

## The Third Revolution: Mass Production of Marketing Information

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**Abstract:** The progress of humanity has witnessed major turning points in its prolonged history. Scholars describe such turning points using the word 'Revolution'. There were, in general, two such major revolutions in the past. The first one is the so-called 'the agricultural revolution'. This revolution started roughly 10,000 years ago in the region of the Middle East and other areas of the world (Rosenzweig, 2007). The agricultural revolution was facilitated by the ability of humanity to produce food on a regular mass-based scale instead of just gathering it. The second revolution is a one which took place in the 18th and 19th centuries and still in progress. This revolution was induced by the mass production of manufacturing tools and the power input to drive them. Collectively, this second shift in the level of advancement of human civilisation is referred to as 'the industrial revolution'. In the closing decades of the last century, information technology (IT) started to impose a profound impact on the management and other functional aspects of organisations and firms. The said is more evident in the case of small- and medium-size enterprises. The impact on operational business functions of firm are most noticed in the field of *Marketing*. In this article, we argued that IT is creating a third turning point in human history. This latest shift is caused by the availability of marketing information on a massive scale for the first time in history. In this article, we discussed the nature of such change and the expected outcome of it. We referred to this shift as the *Marketing Revolution*. As we proceeded in our analysis, we reflected on how new key concepts such as *e-globalisation*, *firm impact sphere* and *internetisation management* can be used in understanding the *Marketing Revolution*.

**Keywords:** Marketing Revolution, Agricultural Revolution, Industrial Revolution, Small And Medium-Size Enterprises SMEs, Localised Management, Networking Management, Internetisation Management, Information Technology, IT, Firm Impact Sphere, Localised Firm Impact Sphere, Semi-Globalised Firm Impact Sphere, Globalised Firm Impact Sphere, E-globalisation, e-Globalisation, Nikolai Kondratiev

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## 1 Research Background

### 1.1 Information Technology and Its Impact on Organisation

Information technology (IT) has become the major facilitator of business activities in the world today (Abouzeedan and Busler, 2002, 2006; Turban et al., 1999, p. 5). IT is also a catalyst of fundamental changes in the structure, operations and management operations of firms (Dertouzos, 1997). This is caused by enhanced capacities such as performing high-speed, high-volume calculations; providing fast, accurate and inexpensive communication between organisations; storage of easy accessible amount of information and increasing efficiency of the working force due to incorporating of IT in organisation. Referring to Wreden (1998), these added capabilities support five business objectives: improving productivity, reducing costs, improving decision making, enhancing customer relationships and developing new strategic application. Areas where innovative IT applications have been introduced into firms and organisations include: production/operation and logistics, marketing and sales, channel systems, accounting and finance systems and human resources systems (Turban et al., 1999, p. 337). Contemporary researchers are foreseeing a transformation of the classical scale economy to a new type of economy because of the impact of the IT. Polenske (2001, 2002), introduced the concept of the 'dispersal' economy as the opposite type of economy to the classical 'scale' or 'agglomeration' economy.

Abouzeedan and Leijon (2004) distinguished between the *globalisation* in its traditional content, prior to the IT age, and globalisation related to the age of the IT. Abouzeedan and Leijon (2004) called the later as *e-globalisation*. The two researchers suggested that the critical time-point represents the start of the e-globalisation to be launching of the World Wide Web in the first half of the 1990s. This e-globalised economy is inducing innovative forms of commercial activities such as *electronic commerce* (EC). EC is a new area that represents the intersection of information systems, marketing and engineering. Managers think of EC in terms of possibilities, innovations and new customer-relations that focus on the users of EC (Keen et al., 2000, p. 123).

One area that has been influenced by the new e-globalisation phenomenon is the management aspects of organisation.

## 1.2 Internetisation Management and Internationalisation

Dana et al. (2002) introduced the new terminology 'internetisation' in the emerging IT-based economy. According to the previously mentioned researchers, the term internetisation refers to 'the process of adoption and diffusion of e-business systems and Internet technologies by innovative entrepreneurs'. Referring to the same source, internetisation shares some core notions with 'internationalisation' in accordance with the *Uppsala model*. The three researchers stated that the stages of internetisation are six ones: non-adoption, trial Internet use, reactive Internet trading, active exploration of Internet, integration of operations with the Internet and finally Internet portal development. The new e-globalised economy is bringing about new forms of organisations such as the Virtual Instant Global Enterprise (VIGE) (Katz, 2002).

In traditional economy, the partnerships forms are managed through classical styles. However, the traditional economy is successively transferred into an IT-based economy where the classical globalisation is shifting toward *E-globalisation* (or *e-Globalisation*) (Abouzeedan and Busler, 2007). Abouzeedan and Busler (2007) argued that different type of management paradigm is needed to run strategic alliances in the new e-globalised economy. This new form of management is designated to be the 'internetisation management' by the two writers.

## 1.3 Firm Growth and Expansion

Wolff and Pett (2000) pointed out that, with increased internationalisation, the economic growth potential afforded by small-business exporting may be quite significant. One method to go international without the possession of excessive resources is through the bridging tactics and other partnership structures (Kanter, 1994). EC can use partnership structure to increase contact with customers and improve the local services at a global scale. The subject of the EC has gained more attention from the scholars in later years (Keen et al., 2000, p. 123). Among such types are the EDI and Lifecycle Systems (CALs). The consensus among researchers seems to be that EC will provoke dramatic movements toward greater international integration of economic activity (Globerman et al., 2001). The nature of online firms' interaction with customers is also shifting from traditional communication channels such as telephone and mail to electronic mail and web-based forms, from full-service to self-service, and from mass marketing to personalised marketing (Bhattacharjee, 2001). Winning new customers may loge firms to expand the geographical scope of their marketing efforts while concentrating scale intensive value-chain activities in a relatively small number of geographical sites (Globerman et al., 2001). Traditionally, cost reduction was facilitated by an increase in sales volume. However, in the new era, cost saving have been facilitated via an IT-driven mechanism. Some areas in which reduced costs can be achieved using the IT tools include: purchasing, inventory and improved control, market efficiency and market intelligence (Corbitt, 2002).

## 1.4 Marketing and the Third Revolution

Humanity has witnessed distinct shifts in its history in relation to its economic development. These are referred to in the economic literature as 'revolutions'. Grassby (1999, p. 45) saw the offspring of revolutions

to be due to the attempts to identify and destroy the forces behind an existing case of equilibrium. These repeated attempts have marked the human history through all its length. We argue in this article that there were three such revolutions: the agricultural, the industrial and the marketing revolution. The agricultural revolution started roughly 10,000–12,000 years ago in the region of the Middle East. The agricultural revolution was facilitated by the ability of humanity to produce food on a regular mass-based scale instead of just gathering it from trees (Rosenzweig, 2007). According to Grassby (1999, p. 26), economic growth is usually identified with industrial production. However, economies can not expand without efficient agricultural activities. Contrary to Classical Marxism, Neomarxism took view that agriculture activities can be capitalistic in their nature, as thus the agriculture sector can bring to existence a bourgeoisie class (Grassby, 1999, p. 26). Some may postulate that capitalism was born only in Europe. Such stand can be misleading and actually there is no clear historical evidence to that. If capitalism is equated with a functioning market for goods or credits, then it would have been visible at an early date in all cultures (Grassby, 1999, p. 29). According to Grassby (1999, p. 27), commerce served as the catalysts for economic change before the industrial revolution. As thus production was controlled by merchants, not by industrialists. When Adam Smith wrote his *Wealth of Nations*, he already postulated a market capitalism as the dynamic force behind the early European economy even before the discussion about industrial revolution had materialised (Grassby, 1999, p. 3). Carl Marx retained Smith's growth model in his analysis. As Marx desired to focus on the role of capital and playing down the significance of technology, he regarded industrial revolution as the last stage of capitalism (Grassby, 1999, p. 15).

The second revolution is a one that took place in the 18th and 19th centuries. This revolution was induced by the mass production of manufacturing tools and the power input to drive them. Collectively, this second shift is referred to as 'the industrial revolution'. The transition from feudalism to industrialism, expressed as the industrial revolution, has attracted less debate than the issue of relationship between feudalism and capitalism (see Grassby, 1999, p. 16). We argue, in this work, that Capitalism cannot be compared with Industrialism. Grassby (1999, p. 19) stressed that, at least, market capitalism appears as old as civilisation and it is recognisable even in primitive societies. According to Grassby (1999, p. 16), the concept of agrarian capitalism is not easy to reconcile with the traditional Marxist thought on relationship between production and class conflict. Traditionally, Marxism denied that agriculture has any capitalistic nature. According to Grassby (1999, p. 30):

'The economic growth of nations has not been regular, uniform, or balance. Some early capitalist economies failed to industrialize and others de-industrialized or decentralized in response to competition and market risk'.

In this article, we argue that in the closing decades of the last century, IT started to impose a profound impact on the management and other functional aspects of organisations and firms. The impact on operational business functions of firm are most noticed is in the field of Marketing. Abouzeedan and Busler (2002, 2006) introduced a new concept, the 'Firm Impact Sphere' (FIP), to account for the impact of IT on the business reach of the small- and medium-size enterprises (SMEs). The concept would help us in understanding how marketing has benefited from IT advancements.

The first section of this article is a general introduction. In Section 2, the concept of marketing is discussed. In the Section 3, we are discussing the impact of IT on organisations, while in Section 4 we are looking at marketing, growth and e-globalisation. In Section 5, we are discussing the 'Marketing Revolution' as the third major shift in human history. In the process we will be discussing the nature of change of the three revolutions. In Section 6, we are touching on the characteristics of the marketing dimensions in the The United Theory of Internationalisation of SMEs' (UNITIS) framework and the connection to the marketing revolution. We will be also discussing, in the same section, the nature of markets in pre-EC age versus in EC-age. Finally, in the closing section we are drawing our conclusions.

## 2 Marketing: The Concept

### 2.1 Background

According to Alderson (1991), the marketing process matches materials found in nature or goods fabricated from these materials against the needs of households or individuals. Sorting, as the root idea of marketing, is consistent with the assumption that heterogeneity is radically and inherently present on both sides of the market, and the aim of marketing is to cope with the heterogeneity of both needs and resources (Alderson, 1991). In Zinkhan's (1999) view, marketing is an applied social science similar to economics, psychology and sociology. There are sub-areas of marketing that are truly disciplines in their own right. Examples include advertising, retailing and strategy (Zinkhan et al., 1992). Zinkhan (1999) considered four disciplines as examples of areas from which marketing scholars have learned. They include: management, art and design; retailing and e-commerce; psychology and consumer behaviour.

### 2.2 Management

Management is a field with a history that closely parallels the history of marketing. Both of these disciplines are frequently housed in schools of business (Zinkhan, 1999). According to Zinkhan (1999), there is a long tradition in marketing of studying the ways that consumers seek and absorb new information. Lau and Lee (1999) used some of the consumer behaviour research, related to the earlier, to make inferences about the factors that underlie brand trust and brand loyalty. According to Baker and Sinkula (1999), the management literature has begun to study how organisations learn, as distinct from individual learning. Organisational learning can be connected to marketing practices of firms. Watson et al. (2000) pointed out that new technologies offers important opportunities to enhance organisational learning and organisational decision-making.

### 2.3 Art and Design

Zinkhan (1999) enlightened us to a second area that made a contribution to marketing, that is, *art* and *design*. The principles of modern design began to emerge at the start of the 20th century with the *Bauhaus movement* in Germany, where there was an interest in combining design principles with the technology of mass production. At the basic level, modern-day designers practice the marketing concept.

### 2.4 Retailing and E-Commerce

According to Norton (1996), EC is financial or commercial transaction that occurs via electronic means. As he pointed out, automated teller machines (ATMS) are early example of using electronic data processing and communications to do business. Quoting Alan B. Albarran, in (Albarran and Goff, 2000, p. 73) 'the buying and selling of goods and services via the Internet has escalated into a thriving economic force known as electronic commerce (e-commerce)'. According to Norton (1996), there are several kinds of EC that are worthy of consideration. They include, beside the Internet: Electronic Data Interchange (EDI), Continuous Acquisition and Lifecycle System (CALs) and The World Wide Web (WWW). Retailing has been enhanced by the ability to use Internet to access new products in the e-globalised economy.

### 2.5 Psychology and Consumer Behaviour

Learning can take place in both directions. That is, marketing managers and scholars can learn from the work of psychologists. At the same time, psychologists sometimes learn from the work of marketing scholars (Zinkhan et al., 1992). Zinkhan and Watson (1998) noted that academics became more aware that they needed to exercise care when adopting measures from other disciplines (e.g. psychology); and they became more concerned with the issues of reliability and validity. During the late 1960s and middle 1970s, marketers borrowed heavily from the field of psychology (Zinkhan, 1999). In the late 1970s and early 1980s, there was a greater concern with the issue of philosophy of marketing science issues and a greater

awareness that consumer behaviour is so complex that it is necessary to study consumers from a wide variety of perspectives (Zinkhan and Watson, 1998). In the 1980s and 1990s, marketing scholars investigated new aspects of consumer behaviour such as consumer fantasies, feelings and obsessions (Zinkhan and Watson, 1998). Alderson (1991) enlightened us to the fact that the conception of consumer behaviour was first presented, some 80 years ago, by the Austrian Economist Bohm-Bawerk.

## 2.6 Internationalisation of Small Firms and E-Globalised Marketing

Since the pioneering study of Johanson and Vahlne's (1977) on internationalisation process of small firms, the research stream proposed that small firms internationalise their activities through a series of progressive stages. At a later stage, researchers Oviatt and McDougall (1994) proposed that at least some small firms are international at their inception. The literature about internationalisation suggests that there are two discrete ways that small firms uses to internationalise 'international-at- founding' (Oviatt and McDougall, 1994), and 'international-by-stage' (Johanson and Vahlne, 1977). Small business scholars do stress that an export strategy is the primary foreign-market entry mode used by small business in their internationalisation mechanisms efforts (Leonidou and Katsikas, 1996). In his work, Saarenketo (2002, p. 2) discusses three of the main traditional perspectives explaining the internationalisation of the firm. These are the process or stage-models of internationalisation, the network approach and the foreign direct investment theory (FDI).

Etemad (2004) argued that growth of smaller firms may not follow processes stipulated in the extant theories of multinational enterprises (MNEs) and international businesses processes (IBPs). In his work, Etemad (2004) suggested a theoretical framework to integrate this fragmentation between the 'institute' and the 'entrepreneur'. The framework Etemad (2004) proposed, using a Dynamic Open Complex Adaptive System (DOCAS) approach, comprising three layers reflecting *entrepreneurs* (or entrepreneurial teams), *firms* and *markets* to reflect their own dynamics as well as the inter-relations and interactions of entities within and across layers within the framework. Abouzeedan and Etemad (2004) developed that work further by proposing specific dimensions related to each of the three layers.

To understand the new concept of 'Marketing Revolution', we need to look at IT impact on organisation.

## 3 Information Technology Impact on Organisations

### 3.1 Background

Scholars have a common agreement as to what constitute an IT system. According to Hickey (2000, p. 4), IT is the technology we use to manipulate information and it is not the information itself. Referring to him again, this technology comprises both hardware (what we see when a computer is turned off) and the software (the programs). Of individual computing units, one can build networks ending with a global IT reach. This brings the question of how the customer is related to the IT network structure.

According to Bhattacharjee (2001), the nature of online firms' interaction with customers is also transforming from traditional communication channels such as telephone and mail to electronic mail and web-based forms, from full-service to self-service, and from mass marketing to personalised marketing. Ngai and Wat (2002) pointed to the fact that globalisation and IT are radically changing the face of business and organisation. According to Gardner (2000, p. 81), aligning an IT system with a customer opportunity is accomplished by constructing IT system architecture. The term IT system architecture is defined as 'the organisation of IT resources to accomplish a business purpose'.

### 3.2 Impact of IT on Organisation

Al Morgan (1994) expressed his view of point that IT has changed organisations and made them flatter, smaller and faster. According to him, bureaucracy is giving away to entrepreneurialism. Referring to Fink and Kazakoff (1997), the potential benefits that an organisation can obtain when it uses IT are extensive and

includes: efficiency gains (e.g. the automation of clerical procedures), increased management effectiveness (e.g. in decision making) and improved business performance (e.g. by entering into strategic alliances with other firms). Technological developments present potential adapters with means to solve problems and create opportunities. One of the phenomena coming out of the IT is the EC. Referring to Lewis (2000), countries started to appreciate the potential for the e-commerce as it offer cost-effective ways for SMEs to offer e-commerce to their customers and their goods. This is most true in Asia. Ngai and Wat (2002) identified several areas of application within e-commerce in their literature review, while Beveren and Thomson (2002) investigated the level of e-commerce engagement by manufacturing SMEs located in the center Highlands of Victoria, Australia.

## 4 Marketing Growth and E-Globalisation

### 4.1 Marketing versus Selling

Many writers tried to relate marketing to growth. According to Levitt's (1991) view there is no such thing as a growth industry, there are only companies organised and operated to create and capitalise on growth opportunities. As Levitt (1991) pointed out correctly, mass production does indeed generate great pressure to 'move' product. But what usually gets emphasised is selling, not marketing. Marketing being a more sophisticated and complex process gets ignored. According to Levitt's (1991) view, the difference between marketing and selling is more than semantic. Selling focus is based on the needs of the seller and marketing based on the needs of the buyer. In reference to Levitt (1991), the profit lure of mass production obviously has a place in the plans and strategy of business management, but it must always follow hard thinking about the customer. As Levitt (1991) pointed out, this is the one of the most important lessons that can be learned from the contradictory behaviour of Henry Ford. In Levitt's view, Henry Ford, in a sense, was both the most brilliant and most senseless marketer in the American history. Ford was senseless in Levitt's opinion, because he fashioned a production system designed to fit market need (Ford, 1923, pp. 146-147). Referring to Levitt (1991), the globalisation of markets is at hand. With that, the multinational commercial world nears its end, and so does the multinational corporation. Levitt (1991) brought to our attention that, in business, convergence or the tendency for everything to become more like everything else has pushed markets toward global commonality. Abouzeedan and Etemad (2004) argued that, on the other hand, such globalisation is also imposing a new challenge to the international managers. Abouzeedan and Etemad (2004) expressed the opinion that the argument pursued by Levitt (1991) is more true for the technically oriented type of product. However, there are products that are culturally bounded such as food products and for them Levitt's logic does not stand for full. The previous dimension is important when we try to visualise dynamics behind the latest shift, meaning the marketing revolution.

## 5 The Third Shift, the Marketing Revolution

### 5.1 The Various Revolutions

We wish to start this section by reflecting on what is meant by *industrial revolution*. This is necessary if we wished to understand the difference between what is known as *IT revolution* and *marketing revolution*. We will reflect on that difference later in the section.

Scholars are in disagreement as to what characterise an industrial revolution. They often referred to such revolution as 'a sudden take-off into self-sustained economic growth.' Such shift did occur in Britain during the last decades of the 18th century and the opening years of the 19th century, roughly in the period 1783-1802. Two conclusions related to that change are supported by the published data. First, the acceleration in growth was a culmination of a long-drawn-out evolutionary process. The second is that the British experience of industrialisation differed from the experiences of other countries (Deane, 1996).

Deane (1996, p. 16) described the nature of development coupled to the *industrial revolution*. He went on stating at the same page:

‘At its (i.e. Industrial Revolution’s) heart lay the development and rapid diffusion of a set of dynamically interrelated innovations in manufacturing technology, together involving profound organizational changes and continuously rising productivity for a group of industries which became the expanding core of modern industrial nation’.

What caused the rapid progress in industrialisation of Britain was the technical progress in the production of iron and of steam power that saw a clear impact firstly on the British cotton industry and later on dissipated to other countries. The British Industrial Revolution was the first to occur and that is why it deserves a special attention (Deane, 1996). Freeman and Louca (2001, p. xi) saw the recent progress in Information and Communication Technology (ICT) as another industrial revolution. The two writers considered the British Industrial Revolution, to be the first Kondratiev wave, followed later by second, third and fourth waves. Nikolai Kondratiev (1892-1938) was a Russian talented economist working in the first third of the 20th century (Freeman and Louca, 2001, p. 66). According to Freeman and Louca (2001, p. xi), the second Kondratiev wave looked at the introduction of Iron Railway, Steam Power and Mechanisation. The third Kondratiev wave incorporated Steel, Heavy Engineering and Electrification, while the fourth Kondratiev wave covered Oil, Automobiles, Motorisation and Mass Production.

One may object to usage of the term marketing revolution in the context of this work as the term ICT revolution is already established. We argue in this work that it is reasonable to incorporate ICT revolution with the other industrial revolutions. Advancements in ICT had a similar impact to the other advances in technology. However, we need to distinguish the *marketing revolution*, which is the result of ICT advances from the progress in the technology itself. The former is more concerned with the information following with the ICT systems rather than the systems themselves.

The more accurate comparison of ICT to the previous revolution would be, in the case of the agricultural revolution, to the availability of the tools and means of farming. In the case of the industrial revolution, the correct comparison would be to the availability of the industrial equipment and the taming of the steam power. Such changes can be comfortably compared to the so-called IT revolution but not the marketing revolution paradigm we are propagating for. What makes latest advances of ICT significant is the fact that the microelectronic innovations within ICT have reduced the costs of storing, processing and transmitting information by several orders of magnitude (Freeman and Louca, 2001, p. 304). This is in difference to previous technological breakthroughs such as in cotton spinning and weaving, in the manufacturing of steel and automobiles and in the oil refining, where the cost reductions were less accelerating (Freeman and Louca, 2001, p. 304). To grasp how marketing information became accessible at a global scale because of ICT advancements, one needs to look at the concept of Firm Impact Sphere (FIP).

The FIP is defined by Abouzeedan and Busler (2007) as the geographical area within which the business activities are conducted, encompassing all forms of functional, operational and strategic processes performed by the firm. The concept of the FIP was introduced first by Abouzeedan and Busler (2002), to account for the impact of IT on the business reach of the SMEs. Abouzeedan and Busler (2002) argued that the result of the IT drive within the business world is a shift from the traditional ‘Localised’ Impact Sphere of the SMEs to the more extended form of firm impact known as ‘Semi-globalised’. The small firms are extending their activities across national borders and into the international markets with quick base. If the current trend continues into the future, Abouzeedan and Busler (2002) expected that SMEs will have a ‘globalised’ FIP. That implies having the whole globe as the market place. According to Abouzeedan and Busler (2002), we are already witnessing the creation of born global SMEs. It is this expanding of the reach of firm activities which facilitating and inducing a global flow of information from the enterprise outward.

**Table 1 Nature of change of the various revolutions**

The turning-point	Nature of change	Outcome of the change
Agricultural revolution	Mass production of food	The change allowed for the establishment of human permanent settlements
Industrial revolution	Mass production of manufacturing tools	The change allowed for the highest level of availability of goods to the people masses
Marketing revolution	Mass production of information directed toward the customer	The change allowed for building up strategies of marketing at a global level

In recent years, efforts by Professor Etemad Hamid from McGill University, Montreal, Canada, using the DOCAS produced a framework capable of containing all the characteristics and complexities of international entrepreneurship. Professor Hamid proposed three-layer system embedded within the international environment to understand internalisation processes of firms. In a later study, Abouzeedan and Etemad (2004) build further on that work. They framed their analysis within what they called *The United Theory of Internationalisation of SMEs* or *UNITIS*.

Before discussing the marketing dimensions introduced by Abouzeedan and Etemad (2004), which are connected to the market layer of the UNITIS, we shall discuss the nature of change brought by the various revolutions.

## 5.2 Nature of Change of the Various Revolutions

The agricultural revolution brought with it a mass increase in food production allowing for the first time for human to settle permanently in villages and then cities. As for the industrial revolution, it brought with it a mass production of manufacturing tools and the power to run them. That allowed for a highest level availability of goods to the masses across the industrialised countries and beyond. The latest of shifts, designated as marketing revolution brought a massive production of information directed to the customers. That change facilitated for the first time in human history, for firms and enterprises, to build global marketing strategies creating a very open competition on the goods and services offered. The said analysis is shown in Table 1.

## 6 Marketing Dimensions of the UNITIS Framework

### 6.1 Background

As we mentioned in the aforementioned section, Abouzeedan and Etemad (2004) proposed specific dimensions to be used to indicate the theoretical variations, which are possible within each of the three layers of the UNITIS framework, thus creating a conceptual analytical scheme to help us penetrate further in our understanding of these layers.

### 6.2 Characteristics of Marketing Dimensions

According to Abouzeedan and Etemad (2004) marketing, as an operational activity of the firm, has a specific dimensions or functional realities. Such dimensions include, but are not restricted to: *reach*, *perspective*, *focus*, *economic gain* and *techniques*. The clarification of these dimensions is described in Table 2 (as appeared in Abouzeedan and Etemad, 2004).

**Table 2 Clarification of the dimensions of marketing activities**

Dimension	Clarification
Reach	What is the extension of the geographical area that the marketing activities are able to extend to?
Perspective	What is the kind of awareness most important to create in the marketing people?
Focus	Where the emphasis of satisfaction will be located?
Economic Gain	What is the strategy pursued to achieve economic gains?
Techniques	How the marketing activities are conducted?

**Table 3 Characteristics of marketing dimensions in pre-EC age versus in EC age**

Dimension	Marketing in pre-EC age	Marketing in EC age
Reach	Localised	Globalised
Perspective	Product awareness	Culture awareness
Focus	Process driven	Customer driven
Economic gain	Product price is the lead	Volume of sales is the lead
Techniques	Non-electronic marketing	Electronic marketing (relaying on Internet)

### 6.3 Marketing in Pre-EC Age versus EC Age

According to Abouzeedan and Etemad (2004), the marketing dimensions proposed within the UNITIS framework attain different characteristics as we are proceeding from the traditional commerce age era or what we called: pre EC-age, to the current period where e-commerce is becoming the predominant form of trade. Abouzeedan and Etemad (2004) argued that these marketing dimensions and their characteristics are altered as the form of trade is changing. The two writers postulated that the traditional, pre EC-age, marketing reach was localised; and the product awareness was the knowledge theme requested from the marketer. The focus was on the business process itself and the particular needs of customer were placed at the bottom of the list of priorities of the firm leadership. Economic gain was generated from product price driven strategy. The techniques were suitable and adapted to the available tools such as word of mouth, posted material, brochures and other printed material, and later on relied on the media (such as radio and TV). In the new age of the e-commerce things has altered, according to Abouzeedan and Etemad (2004). The reach of the marketing activity is becoming globalised instead of being localised. The perspective of the marketer is leaning toward culture awareness. The focus in the marketing activity is becoming the customer. Economic gain is achieved by achieving large sales volumes. Finally, the techniques are shifting from the traditional methods to the electronic tools of the IT. New techniques of marketing include Internet, electronic newspapers and satellite TV. This analysis is shown in Table 3. In this article, we see the shift in marketing dimensions as more reflective of what is happening to the nature of marketing paradigm itself. These alternations of the marketing dimensions are a sign of the impending marketing revolution that started to take place since the launch of the Internet in the early years of the 1990s.

## 7 Conclusion

Researchers argued for sometime now that revolutions occur in human history because of major shifts that alter existing equilibriums of socioeconomic nature. In this article, we argued that there have been three

such shifts introducing three major revolutions, the *agriculture revolutions*, the *industrial revolution* and the *marketing revolution*. The first two have been researched and studied by many scholars. What concerned us most is the latest one, the *marketing revolution*. This revolution is very coupled to the advancements in ICT. In our analysis we leaned back to a work published by Abouzeedan and Etemad (2004), which tried to look at marketing within the context of internationalisation of firm. Abouzeedan and Etemad (2004) analysed the different dimensions of the marketing activities and conceptualised on their characteristics in the older economy, which was a non-EC one. The two writers performed the same analysis with respect to the new economy. In such an economy, the basic element of its structure is IT and its most important application area is e-commerce. Abouzeedan and Etemad (2004) analysis showed that fundamental changes are occurring in the way the marketing activities of a firm are conducted in such an environment. The reach of the activity is becoming globalised instead of being localised. The perspective of the marketer is leaning toward culture awareness. The focus in the marketing activity is becoming the customer. Economic gain is achieved by selling with large volume. Finally, the techniques are shifting from the traditional methods to new techniques of marketing based on the Internet.

We then connected the work done by Abouzeedan and Etemad (2004) to what is said about the nature of disturbance to a prevailing equilibrium which result in a revolution. Our analysis showed that the latest advancements in ICT were responsible to increase dramatically the availability of information to customers inducing the *marketing revolution*.

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