (2006). Challenges and Opportunities in Multi-Channel Customer Management. *Journal of Service Research*, 9(2), 95–112. doi:10.1177/1094670506293559
- Ngai, E. (2005). Customer Relationship Management research (1992-2002): An academic literature review and classification. *Marketing Intelligence & Planning Journal*, 23(6), 582–605. doi:10.1108/02634500510624147
- Nicholson, M., Clarke, I., & Blakemore, M. (2002). One Brand, Three Ways to Shop: Situational Variables and Multichannel Consumer Behavior. *International Review of Retail, Distribution and Consumer Research*, 12(2), 131–148. doi:10.1080/09593960210127691
- Orlikowski, W. (2000). Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organisations. *Organization Science*, 11(4), 404–428. doi:10.1287/orsc.11.4.404.14600
- Ortlinghaus, A., Zielke, S., & Dobbstein, T. (2019). The impact of risk perceptions on the attitude toward multi-channel technologies. *International Review of Retail, Distribution and Consumer Research*, 29(3), 262–284. doi:10.1080/09593969.2019.1599983
- Peltola, S., Vainio, H., & Nieminen, M. (2015, August). Key factors in developing omnichannel customer experience with finnish retailers. In *International Conference on HCI in Business* (pp. 335-346). Springer.
- Petersen, J. A., Kumar, V., Polo, Y., & Sese, F. J. (2018). Unlocking the power of marketing: Understanding the links between customer mindset metrics, behavior, and profitability. *Journal of the Academy of Marketing Science*, 46(5), 813–836. doi:10.1007/s11747-017-0554-5
- Raguseo, E. (2018). Big data technologies: An empirical investigation on their adoption, benefits and risks for companies. *International Journal of Information Management*, 38(1), 187–195. doi:10.1016/j.ijinfomgt.2017.07.008
- Ramaseshan, B., Bejou, D., Jain, S., Mason, C., & Pancras, J. (2006). Issues and Perspectives in Global Customer Relationship Management. *Journal of Service Research*, 9(2), 195–207. doi:10.1177/1094670506293574
- Rhee, E. (2010). Multi-channel management in direct marketing retailing: Traditional call centre versus Internet channel. *Database Marketing & Customer Strategy Management*, 17(2), 70–77. doi:10.1057/dbm.2010.6
- Rose, J. (2002). Interaction, transformation and information systems development – an extended application of soft systems methodology. *Information Technology & People*, 15(3), 242–268. doi:10.1108/09593840210444773
- Rostami, M., Izadbin, A., Zakipour, M., & Rostami, S. (2016). Assessing Electronic Customer Relationship Management (E-CRM) readiness and its impact on Banking Quality of service (Case study: Saderat Bank Branches-West of Tehran). *International Journal of Humanities and Cultural Studies*, 3(1), 1207–1225.
- Schrodera, H., & Zaharia, S. (2008). Linking Multi-Channel Customer Behavior with Shopping Motives: An Empirical Investigation of a German Retailer. *Journal of Retailing and Consumer Services*, 15(6), 452–468. doi:10.1016/j.jretconser.2008.01.001
- Shankar, V., Smith, A., & Ramasamy, A. (2003). The relationship between customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, 20(2), 153–175. doi:10.1016/S0167-8116(03)00016-8



- Sohaib, O., Kang, K., & Miliszewska, I. (2019). Uncertainty avoidance and consumer cognitive innovativeness in e-commerce. *Journal of Global Information Management*, 27(2), 59–77. doi:10.4018/JGIM.2019040104
- Telci, E. E. (2010). Consumer Decision-Making Styles and Multi-Channel Shopping: The Missing Links. *The Business Review, Cambridge*, 14(2), 113–119.
- Verhoef, P. C., & Donkers, B. (2005). The effect of acquisition channels on customer retention and cross-buying. *Journal of Interactive Marketing*, 19(2), 31–43. doi:10.1002/dir.20033
- Walsham, G. (1993). *Interpreting Information Systems in Organizations*. Wiley & Sons.
- Walsham, G. (2002). Cross-Cultural Software Production and Use: A Structural Analysis. *Management Information Systems Quarterly*, 26(4), 359–380. doi:10.2307/4132313
- Walsham, G. (2006). Doing Interpretive Research. *European Journal of Information Systems*, 15(3), 320–330. doi:10.1057/palgrave.ejis.3000589
- Wang, C. (2019). Strategic Information Technology Compensation: A Cross-Cultural Perspective. *Journal of Global Information Management*, 27(4), 16–45. doi:10.4018/JGIM.2019100102
- Wang, M. L. (2018). Linking CRM to customer-oriented behaviour through service climate perceptions. *International Journal of Business and Systems Research*, 12(3), 243–261. doi:10.1504/IJBSR.2018.10011344
- Watson, G. F. IV, Weaven, S., Perkins, H., Sardana, D., & Palmatier, R. W. (2018). International market entry strategies: Relational, digital, and hybrid approaches. *Journal of International Marketing*, 26(1), 30–60. doi:10.1509/jim.17.0034
- Weisinger, J., & Trauth, E. (2003). The Importance of Situating Culture in Cross-Cultural IT Management. *IEEE Transactions on Engineering Management*, 50(1), 26–30. doi:10.1109/TEM.2002.808259
- Wollenburg, J., Holzapfel, A., Hübner, A., & Kuhn, H. (2018). Configuring retail fulfillment processes for Omni-channel customer steering. *International Journal of Electronic Commerce*, 22(4), 540–575. doi:10.1080/10864415.2018.1485085
- Wu, W. Y., Ke, C. C., & Nguyen, P. T. (2018). Online Shopping Behavior in Electronic Commerce: An Integrative Model from Utilitarian and Hedonic Perspectives. *International Journal of Entrepreneurship*, 22(3), 1–18.
- Xiao, L., & Li, Y. (2019). Examining the Effect of Positive Online Reviews on Consumers' Decision Making: The Valence Framework. *Journal of Global Information Management*, 27(3), 159–181. doi:10.4018/JGIM.2019070109
- Yates, J., & Orlikowski, W. J. (1992). Genres of Organizational Communication: A Structural Approach to Studying Communication and Media. *Academy of Management Review*, 17(2), 299–326. doi:10.5465/amr.1992.4279545
- Yin, R. K. (1994). *Case Study Research, Design and Methods* (2nd ed.). Sage Publications.
- Yrjölä, M., Saarijärvi, H., & Nummela, H. (2018). The value propositions of multi-, cross-, and omni-channel retailing. *International Journal of Retail & Distribution Management*, 46(11/12), 1133–1152. doi:10.1108/IJRDM-08-2017-0167

## APPENDIX A: CODING THE 4 STAGES OF CUSTOMER LIFE CYCLE

This section represents the behaviour of different actors (organization's staff and customers) within the multi-channel customer management through customer lifecycle stages using Rich Pictures research tool. This includes four different stages, each represented in a separate Rich Picture (see Figures 1-4). The actor's perceptions are represented by the bubbles, and the arrows identify the relationships between different components of the model. The dotted rectangle represents the organizational barriers which includes organization's staff, multi-channel strategy, and various channels. Various contextual factors are presented by rectangle and arrow indicates the influence on customer's perception and behavior:

- **Gathering information:** Where prospects try to collect information about different companies, different offers, and develop some criteria for decision making, (see Figure 1).
- **Communication and customer services:** It is where customer communicates with the organization asking for help or information, or to complain, (see Figure 2).
- **Transaction:** Where customers buy a new product or service or cross-selling, or up-selling or adding value activities, (see Figure 3).
- **Payment and delivery:** Where customer pays for his/her bill, or pays for their purchases or receive their delivery, (see Figure 4).

## APPENDIX B: STRUCTURATIONAL ANALYSIS

The following sections highlight the Structural Analysis for each phase of the customer lifecycle. Using Orlikowski's practice lens (2000) an interpretation of the actors' actions in each customer lifecycle phase within the context of multi-channel customer management can be derived, (Figures 5, 6, 7, and 8).

## APPENDIX C: CULTURAL DIMENSIONS

Using Structural Analysis (Walsham, 2002), to analyze the emergent structures that have been modulated by the actors in each customer life cycle phase to drive the national cultural dimensions behind it (Tables 4-7).

Figure 1. Rich Picture Description of the Gathering Information phase within multi-channel customer management for TELCORP-Egypt

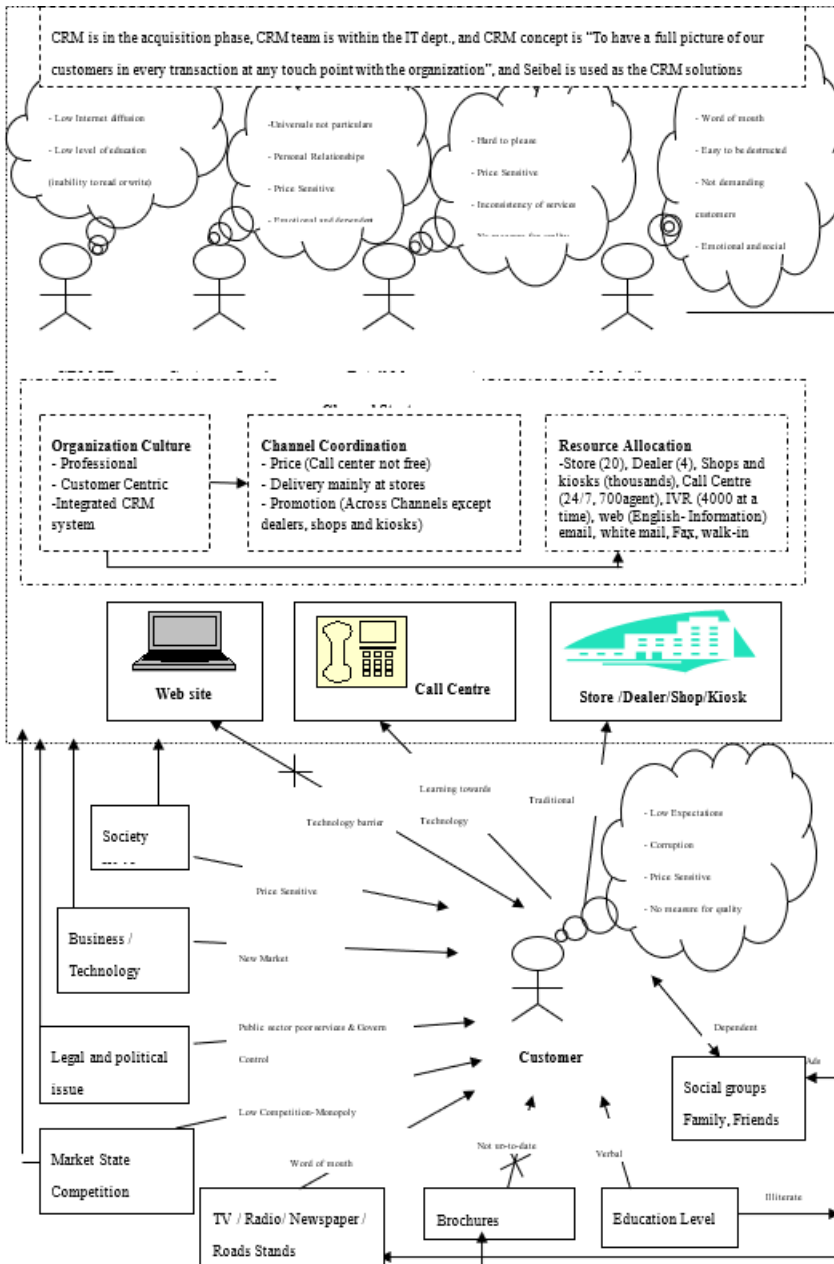


Figure 2. Rich Picture Description of the Communications/Services phase within multi-channel customer management for TELCORP-Egypt

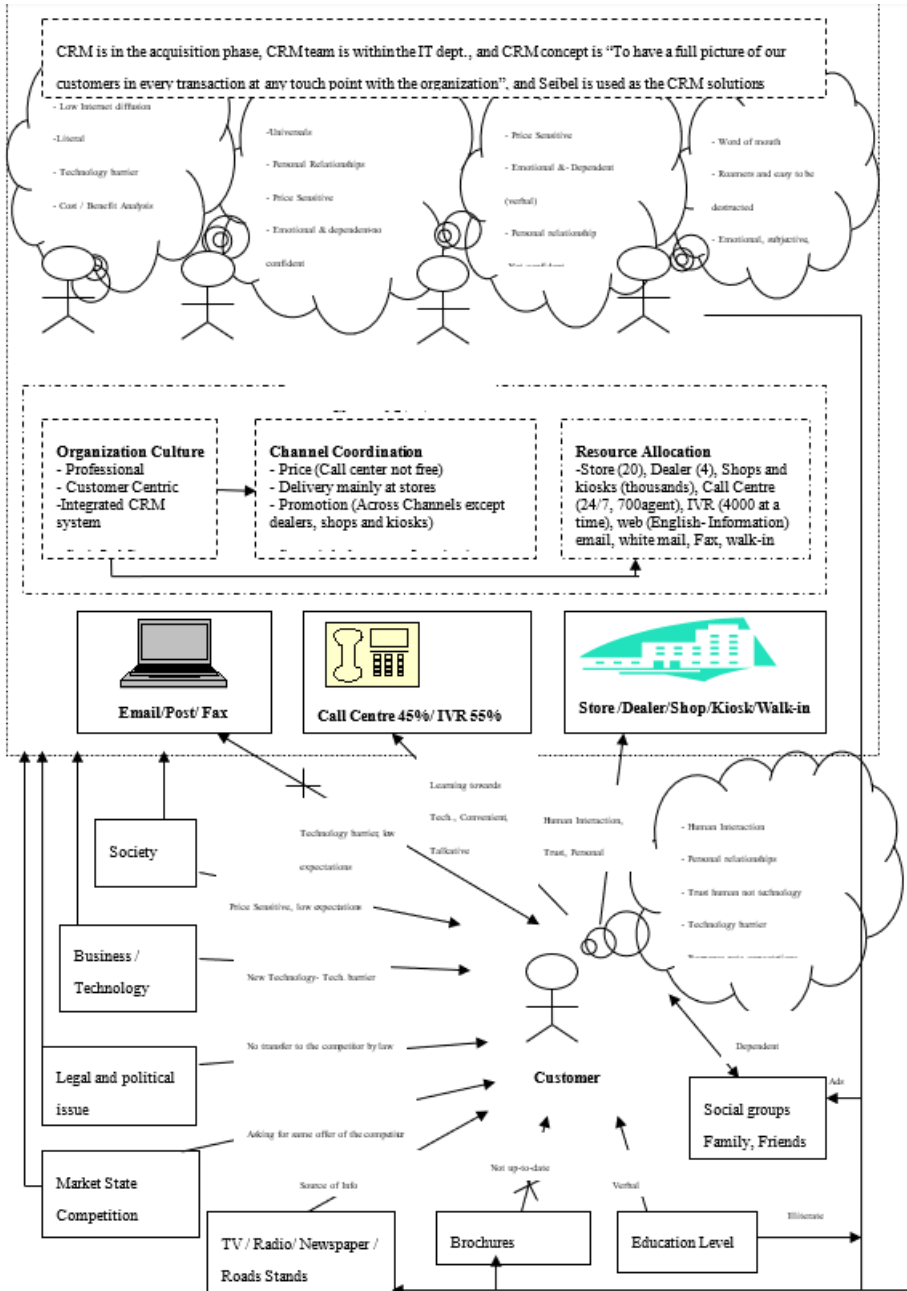


Figure 3. Rich Picture Description of the Transactions phase within multi-channel customer management for TELCORP-Egypt

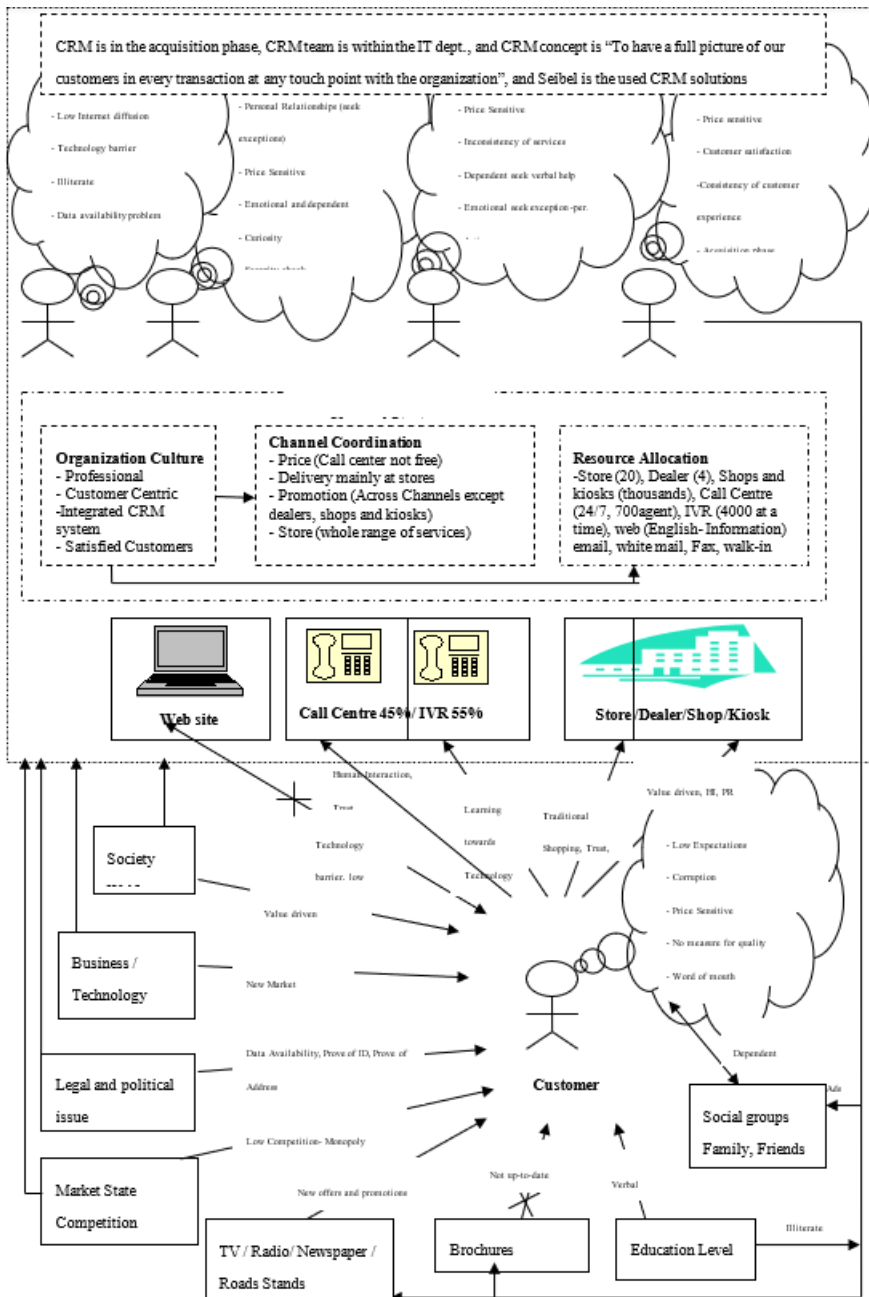


Figure 4. Rich Picture Description of the Payment phase within multi-channel customer management for TELCORP-Egypt

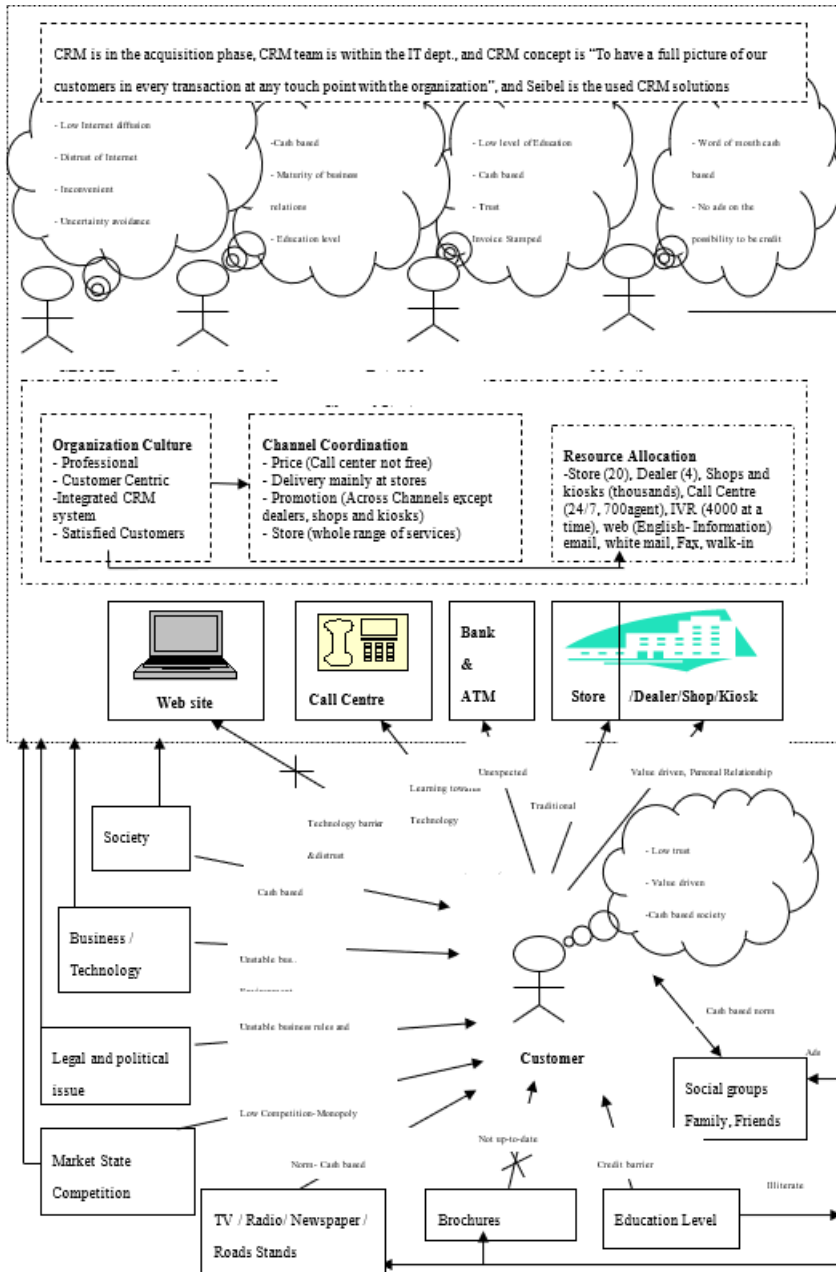


Figure 5. Structural analysis of the Gathering Information phase within multi-channel customer management for TELCORP-Egypt

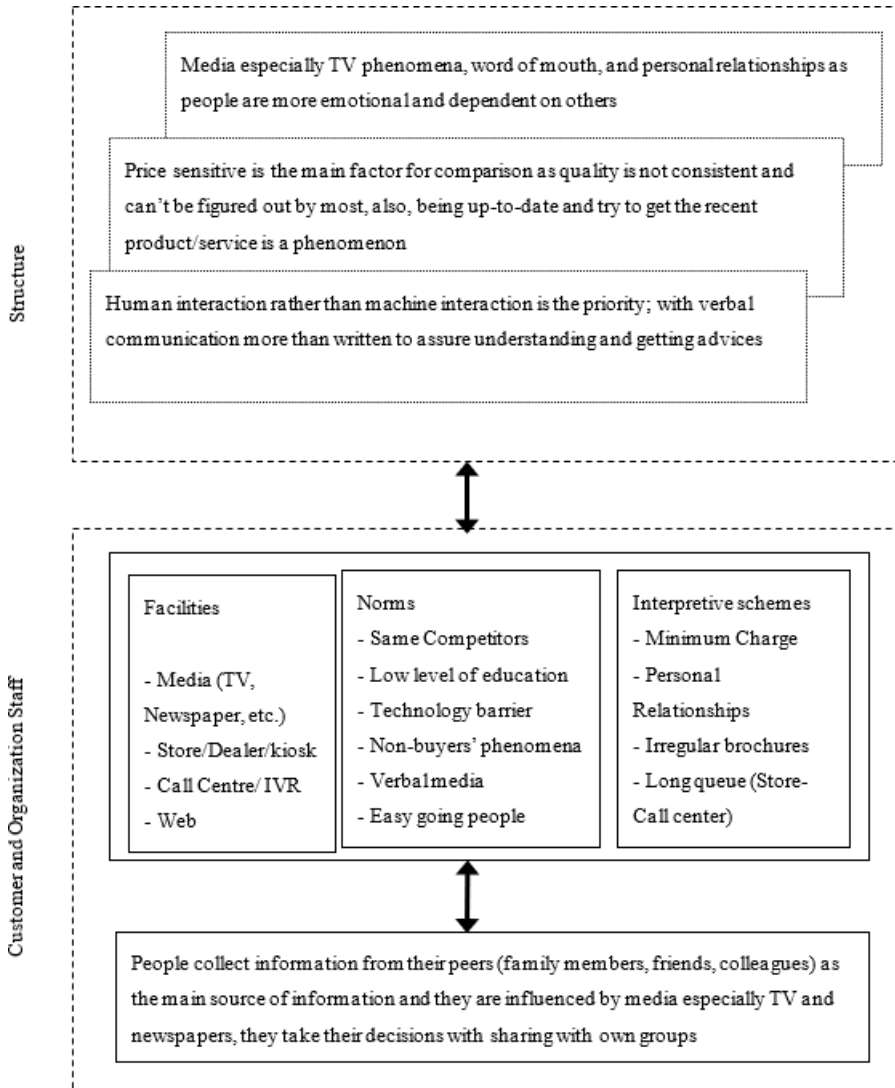


Figure 6. Structural analysis of the Communication phase within multi-channel customer management for TELCORP-Egypt

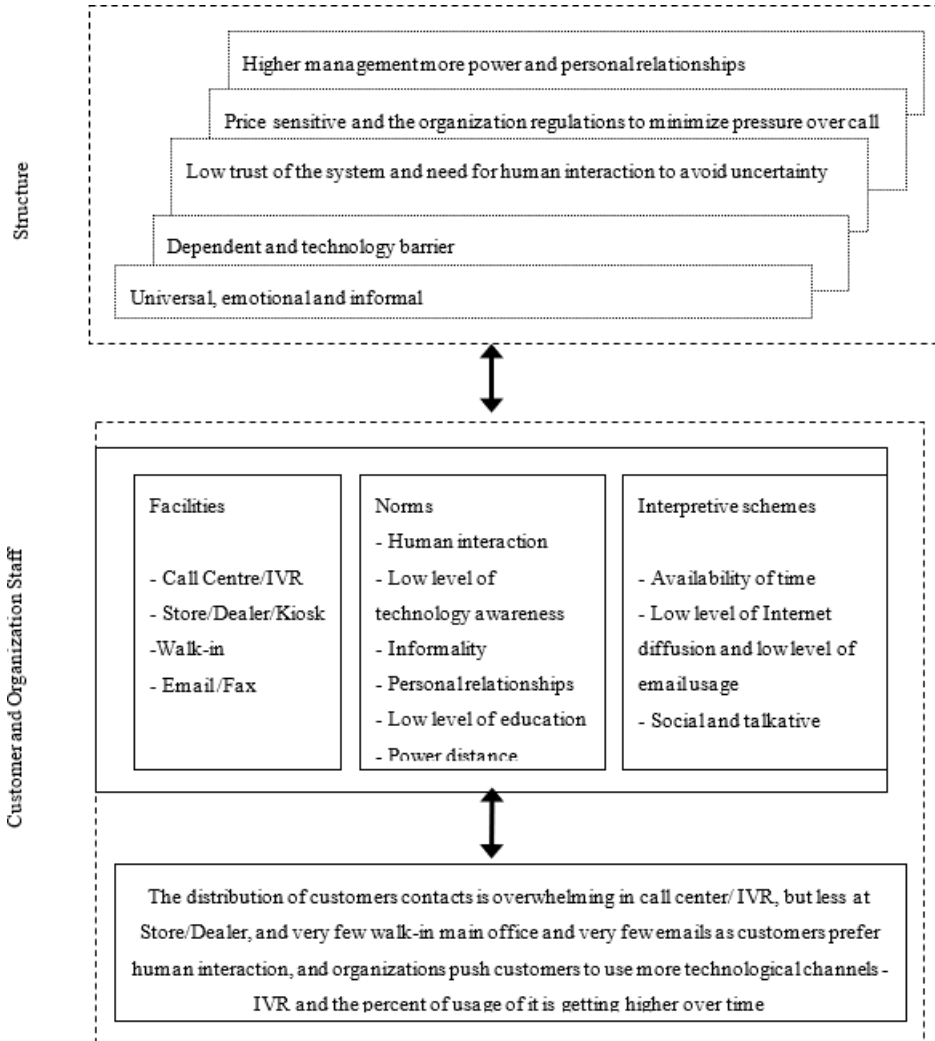




Figure 7. Structural analysis of the transactions phase of within multi-channel customer management for TELCORP-Egypt

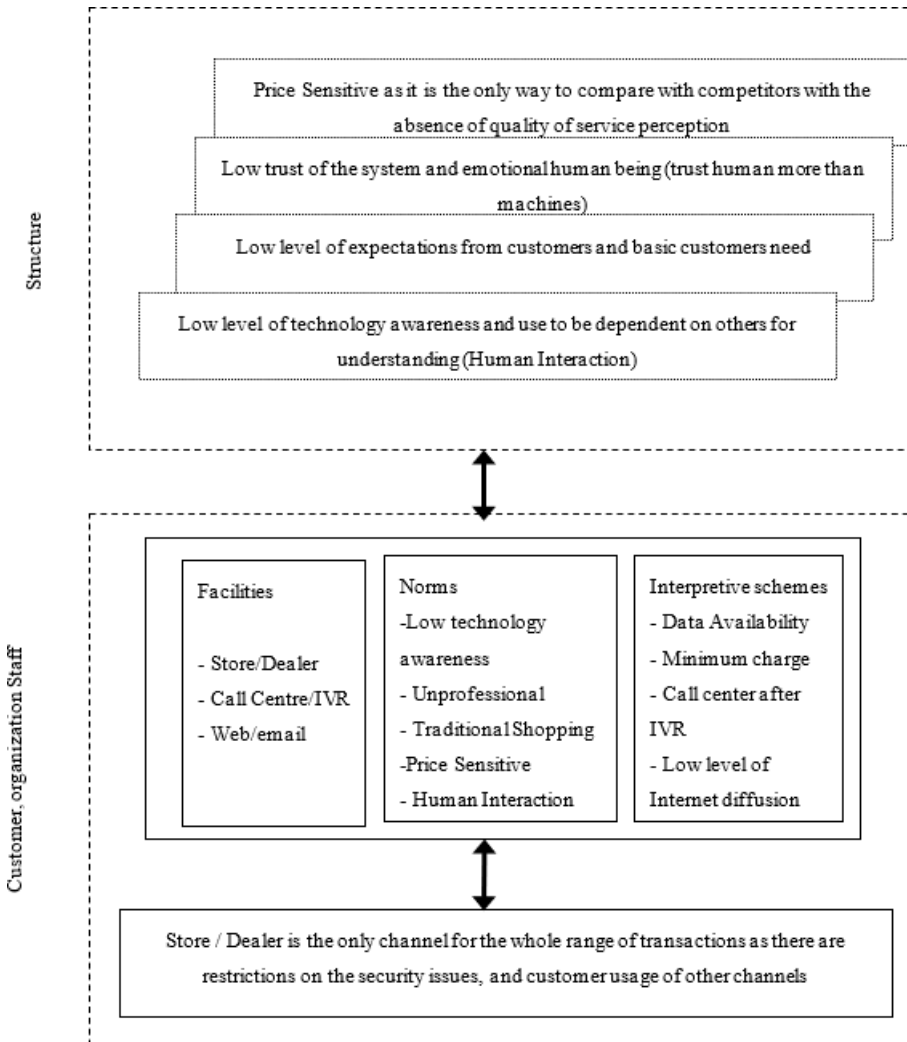
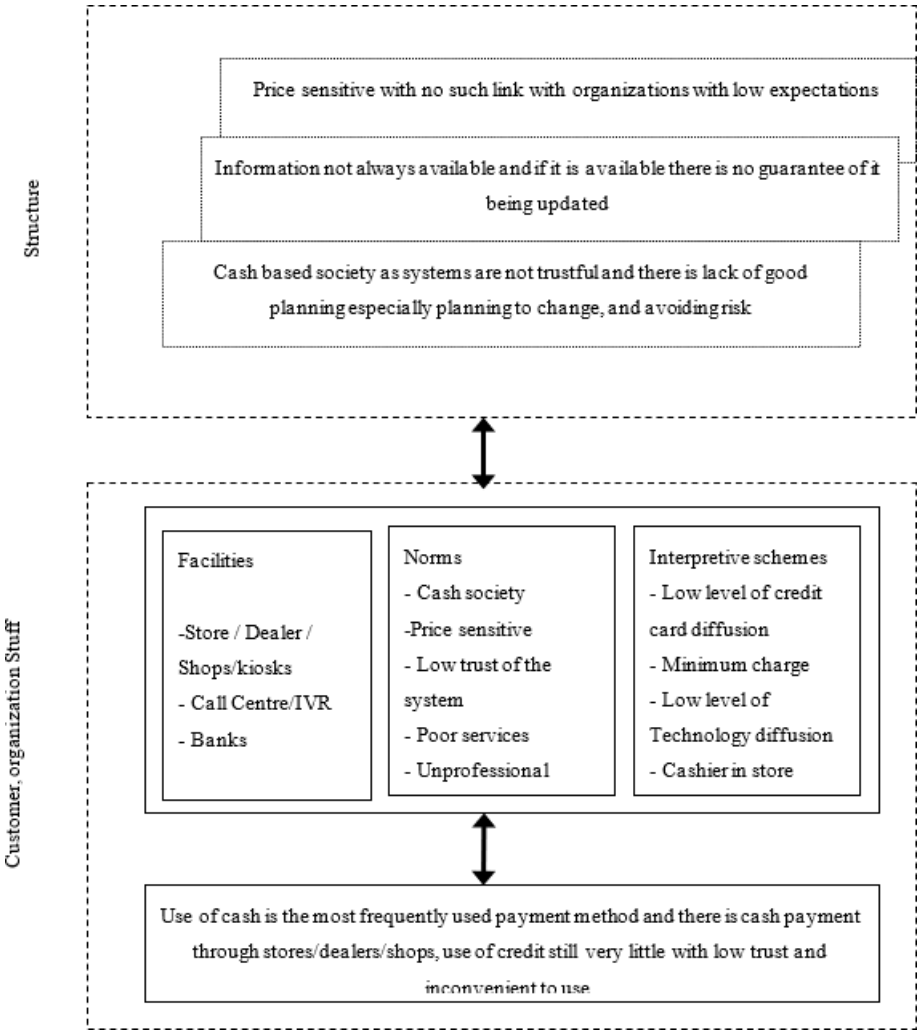


Figure 8. Structural analysis of the payment phase of within multi-channel customer management for TELCORP-Egypt



**Table 4. Structural analysis of the Gathering Information phase within multi-channel customer management for TELCORP-Egypt**

Structure	Media especially TV influence, word of mouth and personal relationships are the main source of information
	Price sensitive and the difficulty to perceive quality of services
	Emotional, and being dependent on others
	Human Interaction
Culture	Collectivism/Dependent
	Market Price Relationship
	Emotional and Social
	Universals
Cross-cultural contradiction and conflict	Egyptians tend to get information through media especially TV and newspapers, also from their peers (friends, family, and colleagues) and that helps them to get an idea about the product and service as that gives them some kind of assurance and trust
Reflexivity and change	Egyptians start to collect information from web sites and call centre / IVR, especially for the young people as the learning cycle starts to grow.

**Table 5. Structural analysis of the Communication phase within multi-channel customer management for TELCORP-Egypt**

Structure	Price Sensitive and the organization regulations to minimize pressure over call center
	Low trust of the system and depending on human interaction
	Higher management more power and personal relationships
	Universals, emotional and unprofessional
	Dependent and Technology barrier
Culture	Market Pricing Relationship
	Low Trust
	Emotional
	Universals
	Collectivism/dependent
Power Distance	
Cross-cultural contradiction and conflict	Dependent, universal, and emotional is how British communicate, they prefer verbal rather than written tool, they prefer to investigate the market through their family and friends and they get something similar.
Reflexivity and change	Customers move to more technological communication channels especially for the young generation.

**Table 6. Structural analysis of the transaction phase within multi-channel customer management for TELCORP-Egypt**

Structure	Low Trust
	Low level of Technology Awareness
	Price Sensitive, and Low level of expectations
	Dependent, emotional and social (Human Interaction)
Culture	Emotional
	Collectivism and dependent
	Market Price Relationship
	Low Trust and uncertainty avoidance
	Unprofessional and universalism
Cross-cultural contradiction and conflict	Egyptian tend to do their shopping as part of their social life, they are emotional, tend to have relax life, they are more dependent and enjoy being in groups
Reflexivity and change	Egyptian are new with technology but it is getting towards being technology oriented especially with the young generation, they keep an eye on the price and use it to compare between offers, but their usage is still with basic services

**Table 7. Structural analysis of the payment phase within multi-channel customer management for TELCORP-Egypt**

Structure	Price sensitive
	Data Availability and accuracy
	Cash based society
Culture	Market Price Relationship
	Low Trust
	Low level of Professionalism
Cross-Cultural contradiction and conflict	Egyptian market is new market for the industry with very little competition and customers tend to search for price which is through find the best offer in the market. Egyptian market is based on cash as still it is in developing stages with some problems with technology diffusion and data availability
Reflexivity and change	Increasing technology awareness within the society and educating customers
	Change the customer behaviour through experience new way of serving customers

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