# ELECTRONIC COMMERCE E-FULFILMENT IN GULF COOPERATION COUNCIL CONSUMER MARKETS

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## Introduction

This paper reports on an ongoing study investigating electronic commerce fulfilment (ECF) in Gulf Cooperation Council (GCC) markets, and presents the theoretical background and empirical findings to date. The growth of online retailing in the GCC has motivated this current research. Al-Nawayseh (2012) investigated e-grocery in Jordan and found that 'click-and-collect' is the most suitable service to fulfil consumer requirements. The six GCC countries are similar to Jordan and have the same religion, beliefs, traditions and language. Also, the GCC countries have significant support for a project to link e-governments together; the GCC countries have achieved the highest number of internet users in the Middle East region after Iran in relation to online buyers and internet users (Menatech, 2013). A study by Xing et al. (2011) investigated EC physical distribution service quality (e-PDSQ) relative to four factors - timeliness, availability, condition and return. Also, Lang & Bressolles (2013) investigated ECF from e-retailers. These two studies also informed this study from an ECF and operational perspective. The aim of this study was to provide new strategies to make electronic commerce (EC) and ECF more efficient, effective and relevant in GCC countries and in order to fulfil this aim, the following three research objectives were developed for empirical study:

- RO1: Investigate existing EC and related ECF logistics processes in GCC B2C markets.
- RO2: Explore the differences between international and GCC ECF purchase and delivery methods.
- RO3: Determine the extent of a cultural effect on the ECF process in the GCC.

## Literature Review

The study is investigating pure player (PP) and multi-channel (MC) online retailers (e-retailers), third-party logistics (3PL) service providers, and consumers from different cities within the six GCC countries (the Kingdom of Saudi Arabia or KSA, Oman, Qatar, Kuwait, United Arab Emirates or UAE, and Bahrain). Considering ECF requires a discussion of B2C in relation to exploring various logistics processes. ECF involves services that interact with various logistics activities from checkout until the shipment is delivered. Thus, to understand the GCC market, the cultural factors unique to the region that might affect an in-depth study of e-services also need to be understood.

### Pure player and multi-channel retailers

EC seen rapid growth from $4.5 billion to $41.5 billion since 1999 (Ramcharran, 2013). Further, EC has expanded globally and in 2011 the market was estimated to be $10 trillion, with a $240 million share going to B2C (Moertini, 2012). The EC market is classified into pure players (PP) who are retailers that only sell online, and multi-channel (MC) retailers who operate sell both online and in physical stores (Boyer, 2001; Burt & Sparks, 2003). Building trust is important for both types of operation. For example, a PP can be established and build trust to create a strong position in relation to consumers, as the procedures are more flexible and the delivery process flows easily to help the continuous development of the business (Elliot & Joseph, 2004). At the same time, MC firms have a way of reaching consumers easily due to their ability to assemble a logistics system quickly and launch a delivery process as they are already in the market; this point can represent a risk for PPs as they have to create an effective logistics system (Maltz et al., 2004; Gurãu et al., 2001). Competition between PPs and MCs is still growing (Urbaczewski et al., 2002; Ngai & Wat, 2002) especially with regard to prices and products. Brynjolfsson & Smith (2000) examined 42 offline and online firms and

found online prices to be lower by 9-16 compared with offline. However, buying online is still a controversial subject. Buying offline has strong points, such as not having to wait for a delivery, the cost of travelling, and the availability of products with the option to exchange immediately at lower cost; whereas online lead times are still critical, consumers are not always sure about the suitability of products, and the challenge of returning products at extra cost and the process taking a long time. However, PPs have greater profitability than MC retailers because investment in technology and developing a supply chain provides them with an advantage in the market when looking to develop strong relationships with customers, and this makes the process faster with lower prices. Amazon.com, the giant PP with a mass product operations model, can still achieve success in sales and customer loyalty. Amazon is valued at more than $79 billion, which is 40 percent higher than Target or Kohl's, which have 2,800 stores. Amazon and some PP retailers have created distinctive brand names and customer loyalty, and individuals will pay $1.72 extra to buy a product from Amazon (Brynjolfsson & Smith, 2000). Global offline sales in 2008 were considered to be $18.7 trillion, while online sales were recorded at $3.7 trillion (Ramcharran, 2013).

**Factors affecting EC**
EC has certain factors that can affect the fulfilment process, whether PP or MC. Consumer culture, for example, is considered an important part of the process as some consumers prefer to deal directly with products such as food or clothes so that they can touch them and see how they feel. Further, there is differentiation between large and small cities in terms of services: in large cities the extent of sharing pictures and downloading music and movies is still higher than in small cities with regard to the availability of technological tools and population numbers (Blum & Goldfarb, 2006; Hortaçsu et al., 2009). Quaddus & Achjari (2005) classified the drivers of EC success and impediments to it according to internal and external factors as shown in Figure 1. These factors will be explored in the empirical study to determine their importance and effect in the GCC.

| Contribution to success | Locus of impact | |
| --- | --- | --- |
| | Internal | External |
| Driver | 1. Cost leadership<br>2. Reputation<br>3. Market<br>4. Business entry | 1. Product pricing<br>2. Time spent<br>3. Convenience<br>4. External relationship |
| Impediment | 1. Financial<br>2. Risks<br>3. Expertise | 1. Customer's expense<br>2. Delivery time<br>3. Transaction risk<br>4. Access |

Figure 1: Internal and external factors that affect EC (Quaddus & Achjari, 2005)

**Grocery and non-grocery**
In many developed countries firms sell groceries online and deliver them, but do not do so to the same extent in GCC countries. Delivering groceries to consumers is still a difficult process to accomplish easily as there are challenges involved that are of greater concern than for non-foods, such as temperature, speed and quality, the ability to exchange, the variety of brands and physical delivery (Sherah, 2008). In addition, launching an online grocery business is considered by PPs and MCs to be both costly and risky (Al-Nawayseh, 2012). Ghezzi et al. (2012) analysed the percentages of EC penetration in both the US and Europe and found the US online market still occupied a higher percentage than for the whole of Europe for clothing, followed by books and DVDs, with a low percentage for grocery for both regions.

## E-fulfilment and logistics

E-fulfilment has a complex relation in many organizations, whether locally or globally, as each logistics element can be affected from the point of despatch. Logistics has a strong effect on an economy and can affect gross domestic product, economic growth and society as a whole. The cost classification of logistics can be divided into four major sectors: transportation, warehousing, inventory and administration (Grant, 2012). Focusing on logistics activity can lead to more production and enhance efficiency while maintaining the quality of products, which in turn leads to consumer loyalty that comes from speed of delivery with proper shipment conditions. Product delivery from point of origin to point of consumption (Grant, 2012) is a complex process and combines two fields: marketing services and logistics activity. There are five activities common to both fields: people, processes, place of sale or distribution, power, and planning and control. Further, packaging products and then delivering the shipment at a precise time in good condition to the right place and person relies on physical distribution (PD), which in MC delivery systems can be assembled more easily than for PPs. However, building a home delivery system or outsourcing outbound activity is considered one of the obstacles, particularly for pure players. Amazon and Dell have similar supply chain strategies whereby they outsource the last stage of their delivery service to a 3PL service provider. PD is one of the processes that deal with finished products and integrates the satisfaction of firm and consumer requirements (Xing et al., 2011).

B2C is considered vital in EC logistics and affects capability and firm strategy, whereas B2B often follows traditional logistics processes. In addition, EC can be influenced by the location of the inventory and whether the warehouse structure is centralized or decentralized, and if the inventory is outsourced or uses the same producer or retailer. Various logistics capabilities have been discussed (Cho et al., 2008) and some (García et al., 2007) argue that an efficient method would be to choose warehousing. However, some research has added a way of applying outsourcing that comes from two parts of a strategy: capacity with flexibility and a global presence (Delfmann et al., 2002). Another concern is that different segments of customers emerge as a result of the differentiation of logistics strategies. Cao & Zhao (2004) have discussed customers' demands as individuals and as EC consumers, identifying that EC retailers should be aware of the performance of delivery and maintain service in e-fulfilment accordingly. Bask et al. (2012) argued that most EC studies focus on digital channels, which better combine the electronic channel and bricks and mortar. In addition, logistics needs to enhance the study of B2C and customer-to-customer (C2C) trade in order to identify fulfilment solutions for the structures, services and processes of EC. Appropriate delivery was recently considered in the e-PDSQ model by Xing et al. (2011) and the value of time in the shopping mode has also been discussed (Hsiao, 2009) and found to be related. Delivery time is considered a vital factor for customers when choosing between stores (Cao & Zhao, 2004).

## GCC as a unit of analysis

As noted above limited information in the literature about ECF in the Middle East and the GCC region in particular motivated this research to investigate this phenomenon in depth. The number of e-stores for PP and MC retailers has expanded to more than 200 in GCC, although the number is likely to be greater when taking into account the cultural factors that can play a strong role when designing a logistics model, as some traditions mean that a model that works in one city will not apply in another, even in the same region. Another factor is that transportation in GCC countries relies on road and air cargo, which involves cost and often delays. Payment gateways are still critical and there is confusion about this among many customers because credit cards have some Islamic regulations for when they can or cannot be used, with a limit on the amount of money in some cases. The postal system still is not reliable, even with some contributions from private firms to address this. At the same time, global 3PLs exist but still focuses on the business-to-business (B2B) market. There is one global Arabic firm that has plans to focus on B2C but still does not consider e-stores a target. On the other side, consumer are the weakness factor between the three categories which

dealing with firm still hard as there is no regulation arrange the producers between the parties, particularly in the KSA. In addition, Saudi women are not allowed to drive and delivering to homes is still difficult as the locations provided are not always presented clearly with some successful experience with local driver in some way. Return shipments are also difficult and, most of the time, the results consider product is lost which the chance of return still hard duo more procedure and consume long time further e-firms not reached such model to fulfil customer in the region. Therefore, studying the e-fulfilment literature and undertaking this study of a variety of firms' experiences provided results in two important areas: first, the various methods for developing and managing e-fulfilment logistics services; and second, an exploration of e-fulfilment in developing countries and how they benefit from previous experience with regard to current infrastructure and cultural effects. Finally, a few previous studies have mentioned e-fulfilment logistics in Arabic countries or GCC nations, which has also encouraged this in-depth investigation from a business perspective.

**Methodology**

To summarise the literature review, the developing nature of ECF in general and its limitations in the GCC in particular led to the three research objectives presented in the Introduction. Since this phenomenon is relatively under-researched the methodology follows an interpretivist paradigm and the research method uses an inductive and qualitative approach (Collis & Hussey, 2009). Qualitative semi-structured interviews were conducted to provide an understanding of the current situation for PP and MC retailers in the GCC countries and obtain in-depth data regarding the logistics fulfilment. Fifty interviews were held with e-retailers firm, 3PLs and consumers and covered large and small cities and men and women equally across all six GCC countries. The sample consisted of 20 e-retail firms (E), 10 3PLs (P), and 20 consumers (C). E-retailers were classified into grocery or non-grocery and as PP or MC. Data were collected face-to-face in the KSA and UAE and remotely by telephone and Skype for the four other countries. Data were coded using NVivo 10 software and the resulting analysis has so far revealed several themes and subthemes. The important themes that have emerged will be discussed in the findings section below. The themes illustrated the views of participants in each category. For example, under one of the main themes, challenges, some consumers claimed that 3PLs did not deliver to their home, so they were asked to go to the branch. Firm E1 deals with grocery and could not find a 3PL firm to ship products outside its city. At the same time, cash on delivery (COD) is considered risky by some firms and 3PLs. However, most consumers preferred that as a payment solution.

**Findings**

The main and subthemes that emerged from the responses also mentioned newly emerged themes that are not in the literature, such as cultural factors that are seen as an important factor in GCC countries. The theme of 'click and collect' also emerged as important for consumer ECF. However, P12 commented that large products needed to be delivered and assembled by professionals but P7 considered small items can just be delivered. P7 stated: "*delivering is better than collecting from stores, the percentage of collecting from stores is 3% of the total of all consumer sales*". P4 stated "*our offices are open for customers to collect shipments for a maximum of 10 days*". C11 was from a small city and reported that P7 gave an option when calling but delivery to the house needed to be approved by the sender and incurred extra cost. C10 mentioned that he dealt with both types of 3PL, global and local, and had found that local ones were cheaper by SAR 100 Saudi Riyals (about £15) based on shipment weight. C12 reported that she was very satisfied with direct delivery and payment by Visa was more secure if she wanted to return something. As a global 3PL, P7 stated: "*we prefer to deliver from our offices, especially when women haven't written the full address*". As a large furniture store, C16 claimed that consumers preferred to check and touch the products and "*next year we have plans to expand delivery to 4% of sales*".

**Factors affecting ECF**

Five factors affecting ECF have been derived from the analysis: cash on delivery (COD), delivering to women, delivery service, consumers not being at home, and trust. COD services are still critical for some e-retailers and 3PLs due to the risk of customers not paying or drivers having to carry cash. However, most consumers preferred COD as a trusted solution as the majority of e-stores deal with it in response to consumer demand. There was one solution in the UAE where three banks gave access to consumers to transfer money from their account to their 'check-out wallet' at an e-retailer. It was also clear that most consumers did not understand delivery procedures after they made a purchase as there is ambiguity in the lead-times and delivery processes. One global 3PL, P3, changed its strategy with regard to culture: "*we deliver to homes all over the world except here in the KSA*". In most cases, a brother or housekeeper can receive an order on a female's behalf. However, there was one case for P1, who knocked on the door of an apartment belonging to a family whose husband was on military leave, and a relative answered to see a strange man, the driver, with a shipment in his hand. The relative tried to question him, but then hit him and he was in hospital for 12 days. In addition, once a shipment has been dispatched, most e-retailers and 3PLs call the consumers to arrange delivery but still face problems with them not answering or not being at home. There is lack of trust from consumers as most e-stores said the consumers kept asking about the delivery time even though 3PLs use the English language in e-mail and text notifications with an Arabic native. With regard to trust, most consumers prefer to deal with brand names, even globally, and feel comfortable when they see the logo on a website where they would like to buy something. Trust is critical in such factors as transferring payment and the safety of sites, as e-stores still repeat that transferring money to a private account is not acceptable from consumers.

**Discussion**

Findings to date that are related to the three research objectives in this paper are summarised in Tables 1 to 3 below, along with explanatory commentary and examples that are associated with the points in the various cells in the tables.

| | RO1: Investigate existing EC and related e-fulfilment logistics processes in GCC B2C markets. | | |
|---|---|---|---|
| | **e-firms** | **3PLs** | **Consumers** |
| Strategy | Strategy still changeable | - Ready to customize<br>- Have a strategy to deal with e-stores<br>- B2B is not profitable yet | - Still confused<br>-Large cities and remote area<br>-Time and lorries |
| Criteria | Fruit and vegetables | Standard followed | Deal with packages that are costly |
| In-source | Local drivers are still a temporary solution | Take some operation | Preferred as a known area |
| Outsource | Most of them are looking for brands | Can take on their conditions | There is still a gap |

Table1: Results from research objective 1

Table 1 above notes the first research objective results which consider the current fulfilment models and how each category deals with ECF in the GCC based on four factors. As a strategy, most e-retailers keep changing the model to improve consumer fulfilment and have more than model locally, regionally and globally. The majority of local and global 3PLs consider B2B as a major service and give B2C a small segment of the service apart from P1, who opened a new line to serve consumers from e-stores in 400 places. However, most consumers are still confused and have difficulty with dealing with 3PLs, especially consumers in small cities. There is also a new rule that bans trucks from entering cities before 11:00 pm, which most 3PLs agree causes more delay for shipments. Consumers prefer to pay COD so that they can check the product before they pay for it. In-sourcing is considered a temporary solution, particularly for fast delivery if consumers live in the area or know

them, and 3PLs do this a lot to fulfil consumers in large cities. Most of the time, outsourcing services does not bring consumer fulfilment that 3PLs followed standards and brand some time locally flailed with local shipment and succeed with global one. As E3 stated "*3PLs in the Gulf design their system to serve banks, nothing more*".

| | RO2: Explore the differences between international and GCC e-fulfilment purchase and delivery methods. | | |
|---|---|---|---|
| | e-firms | 3PLs | Consumers |
| Delivery preferred | Try to determined | Our slandered policy<br>More with too extra | To homes<br>After 5 pm |
| Global service | Quicker clearance | Different services | More options<br>Payment issues |
| Time condition | Give more extra time<br>Not accurate<br>Depends on the product | Still late with mass some times | Local better than global<br>Not value products |
| Returns | Flexible to market challenges | -Not involved<br>-If involved, products are considered damaged or lost | Local: possibly<br>Global: no way (costly) |
| Small cities | -Still late on services<br>-Demand not supported | Remote area strategy | Order with worry |

Table 2: Results from research objective 2

As noted in Table 2 above for the second research objective, local e-retailers try to find a suitable approach to satisfy consumers by using different 3PLs or sometimes relying on local drivers. The 3PLs have standard service packages which not appropriate with the majority of consumers and are even costly to some e-retailers but there is advantage in having standard global services for those who buy from websites abroad. P1 and P7 collect all consumer purchases from abroad and have a specific time to ship as one unit to the GCC. Additionally, 3PLs do not deal with services inside countries such as Kuwait and Bahrain as it is considered too costly to deal with them. Further, all 3PLs in the KSA work under agents as there are no franchise operations. This is different in the UAE where there are local franchises offices in Dubai that have different service compared with firms in KSA. Regarding returns, once a shipment is dispatched or received in error, the e-retailers operate under two assumptions: it takes a long time to return the shipment and refund the money or it is considered lost and they send another one – the latter is the case for many global returns. Another issue raised was that deliveries are made during working hours and most consumers complained about these times as most transaction are COD where the buyer must receive and pay for it. It is not an option to leave it with a neighbour; it is too risky as the address may not be accurate and would also need to be confirmed by the buyer. Few 3PLs achieve the stated delivery time; only local driver in large cities as they know the area very well. Regarding shipment condition, only P7 achieves that standard. Consumers deal with clothes and electronics from global e-retailers which they noted will take at least one month and is still risky. Although all e-retailers and 3PLs make phone calls before delivery, consumers find it difficult to be available, particularly in large cities. If consumers do not receive a shipment, it will be placed in a hub with a lengthy procedure for collection, although P7 has different branches. E7 deals with P7 for imports and distribution stating: "*this P7, brilliant in services outside the country (KSA), accurate, organized but can't succeed inside one city locally, why*?" Another, E6, deals with P3 to import from China to his stores but stated "*no way to make them run our delivery, as P1 are more experienced and flexible*".

Culture as the third research objective and presented in Table 3 below plays an important role in ECF and might alter the ECF model due to traditions and religious beliefs. However, click and collect is affected by price and some firms inside GCC countries cannot cope with EC and online consumers as prices online are still the same as in stores. With regard to one study (Al-Nawayseh, 2012), click and collect is not considered capable of fulfilling consumers in GCC countries. Frequently asked questions can still be contained in one sentence: when will the shipment be delivered? Women are considered

a large segment of the buyers and sellers. This study has shown that e-retailers are run by businesswomen who export products regionally and globally. COD is still as issue somewhere in the middle between firms and consumers. The growth of smartphone users has led to more pressure and demand on both e-retailers and 3PLs with slow respond of services for example public organisation responsible of design postal system has bought programme from entrepreneur to locate location and when asked them about the radical solution of postal system they said *"there is a solution provided in our website called (locater) but the consumers can't figure that out"*.

| | RO3: Determine the extent of a cultural effect on e-fulfilment processes in the GCC. | | |
|---|---|---|---|
| | e-firms | 3PLs | Consumers |
| Click and collect | Try to determined | Our standard policy<br>More with too extra | -To homes<br>-After 5 pm |
| Delivery to women | Considered normal | Different services. | There are options<br>If organized properly |
| COD | Some agreed.<br>Some considered it risky. | One of them dealt with it.<br>Local deal with it. | Preferred |
| Preferred | -Location system<br>-Logistics system<br>-Payment system. | Location system<br>Payment gateway | -More services<br>-Regulations |
| Frequently asked questions | Time of delivery | Time of delivery | Need to know the time as global shipment is tracked |

Table 3: Results from research objective 3

**Conclusions and Next Steps**

This paper has discussed results to date an in-progress research study about the current state of ECF in GCC countries by investigating e-retailers and 3PLs locally and globally, as well as consumers. The empirical findings thus far suggest how each category can be examined to assess where elements are missing to try and address them and make ECF better in the region. This could lead to more e-retailers applying a suitable logistics and ECF model and more 3PLs understanding the various segments and achieving consumer fulfilment through local and global services. Going forward, the analysis of the fifty interviews needs to be completed to identify and verify the important emerging themes for presentation at future conferences or publication.

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