

E-BUSINESS DEVELOPMENTS AND SKILLS REQUIREMENTS IN THE RETAIL SECTOR

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Abstract

The article summarises the findings of an international study among retailers as to the state of e-business in the international retail sector and the skills required by the sector to cope with the changing technologies. The research methodology consists of three steps. Firstly, a comprehensive literature review was done; secondly, qualitative interviewing of experts in e-business, information technology and management was conducted; and thirdly, in-depth interviews with retail experts took place. The future success of retailers depends heavily on their abilities to take advantage of the technological developments. Therefore these companies have an increasing demand for employees who combine quantitative technological and statistical skills with expertise in qualitative fields. Retailers already report difficulties in obtaining the workforce they need. The situation is expected to become more problematic in the near future. Companies need to prepare themselves. Increasing the qualifications of employees is strongly recommended.

Keywords: E-business, E-retailing, Skills Development, Retail Sector, Technology

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1 Introduction

The rise of information technology already has a long history as the internet in particular has contributed a lot to a change in people's behaviour patterns. Online tools and technologies support business processes as much as private communication, consumption and leisure. Hardware developments such as smartphones or tablets opened access to innovative services like twitter, skype, facebook, whatsapp, google and many others.

More information is made available in less time over larger distances. Dealing successfully with this increased amount of data is one of the main challenges in today's business world. The future survival of companies depends largely on their ability to cope with these transformations.

The choice of technological solutions is vast, hence the advantage and vitality of impact on business performance seem beyond question (Caldwell et al., 2013:692) but the stakes are high, so is complexity, and the prediction of return on investment is doubtful (Pilinkiene, Kurschus & Auskalnyte, 2013:80).

1.1 Information technology, customer behaviour and retailing

The range of developments in information technology

in the last decades has been ample. Miniaturization of digital electronics, accelerated growth of processing speed, falling prices and software which becomes ever easier to use can be mentioned as examples of the megatrends so far. The internet and the spread of complementary networking technologies allow people to display entirely new behaviours.

Multitasking, for instance, has become a widespread phenomenon concerning the simultaneous use of various communication devices (not only) among the younger generations (Pea et al., 2012:327). This must have consequences for the way recipients are addressed. It can be assumed that the level of attention is fading and purely informational messages will lose impact. Therefore the landscape in media communication is changing and a combination of informational and entertaining content is becoming increasingly widespread (Bernhard, 2012:24).

Major changes in consumers' buying behaviour began to occur after the millennium. The process gained momentum continuously and, while retail sales nowadays show rather lateral movements (Eurostat 2014), the data below (see Table 1) demonstrates the strong growth of online retail sales in Europe.

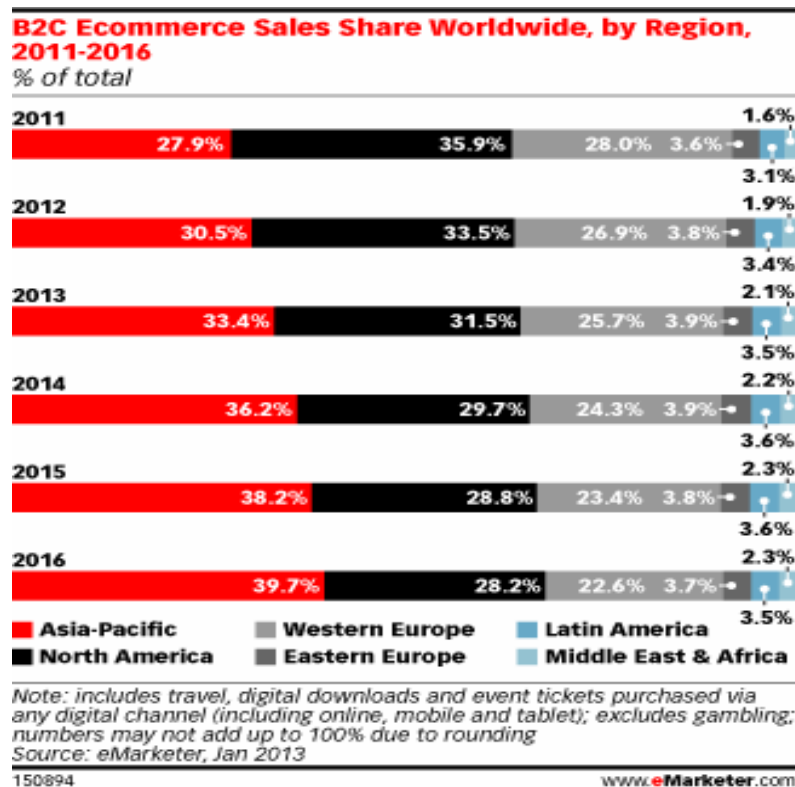
Table 1. Online retail sales in Europe

Online Retail Sales	Online Sales (£ bn) 2013	Growth 2013	Online Sales (£ bn) 2014	Growth 2014
UK	£38,83	16,8%	£44,97	15,8%
Germany	£28,98	39,2%	£35,36	22,0%
France	£22,65	12,0%	£26,38	16,5%
Spain	£5,75	22,5%	£6,87	19,6%
Italy	£4,48	18,6%	£5,33	19,0%
Netherlands	£4,48	11,6%	£5,09	13,5%
Sweden	£3,13	15,9%	£3,61	15,5%
Poland	£2,92	24,0%	£3,57	22,6%
Europe	£111,21	21,1%	£131,18	18,1%

Source: Centre for Retail Research, 2014

On a global level the situation in e-commerce does not seem to differ much. It can be observed that especially Asia is expected to pick up in online sales (see Figure 1). North-America and Western Europe seem headed for some consolidation on a high level. The rest of the world, namely, Africa,

looks as though it is being left behind (Marketingland, 2014). When the data below is being interpreted, it is important to keep in mind that forecast developments are based on an average increase of 20% annually on a worldwide basis (statista 2014a) until 2017.

Figure 1. B2C E-Commerce sales shares by region

Source: eMarketer 2013

1.2 E-business and e-commerce

Even considering only recent publications there is a broad range of works dealing with the issue of e-business. It appears that different authors are far from a common understanding.

Various definitions focus on the process aspect. “Electronic business is the initiation, acknowledgement and execution of electronic business processes...” (Meier & Stormer, 2012:2). Others emphasize the network facet (Zhang, 2013:238). Nowadays most scholars differentiate clearly between e-commerce and e-business (e.g.

Meier & Stormer, 2012:2; ECDL, 2011:3), which was not always common ground (Burns, Marshall & Barnett, 2002:9).

Most authors agree concerning the targeting of e-business and mention transactions or, more precisely, business processes (Jelassi & Enders, 2008:4; Chen, 2004:3; Papazoglou & Ribbers, 2005:2), which are made possible by electronic means through the use of internet technology.

The focus of e-business can be on institutions or on consumers, which leads to the distinction of various activities forming parts of e-business (Wirtz, 2013:30):

- e-commerce: Directly connected with buying or selling of products and services to consumers or institutions.
- e-education: Transfer of educational services to consumers or institutions.
- e-communication: Providing communication platforms to consumers or institutions
- e-information, e-entertainment: Offering informational or entertaining content to consumers
- e-collaboration: Managing or supporting of inter- or intra-organizational collaborative processes

Thus e-commerce can be regarded as a part of e-business.

Another pragmatic approach to the differentiation of fields in e-business could be related to corporate functions (see Table 2) (Meier & Stormer, 2012:26). That allows for the discussion of developments in the various functional areas of business organizations closely relating consequences to the activities being considered.

Table 2. Fields of e-business

<p>Strategic planning and cooperation Development of products and services Innovation, technology and mobile solutions e-marketing, e-commerce Relationship management</p> <p>Operative process execution e-procurement e-distribution, logistics e-payment</p> <p>Supporting processes Human resource management Management and organization Controlling (Cyber-) security</p>

Source: Meier & Stormer, 2012:26

Obviously the definition of e-business can be very broad including practically all relevant activities for a company as long as they are performed or at least supported electronically. The result then is the appearance of a whole range of networks (e.g. service, knowledge, people, intelligence, machines) which

form a globally understandable e-business environment (Dorloff & Kajan, 2012:14).

Currently developments of a particular dynamic can be observed in the fields of mobile devices, social (net-) applications and location-based services (Heinemann, 2014:6).

Customer relationship management, enterprise resource planning and supplier relationship management, which at present are all supported electronically, show the potential for integration (Stefanou, 2013:148). The impact of these developments is discussed, especially for the retail business, and the consequences for the skills requirements of employees are shown.

2 Methodology

The methodology of the research includes three major steps which are described briefly in this section.

2.1 Literature review

A comprehensive literature review has been conducted. The search focused on articles dealing with e-business issues which were published since 2010. The search included not only scientific journals but also the most important business/economic newspapers, retail and IT magazines.

Additionally the internet was searched concentrating on websites (i.e. igd website, platt retail institute), blogs and discussion groups in order to see whether any new developments in e-business are being mentioned.

2.2 Delphi technique

To ensure that no relevant trend or development could be overlooked, international experts, opinion leaders and scientists were included as sources of information. In this second step ten experts were interviewed applying Delphi technique. Their area of expertise can be observed in Table 3.

Table 3. Sample of Interviewees in Delphi

<ul style="list-style-type: none"> • 3 IT experts from different countries • 3 e-business experts from different countries • 2 experts in management and organization from different countries • 2 HR experts from different countries
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The interviewed experts originate from Germany, Switzerland, Austria, UK, Ireland, China, India, and South Africa.

The interviewees represent companies, trade/retail and IT/e-business associations, research institutions, government think tanks, and universities.

Interviews were done face-to-face. In the first round the scope was more general (see Table 4).

Table 4. Interviewing Guideline Delphi Round

<input type="checkbox"/>	How do the experts perceive e-business?
<input type="checkbox"/>	Which innovations in e-business can be identified?
<input type="checkbox"/>	Which developments can be observed?
<input type="checkbox"/>	How important are they?
<input type="checkbox"/>	How persistent will they be?
<input type="checkbox"/>	What impact do they have?
<input type="checkbox"/>	Which consequences must be expected?
<input type="checkbox"/>	How dynamic are they?
<input type="checkbox"/>	Which future developments are expected?
<input type="checkbox"/>	What is their probability?
<input type="checkbox"/>	On what do these developments depend?
<input type="checkbox"/>	Which sectors will be affected the most?
<input type="checkbox"/>	Are there different scenarios?
<input type="checkbox"/>	Is there any geographical bias?
<input type="checkbox"/>	Which sources of information are being used by the experts?
<input type="checkbox"/>	How can they be ranked according to their importance?
<input type="checkbox"/>	Which readings or other sources of information do the experts recommend?

In several fields all experts share the same opinion. But in other areas the convictions are rather biased. In the second round of Delphi questioning was focused on such spheres where there were obvious differences in interviewees' perceptions.

2.3 In-depth interviews with retail experts

After reaching a comprehensive understanding of present and future developments in e-business, the next step was to research the relevance for the retail sector and to produce insights into its skills requirements.

Therefore in a final round of interviews 5 international experts were questioned, 2 of them scientists with a long research background in retailing (e.g. full professors holding retail chairs at universities) and 3 senior executives of large retailers.

3 Discussion of findings

The findings are presented and debated in three steps. Firstly, developments in e-business which have an impact on retailers will be addressed. Secondly, important trends in retailing and commerce will be looked at. Thirdly, the effects on skills requirements of employees in the retail sector will be discussed.

3.1 Developments in e-business affecting retailers

The e-business is soaring in all kinds of industries and the rapid pace of technological innovation has touched

on almost all areas of commercial activities globally, causing the transformation of businesses, especially retailers (Platt Retail Institute Report, 2012:3). It contributed to changing the shopping habits of consumers within the industry and the effect on b2c (business-to-consumer) e-commerce has been profound (Jones Lang Lasalle, 2013:4).

The strong growth in online buying is expected to continue (see Table 5). It can be observed that the biggest growth rates are predicted for emerging markets (e.g. China, India, Indonesia, Mexico, Brazil, Russia). By contrast, the expected growth rates in developed countries are rather moderate (Jones Lang Lasalle, 2013:19).

These trends represent many business opportunities for enterprises. However, the implementation of an e-business strategy also presents companies with a certain level of risk and a few challenges. It requires staff to possess a whole new set of skills and technical know-how which many businesses might not have.

As common advantages of e-business implementation (see Table 6) increased sales, improved customer service, improvements in distribution and cost reduction are named (Abid, Rahim & Scheepers, 2011:2), but not unanimously (e.g. Tan et al. [2010:28] present evidence for increased cost). Retailers aim at the achievement of operational efficiencies and they implement e-business strategies as a response to changing consumer behaviour (Jones Lang Lasalle, 2013:14). But the range of benefits appears to be even broader (Lin, 2008:61). Obviously e-business is empowering companies to accomplish their goals through the active use of the internet. This does not only mean building a greater online presence, enhancing company image and targeting markets, but it also allows them to simplify payment systems and engage directly with customers using an online medium. Most can also significantly develop their internal efficiencies (Terzi, 2011:746) in collective working processes by applying e-business practices. Periodic meetings can be made without travelling long distances, calendars can be shared, organizational efficiency and competitive advantage can be improved (Janita & Chong, 2013:573).

Retailers face a number of necessities including individualization, use of mobile devices, cost containment, flexibility, speed in logistics and security, to name only a few. e-business has become a shopping channel away from the normal brick and mortar stores forcing retailers to meet consumers on their terms. It is fuelling the drive into the direction of technological innovation. Regardless of these challenges and opportunities, retailers as an industry have a tendency to under-invest in technology (Platt Retail Institute Report, 2012:8).

Table 5. Digital buyers worldwide (Forecast)

Digital Buyers Worldwide, by Country, 2011-2016						
<i>millions</i>						
	2011	2012	2013	2014	2015	2016
Asia-Pacific	334.8	391.1	457.6	523.1	591.7	653.5
—China	178.4	219.8	270.9	322.1	374.9	423.4
—Japan	70.2	73.3	75.6	77.0	78.2	79.2
—India	14.5	19.2	24.6	30.0	36.2	41.8
—South Korea	22.2	23.3	24.4	25.4	26.3	26.9
—Australia	9.8	10.2	10.6	10.9	11.2	11.5
—Indonesia	2.0	3.1	4.6	5.9	7.4	8.7
—Other	37.6	42.2	47.0	51.8	57.3	62.1
Western Europe	156.8	168.6	178.8	186.1	192.1	197.3
—Germany	38.2	41.2	43.3	44.4	45.2	45.9
—UK	33.0	34.8	36.5	37.5	38.2	38.9
—France	24.5	26.5	28.1	29.2	29.8	30.4
—Spain	13.4	14.5	15.9	17.2	18.6	19.5
—Italy	10.5	11.7	13.0	14.2	15.4	16.6
—Netherlands	7.3	7.8	8.1	8.3	8.5	8.6
—Sweden	4.1	4.3	4.5	4.6	4.7	4.8
—Denmark	2.5	2.7	2.9	3.0	3.0	3.1
—Finland	2.3	2.4	2.5	2.6	2.7	2.8
—Norway	2.2	2.3	2.4	2.5	2.6	2.7
—Other	18.8	20.3	21.6	22.6	23.4	24.1
North America	156.7	164.2	171.3	178.8	185.8	192.6
—US	143.4	149.8	156.1	162.6	168.7	175.0
—Canada	13.3	14.4	15.2	16.2	17.1	17.6
Eastern Europe	63.9	75.2	85.2	95.2	102.5	107.4
—Russia	19.6	23.1	26.2	29.3	31.4	32.7
—Other	44.3	52.1	59.0	65.9	71.1	74.7
Latin America	50.3	63.6	73.0	82.5	90.6	97.5
—Brazil	19.1	23.7	26.7	29.7	31.9	33.9
—Argentina	6.4	8.1	9.2	10.4	11.3	11.8
—Mexico	5.8	7.2	8.4	9.6	10.9	12.1
—Other	19.1	24.7	28.8	32.8	36.5	39.7
Middle East & Africa	30.0	40.9	49.8	58.6	65.8	73.1
Worldwide	792.6	903.6	1,015.8	1,124.3	1,228.5	1,321.4

Note: ages 14+; internet users who have made at least one purchase via any digital channel within the past year, including online, mobile and tablet purchases; numbers may not add up to total due to rounding
Source: eMarketer, Jan 2013

150023 www.eMarketer.com

The technology (ICT infrastructure), the organization (human capital) and the environment (public institutions, macro economy) have a huge reciprocal influence on the processes required to implement e-business. On a national level e-business development and e-governance development seem to be intertwined (Srivastava & Teo, 2010:278).

Table 6. Opportunities and difficulties resulting from e-business

+	–
Sales increase	Investment Decision
Better Customer Service	Technology Selection
Improved Distribution	Staff Development
Reduced Costs	

Internal factors, such as management attitudes, corporate strategy and technological strength, combined with pressure from customers and suppliers, make for a good part of companies' determination to

make advances in the adoption of e-business (Li & Xie, 2012:30).

e-business has an important role in foreign trade (Zhang, 2013:237) as it helps to reduce risk, increase knowledge, provide real time information, reduce asymmetric information and therefore increase enterprises' efficiency and international competitiveness (see Table 10). For SMEs e-business can be helpful in their efforts to go global (Moertini, 2012:15). From a macroeconomic transaction-cost perspective e-business can boost international trade as it lowers the cost of collecting information substantially (Terzi, 2013:748).

The diffusion of e-business affects practically all kinds of businesses, but the repercussions on trade and retailing are significant (Scheer, 2013:14). Even some small businesses in retail have understood the opportunities that arise (Scharrenbroch, 2013:15), leading to a range of challenges.

An important development in e-business nowadays according to our empirical research is increasing openness. Institutions or companies are

making their data (e.g. customer behaviour) available to external partners, who will analyse the data and possibly create new services and support (open technologies). British retailer Tesco, for instance, has a range of projects in that field.

The opinion landscape seems rather varied when it comes to the protection of data privacy. From a general perspective half of our sample is convinced that consumers are losing interest in that issue while the other half expects a sharp turn around not only in the wake of the NSA (National Security Agency) scandal. On a closer look it seems that consumers in Anglo-American countries and Asia seem less concerned than people in Europe. If behavioural data, for instance, can be anonymized, most experts would not see acceptance by consumers as a big problem, while they all see it differently if personalized data is used.

Big data is identified as another megatrend in e-business, where huge amounts of data become accessible and can be analysed. The complexity of potential for evaluation is increasing sharply. That leads to a growing need for particularly skilled and qualified employees in all kinds of organizations. Real one2one marketing will become possible in mass markets and the segmentation of markets will become much more sophisticated and behaviour-orientated.

Concerning the e-business influence on distribution channels, two opposite phenomena, intermediation and disintermediation, are occurring. Currently it is not clear which one prevails under which circumstances.

The supply chains are expected to become more complex as a range of additional services will be added, thus increasing the number of players in the supply chain. The actors will specialize in value-added steps. Different models will operate for extensive buying processes, including spontaneous decision-making.

A convergence of online and offline trade is predicted as a future standard for most buying processes in b2c by many of the experts interviewed. It will not be possible to successfully do one without the other in the future.

Sensor technology is developing fast and has a strong influence on what can be realized in e-business, with new devices coming up (e.g. google glass as a contact lens).

Online communication is replacing traditional ways of communicating, resulting in online relations. They allow for higher precision and efficiency in communication and interaction. One of the pacemakers is e-banking that nowadays goes much further than only account-keeping and includes the whole range of financial services. Other sectors leading in this area (on an international level) are health care, e-government, and retailing.

3.2 Trends in retailing and commerce

Since most retailers are doing their business in a highly competitive environment, the definition of a successful e-business strategy still has to obey the number one marketing principle: Focus on customers' requirements.

Obviously these depend on the specific target group and characteristics (political, economic, socio-cultural, technological, environmental, legal) of the environment where customers are located (Sander, 2004:303; Homburg & Krohmer, 2006:471). Taking all these individual wishes and needs into account leads to individualization as a possible strategy nexus (see Table 7).

Table 7. Individualization as a Strategy

- | |
|---|
| <ul style="list-style-type: none"> • Use of Modern Communication Techniques • Addressing Customer Individually • Interacting on a Permanent Basis • Learn about Customer Needs • Offering Individual Solutions |
|---|

But the goal must also be to build up trust (Kollmann, 2013:172) so that personal, private data and information become accessible. Only under these circumstances does a personalized one-to-one marketing strategy (Niculescu, Payne & Krishnan, 2013:52; Fowler, Pitta & Leventhal, 2013:509) become feasible and successful.

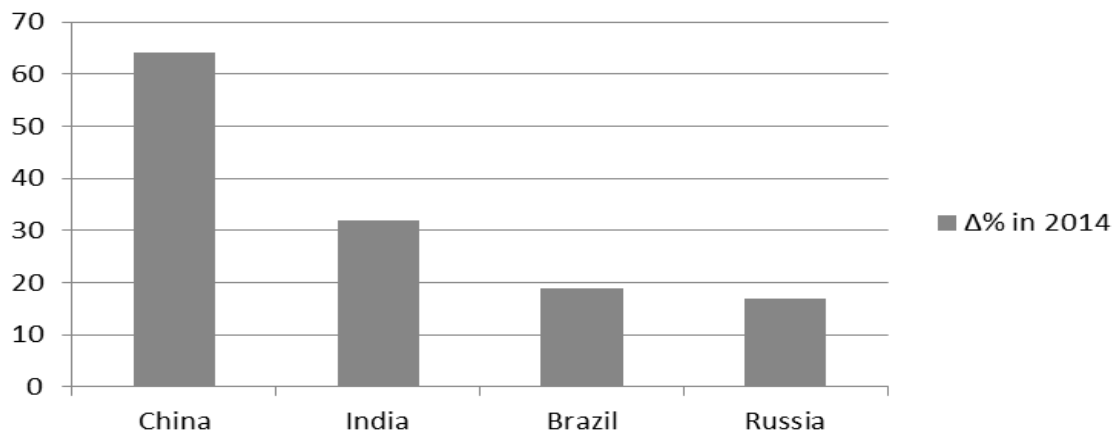
As a result of the advances in modern IT, such strategies can be technologically realized even in mass markets on a global level. Thus finding the right strategy and translating it into the right business model (Sorescu et al., 2011:S4) can be regarded as the key to success.

There are numerous technological developments across all sectors and industries (Pantano, 2010:171), many of which have benefitted retailing. They have been used to improve the overall shopping experience, to build relationships or for the redefinition of retailers' marketing strategy (Pantano & Naccarato, 2010:201).

The strongest growth in e-commerce sales can be observed in developing countries (see figure 2).

While in China Alibaba accounts for about 80% of e-commerce sales with a market position of similar strength to Amazon in the US and European countries, it looks as though there will be intense competition for market share in India (Kazmin, 2014:13).

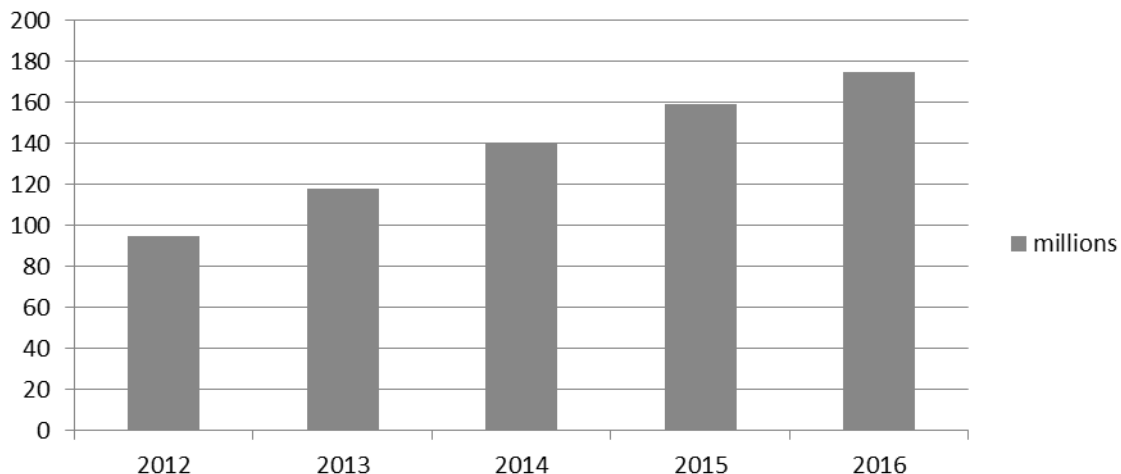
So far the mere size of markets is attractive, therefore it might still take some time before South Africa will receive more attention from e-commerce giants. One recent technological development within e-commerce is mobile shopping or m-commerce. It entails the use of a smartphone to identify deals, compare products and prices, and order while on the go. Consequently it can be observed that already more than 75% of internet connections are made from mobile devices (Boston Consulting Group, 2012a:4).

Figure 2. E-commerce sales, growth in 2014

Source: e-Marketer

In many developed markets, such as the US and UK, online sales growth is being driven by an increasing number of shoppers using smart mobile phones (see figure 3). In the US, for example, the number of mobile shoppers is predicted to rise from

around 95 million in 2012 to 175 million by 2016 (Jones Lang Lasalle, 2013:5). Therefore a multichannel offering becomes essential for retailers (Boston Consulting Group, 2012a:11).

Figure 3 Mobile-commerce forecast – number of mobile shoppers in the US

Source: e-Marketer

It seems multi-channelling and, more specifically, omni-channelling are already imperative for retailers and those who are not participating will disappear (Wenig, 2014).

As mobile devices are normally used almost permanently by one single user, they become interesting for building and maintaining customer relationships. The potential for managing customer relations, in order to gain more insights into the client's mind-set and behaviour, had been recognized by marketers for a while. But implementing such a strategy in consumer markets turned out to be more difficult than in b2b, where it has a long tradition. Portable devices could now be helpful in consumer markets in getting one foot in the door (Shankar et al., 2010:112), but it is not enough only to provide

information and to display the company offer. Entertaining the customers (Pander, 2014) is gaining importance (Riedel, 2014) and can help in building loyalty and commitment (Pantano & Naccarato, 2010:202), thus stabilizing customer relations.

Multi-channelling can not only be a driver of loyalty but increase customers' spending. The aim should be to inspire clients, making it necessary to understand how customers want to shop and making products easier to find. Providing recipes with ingredients that can be shopped online could be such an approach (Byfield-Green, 2014).

On the other hand, there is a risk if online advertising becomes too intense. In a study published recently (Fittkau & Maaß, 2014) it has been shown clearly that if advertising messages are repeated too

often they are likely to cause resistance. In that particular study more than one third of the participants were showing signs of resistance, if targeted with the same or similar commercial too frequently.

Table 8. Mobile commerce

- good basis for individualization (single user)
- steadying of communication and interaction
- better insights into behaviour
- intensity should not be exaggerated
- facilitates word-of-mouth processes

Apps on mobile devices play an important role (see Table 8) in steadying the customer interaction, as consumer interest in all kinds of apps is rising on an international level (Accenture, 2014:7). As consumers obviously are willing to trade in privacy for convenience or entertainment provided through apps (Accenture, 2014:8), it does not come as a surprise that at least the large retailers are all heavily engaged in launching them.

The trust-building factor of word-of-mouth communication is strong (Weiber & Wolf, 2013:210) so companies should not ignore the arena of social commerce. Viral communication can spread information at great velocity, positively or negatively. In the first case it represents a powerful communication instrument at low cost. In the second case it can bear a significant risk for the image of companies. Therefore it is important to know what is happening in social networks and react quickly.

Our empirical research suggests there will be a merging of shopping and entertainment. So far this can be observed in offline channels like malls but in the near future this will strongly affect the online shopping activities (lean back behaviour will increase).

Another aspect is the reduction of complexity in the making of buying decisions. Technological advances will not only allow the customer to consider more offers but also to identify the right offer efficiently.

In a recent publication, as a result of electronic consumer buzz about products and brands, e-sentiment has been looked at (Shin et al., 2013:13). Obviously there is a significant impact of e-sentiment on consumers' buying decisions and subsequently on sales figures. Thus it looks strongly advisable for providers to analyse consumer buzz systematically and to take measures to try and influence it. Social commerce (see Table 9) intends to achieve sales by making use of social media, web technologies, social interaction and user-generated content. That makes it an innovative field of business activities where many questions still remain unanswered (Huang & Benyoucef, 2013:258). But it definitely offers opportunities like cross-selling, trust-building and customer commitment for retailers and should

therefore definitely be included in their strategies (Wolf & Reuter, 2013:860).

Table 9. Social commerce

- intensive use of social media and web technology
- relies on user-generated content
- word-of-mouth communication to build trust
- facilitates viral communication effects
- allows cross-selling
- may increase customer commitment

As another central element of e-business, e-procurement already plays an increasing role and is recommended for inclusion in companies' e-business strategy (CIPS, 2013:2). Compared to traditional marketplaces, e-marketplaces allow further benefits such as better transparency, higher efficiency, and less capacity restriction (Kollmann, 2013:426).

There is empirical evidence that enterprises benefit from participating in e-marketplaces (Chang & Wong, 2010:268). E-marketplaces are currently platforms for launching new products and services, enabling companies to identify new market opportunities and pursue new customers.

It has been shown that e-procurement reduces paper work and enhances the competitiveness of a business, while reducing costs (Hashim, Said & Idris, 2013:842). Communication becomes faster, leading to increased efficiency in administrative processes, and accelerating the search for products to purchase. However, implementing an e-procurement strategy is a challenging process (Hashim, Said & Idris, 2013:837). A study in the UK found that the largest productivity gains from e-procurement are generated in the manufacturing sector and services such as wholesale and retailing (Boston Consulting Group, 2010:10).

The objective of e-procurement (see Table 10) goes far beyond the mere replacement of paper. It aims at achieving significant improvements in the efficiency of individual purchases, the administration of an organization and the markets' functioning (Alvarez-Rodriguez et al., 2014:797). Therefore it can be considered a critical strategic factor for achieving improvements in the competitiveness of companies.

Table 10. E-procurement

- facilitates processes
- increases transparency
- communication speed is increased
- boosts productivity
- can improve competitiveness

Communication activities definitely form an important part of measures in order to implement corporate strategies. To allow for a highly individualized customer communication it is necessary

to make sure that all customer information is made accessible to sales and service staff. This is the moment for customer relationship management (CRM). A CRM system can be defined as “a repository of customer information which contains all customer profiles” (Phan & Vogel, 2010:70). In addition to the traditional database roles, it has the capability of personalising needs of individual customers by differentiating products or services for each unique customer.

Online retailing encompasses a distancing phenomenon where the online shopper has no human contact with retail store staff. This is in contrast to the online shopper’s sub-conscious desire to engage with online stores that are more sociable and personal (Toufaily et al., 2013:545), thereby allowing a form of communication which is already quite close to classic face-to-face communication – the silver bullet in selling.

So, bridging the gap between the online shopper and the online store becomes of utmost importance. To build trust and loyalty a relationship has to be built between the online shopper and the e-business. Customer retention is important in this process and simply attracting site traffic and attracting new customers is not a sustainable strategy (Durmus et al., 2013:426). It has been revealed that the main factors that predict e-loyalty (loyalty in an online domain) of consumers are efficiency and “contact” in the context of e-service recovery.

This suggests that efficiency in terms of service and resolving customer problems when they arise, in an online environment, is not very different from the retail environment. A brandnew study from Germany shows that service quality is extremely important to customers no matter whether they buy online or in a traditional store (Hitec, 2014a:10). However, it remains unclear how much they are prepared to pay for it (Hitec, 2014b:13).

Thus the dimensions of customer service, which are important for online retailers, include reliability, access, ease of navigation, efficiency, responsiveness, flexibility, assurance, security, aesthetics and personalization (Suryandari & Paswan, 2014:70). These are also important to brick and mortar retailers, but it seems possible that they may choose to focus on different dimensions (Ladhari, 2010:475). Building relationships around these dimensions requires access to data, as an in-depth understanding of the various online consumer segments is important from an online marketing and a customer relationship strategy perspective.

To build a CRM (see Table 11) strategy in an online environment, the online retailer needs access to data which provides information around the profiling of the online consumer in terms of shopping patterns and other primarily behavioural pictures.

Table 11. Customer Relationship Management

- | |
|--|
| <ul style="list-style-type: none"> • Building lasting relationships • Obtaining and analysing customer data • Company-wide availability of customer data • Targeting each customer individually • Analysis of relations’ developments |
|--|

The common objective here is to build up customer commitment and to turn discrete transactions into long lasting relations and the application of CRM becomes a business philosophy (Stefanou, 2013:145). But it has been found that for the customers’ decision to participate in food retailers’ loyalty programs, individual advantages are crucial and unrivalled (Gómez et al., 2012:498).

Internet-based technologies provide a range of new tools (Klaiber, 2010:324). They can be extremely helpful in communication, whether the target group is located inside or outside of the organization.

Another key factor in the realization of e-business strategies is represented by the logistics (see Table 12). It forms a crucial part of the supply chain (Coyle et al., 2013:36) and is therefore of central importance for the delivery of products or services and thus for the performance of a company (Graham, 2013:6). With the growth in e-commerce the attention to logistics is being boosted as well (Straube et al., 2010:32). Technology plays an increasing role in any logistics system from the functionality and control perspective to maintaining the supply chain agility (BME, BVL, 2012:22). There is empirical evidence that IT integration, management competencies and supply chain integration all have a strong positive effect on the supply chain agility (Ngai et al., 2011:245), which consequently enhances the performance of an enterprise (Ngai et al., 2011:246).

Table 12. E-logistics

- | |
|--|
| <ul style="list-style-type: none"> • Supply chain integration • Warehouse management • Transport management • Handling of cargo • Demand-based delivery • IT use for planning, executing and controlling |
|--|

As the supply chain evolves, information and communication technology used in the supply chain evolves, too. In recent years there was a tremendous growth in supply chain management (SCM) issues, such as warehouse management, transportation management systems and supply chain planning and execution, and the future developments seem closely related to globalisation and environment (Prajogo & Sohal, 2013:1532). For the present it should be clear that the modern retail logistics system is heavily dependent on the use of information technology (Gustafsson et al., 2006:48). It is therefore evident that e-commerce is interwoven into all the elements within

the logistics system from order placement, order processing, order picking to inventory systems and order delivery. Therefore the components of a logistics system stand for important measures in process execution on the path of implementing an organization’s strategy. Even giants such as Amazon are challenged to improve their performance in logistics continuously by innovating themselves or by taking over innovative logistics firms (The Economist, 2014).

The proliferation of e-payment (see Table 13) including micro payment systems can be considered one of today’s most important development trends in e-business. It can be defined as the “transfer of an electronic value of payment from a payer to a payee over an e-payment device which allows customers to remotely access and manage their bank accounts and transactions, performed over an electronic network (internet)” (Teoh et al., 2013:466).

Recently e-payment has become part of the many payment systems that exist and it has gained much popularity. Most retailers have added e-payment systems to their channels of payment offered to customers. Clients are making use of e-payment facilities; however, its reliability, safety and trust are still questioned. The offers in e-payment are basically designed to lower transaction costs and create convenience for customers (Teoh et al., 2013:465).

Obviously e-payment systems have increased in popularity and are being used globally. Countries like France, the US and UK have refined and fully developed e-payment systems. It is an integral component of business operations. As e-business grows into being a major element of business operations for many companies, e-payment has also elevated itself to become one of the most important and critical cogs of a successful business (Kim et al., 2010:84). The e-payment system acts as an important pillar of the e-marketplace (Mazumdar & Giri, 2012:930).

Table 13. E-payment

<ul style="list-style-type: none"> • Increase in process efficiency • Low cost of executing • High flexibility • Easy handling of small payments • Indispensable element of e-commerce

Online shopping and usage of the internet in general have increased significantly during the last years. This trend together with a range of scandals related to disregard of consumers’ privacy issues has led to a situation where concerns about internet security can be regarded as the top reason for consumers’ choice to avoid online shopping (Hartono et al., 2014:11). Obviously cyber-crime has taken on huge proportions (Norton, 2011:3). According to the Norton cyber-crime report 2012, cyber-attacks cause

damages of 110 billion US\$ per year on a global basis (Norton, 2012:6).

Cyber dependent crimes (or “pure” cyber-crimes) are offences that can only be committed using a computer, computer networks or other forms of information communications technology (ICT) (Detica, 2011:6). Security is of paramount importance to the success of any online retailer. Its lack causes growing concern among the population and makes people change their behaviour (Harris Interactive Online, 2009).

Cyber-crimes evidently are growing in number and the damage they are causing is increasing (UNODC, 2013:6). The governments have begun to respond, but it is still not very clear to what extent they will be able to limit growth in that area. Should there be an increased probability for users to become victimized, this will influence the behaviour significantly and most probably lower the acceptance of online offers. Therefore prevention of cyber-crimes is not only a challenge for governments but for private companies, namely, retailers, as well.

In human resource management apparently online recruiting processes are on the rise (Klaiber, 2014). These changes offer substantial potential to be more efficient in hiring and should not be overlooked by retailers.

To be successful in a highly competitive environment companies are relying more and more on electronic business networks, online platforms, mobile and data-based recruiting. The development of an attractive employer brand becomes an important issue, too (Erlat, 2014). Management and organization require a comprehensive informational basis. In this regard management information systems can be helpful (Beal, 2014), providing many different kinds of internal and external information of relevance for the specific management functions.

3.3 Skills requirements of employees

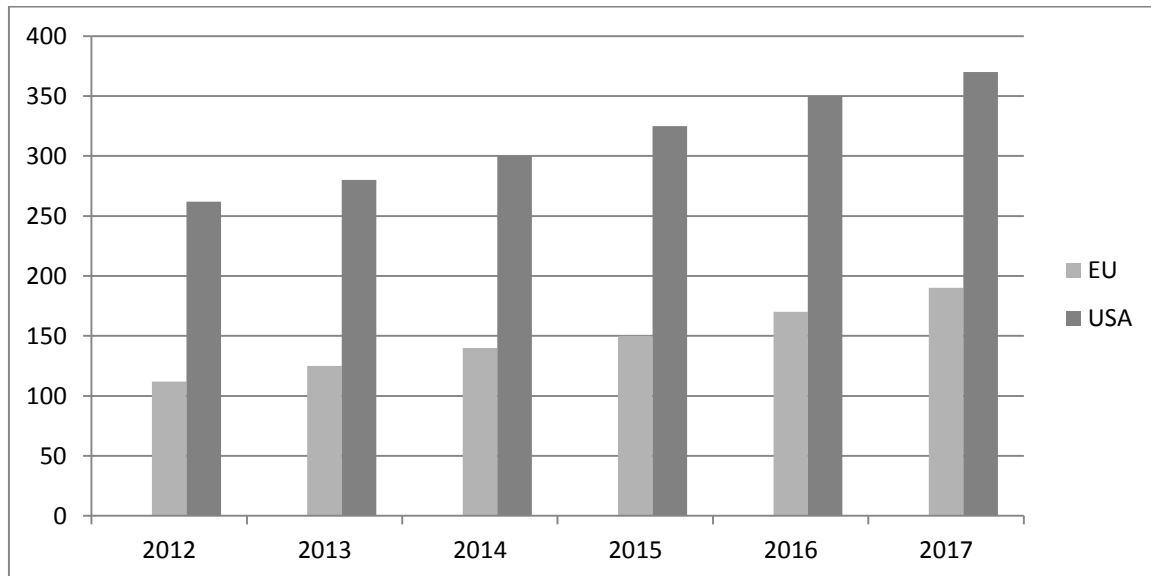
Already the demand for well qualified experts in e-commerce is huge and the requirements are challenging. So more and more retail chains, particularly in clothing and fashion, have a growing demand for employees holding a university degree (Lutz, 2012:V2/15). However, there are very few universities offering programs in e-commerce with a retail focus. Therefore the job offer for these graduates is excellent and the main bottleneck in e-commerce development for companies – at least in Germany – is a lack of qualified employees (Heinemann, 2012:V2/15).

With good returns online retailers can afford to pay high salaries to qualified employees (Rigby, 2011:65). By doing that, they manage to set the pace and drive innovation while some of the traditional retailers are struggling with difficulties to attract high potentials.

As online retail continues to grow (see Figure 4) – in Europe the figures are expected to double from 2012 by 2020 (Heinemann, 2013a:8) – the demand for qualified staff from this sector will rise, too. Furthermore the traditional retailers are forced to

opt for multi-channelling (Rigby et al., 2014:5) and therefore increase their online activities significantly. Thus the competition among retailers for e-commerce experts is going to reach higher levels.

Figure 4. Forecast sales e-commerce in billion US \$



Source: Forrester

The required qualification level in traditional retail is generally going to rise. More ROPO (=research online purchase offline) customers will appear in the stores. They are very well informed about the products they require and about the offers and bargains on the market – sometimes even better than the salesperson in the shop (Heinemann, 2013b:17). Hence there is a general offensive in qualifications needed and it is not only about knowing the products but also knowing how to use modern communication technology as a support in order to be able to keep up with the customers' knowledge or preferably exceed it.

Another important aspect concerning the search for qualified staff is the usage of employer evaluation platforms like kununu, companize, meinchef.de, kelzen or jobvoting.de. They provide the possibility for employers to present themselves in an authentic way (Haderlein, 2012:150).

Many highly skilled and qualified players in e-business and e-commerce are the entrepreneur-type rather than the typical employee (Krisch & Rowold, 2011:88). Therefore most of them have a strong preference for developing their own company instead of becoming an employee. Hence, considering options for outsourcing specific parts of the retailers' e-commerce activities could possibly help them overcome the bottleneck situation. But on the other hand outsourcing bears the risk that enterprises are not able fully to control developments in areas which are crucial to the success of their business model.

Furthermore they might become dependent on their outsourcing partners (Macharzina & Wolf, 2012:301)

The dynamics in e-business are huge and causing the change of business models, particularly in retailing. Consequently the buying behaviour of consumers is changing. This causes opportunities for the retailers but threats, too. As retailers have to deal with a fast changing environment this leads to dramatic changes in the qualification profile of employees needed.

4 Conclusion

Therefore the challenge of getting prepared is huge. Within retailing companies more than all other fields the required qualification profiles of executives in middle management will be subject to change. This results from

- the required channel integration (online and offline simultaneously),
- the need to create offers which combine shopping and entertainment,
- the necessity to adjust (traditional) e-commerce to mobile commerce,
- security issues which can be expected to gain importance and are crucial for building trust, and
- the individualization of customer focus.

Certainly technological expertise and in-depth knowledge of up-to-date technologies form part of these new qualification profiles required. But it is not going to be technology competence alone which

successful retail businesses will need in future in their attempts to develop and expand their online presence. It must come combined with strong administrative capabilities, a profound marketing background and sales experience in order to be able to deal successfully with the challenges retailing is expected to be facing.

Furthermore combining and integrating knowledge from different functional areas of a company is needed in retailing to deal successfully with the challenges resulting from e-business developments.

Sound education in business is still important but with the rise of IT applications and the resulting possibilities, qualifications and knowledge in analytics, statistics and mathematics become more important.

Employees should understand that they have to improve their qualifications on an ongoing basis in order to keep pace with the developments. The right combination of knowledge and skills plus motivation, attitudes, values and dispositions is what retailers require. Therefore the organizations have to provide the right framework to allow for lifelong learning of their staff within the e-business domain.

Although e-business developments can be seen as a global trend, the situation in different countries and regions varies a lot. That in particular is the case when it comes to hiring or the availability of skilled and qualified employees. In some countries where general unemployment is high it still seems to be not too difficult, while in those countries where the economy grows many companies already have difficulties in finding and attracting the employees needed.

But nevertheless it remains as a clear result of our study that retailers are facing the challenge to invest more into the qualification of their employees, if they want to be successful in the future. For some countries this demand for employees qualified for e-retail is very pressing, whereas for others it is not so immediate - there is more time available for them to develop the required skills.

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