

3-1 Criteria That Measure the Level of Advancement In E-Commerce

It is important to identify the key drivers of e-commerce to allow a comparison between different countries. It is often claimed *يدعي* that Ecommerce is more advanced in the USA than in Europe and Asia respectively. These key drivers can be measured by a number of criteria that can highlight the stages of advancement of e-commerce in each of the respective countries.

The criteria that can determine the level of advancement of e-commerce are summarized below and can be categorized as:

1 *Technological factors* – The degree of advancement of the telecommunications infrastructure which provides access to the new technology for business and consumers.

Q: what type of infrastructure that needed to adopt Ecommerce in Iraq?

درجة تطور البنية التحتية في مجال الاتصالات والتي تؤمن النفاذ والوصول للمستهلك ومجهزي البضائع.

2 *Political factors* – including the role of government in creating government legislation, initiatives and funding to support the use and development of e-commerce and information technology.

العوامل السياسية وتتضمن دور الحكومة في اصدار التشريعات اللازمة للبدء بمثل هذه المشاريع وتوفير الاموال اللازمة لدعم تطوير التجارة الالكترونية وقطاع تكنولوجيا المعلومات.

3 Social factors – incorporating the level and advancement in IT education and training which will enable both potential buyers and the workforce to understand and use the new technology.

دمج وتوظيف مختلف المستويات في مجال التعليم والتدريب في تقنية المعلومات والذي سيمكن كل من المشتريين المحتملين والقوى العاملة لفهم واستعمال التقنيات الحديثة في التجارة.

4 Economic factors – including the general wealth and commercial health of the nation and the elements that contribute to it.

العوامل الاقتصادية وتتضمن الثروة العامة للشعب والوضع التجاري المتعافي للدولة وجميع العوامل التي تساهم في استمرارية وزيادة الثروات وتعافي الاقتصاد.

3-2 Criteria That Measure the Level of Advancement In E-Business

Since a distinction has been made between e-commerce and e-business for consistency (لغرض التناغم), the key drivers of e-business are also identified.

These are mainly at the level of the firm and are influenced by the macro-environment and e-commerce, which include:

1. **Organizational culture** – attitudes وضع to research and development (R&D); its willingness رغبة to innovate ابتداء and use technology to achieve objectives.

ثقافة المؤسسة: اهتمام المؤسسات بالبحث والتطوير والرغبة في استحداث واستخدام التكنولوجيا الحديثة لانجاز اهداف المؤسسة

2. **Commercial benefits** – in terms of cost savings and improved efficiency that impact on the financial performance of the firm.

الفائدة التجارية: وتكون متمثلة في تقليل الكلفة وتحسين الكفاءة والتي تؤثر على الاداء المالي للشركات

3. *Skilled and committed workforce* –is willing and able to implement new technologies and processes.

توفر القوى العاملة الماهرة

4. *Requirements of customers and suppliers* – in terms of product and service demand and supply.

احتياجات الزبائن والمجهزين

5. *Competition* – ensuring the organization stays ahead of or at least keeps up with competitors and industry leaders.

3-3 The Impact of Electronic Commerce/e-Business?

E-business and E-commerce impact on many areas of business. For example:

Marketing – issues of on-line advertising, marketing strategies and consumer behavior and cultures.

One of the areas in which it impacts particularly is direct marketing. In the past, this was mainly door-to door; mail order using catalogues or leaflets. This moved to telemarketing and TV selling with the advances in telephone and television technology and finally developed into e-marketing.

Computer sciences – development of different network and computing technologies and languages to support e-commerce and e-business, for

example linking front office and back office legacy systems with the ‘web based’ technology.

Finance and accounting – on-line banking; issues of transaction costs; accounting and auditing implications.

Economics – the impact of e-commerce on local and global economies; understanding the concepts of a digital and knowledge-based economy and how this fits into economic theory.

Production and operations management – the impact of on-line processing has led to reduced cycle times. It takes seconds to deliver digitized products and services electronically; similarly the time for processing orders can be reduced by more than 90 per cent from days to minutes.

Production systems are integrated with finance marketing and other functional systems as well as with business partners and customers (see Intel mini-case).

Case study

Intel launched their on-line business in summer 1998 when their sales shot from zero to \$1 billion per month in the first month of operation. The reason for this is that they totally re-engineered their processes to include small and medium-sized businesses.

Previously only Intel’s larger customers were connected to them by expensive EDI networks, leaving the small and medium-sized companies sending faxes or phoning in orders or requirements. Intel concentrated on

procurement customer support for a range of their products (including computer chips and microprocessors), developing an extranet (which is the linking of a number of intranets using Internet technology with added security creating virtually private networks). By using the extranet, authorized small and medium-sized business partners could place orders, track the orders and look at product documentation on the site. The savings for Intel and their customers were large – they eliminated 45,000 faxes in a quarter to Taiwan alone – saving on time, telephone charges and fax paper.

الفقرة التالية مهمة

Production and operations management (manufacturing) – moving from mass production to demand-driven, mass customization customer pull rather than the manufacturer push of the past.

Web-based Enterprise Resource Planning systems (ERP) can also be used to forward orders directly to designers and/or production floor within seconds, thus cutting production cycle times by up to 50 per cent, especially when manufacturing plants, engineers and designers are located in different countries.

In sub-assembler companies, where a product is assembled from a number of different components sourced from a number of manufacturers, communication, collaboration and coordination are critical – so electronic bidding can yield cheaper components and having flexible and adaptable procurement systems allows fast changes at a minimum cost so inventories can be minimized and money saved.

Management information systems – analysis, design and implementation of e-business systems within an organization; issues of integration of front-end and back-end systems.

Human resource management – issues of on-line recruitingتوظيف, home working and 'entrepreneurs' working on a project by project basis replacing permanent employees.

Business law and ethics – the different legal and ethical issues that have arisen as a result of a global 'virtual' market. Issues such as copyright laws, privacy of customer information, legality of electronic contracts, etc.