

The leading bodies for best practice and standards in electronic business working together to enhance UK performance

TOP LEVEL OVERVIEW OF E.BUSINESS

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Electronic business is the combination of working environments, business and administrative processes, data, computers and networks which allows individuals, teams and organisations to collaborate cost-effectively in order to achieve shared (or at least consistent) objectives, irrespective of the location or ownership of the people, resources and facilities employed. The potential of electronic business remains as great as ever, in spite of the dot.com boom and bust. The same substantial opportunities, and obstacles, exist. This paper is a brief guide for senior decision-takers, which aims to encourage sustained, consistent and cost-effective investment in e.business in all sectors of the economy.

1. e.business is an enabler – it is not an end in itself. e.business has to add genuine value for which someone is willing to pay. It is essential to focus first on the business improvements you want to make to the total set of processes and relationships which constitute your value chain, and then determine how best to support these electronically. It is therefore better to think of **business enabled electronically** - “B.e.e.” - focussing on business improvements to which electronic facilities can contribute (see “B.e.e. – The Future for e.business” for a fuller explanation – published by UKPeb – 2002).
2. e.business has huge potential to provide substantial improvements to:-
 - a. communications with and between all consumers, citizens, employees, communities with shared interests, and individuals – gathering, sharing and disseminating news, views, information and structured knowledge. Education and training can also be greatly enhanced by linking electronically to individuals wherever they wish to be - at home, in the office, on the move
 - b. communications among organisations participating in a common value chain/ network which provides end products and services – sharing data on plans and performance, on product/ service details and transactions.
 - c. configuration of new solutions to meet individual or business requirements – interactively developing better results than could be

achieved conventionally

- d. teamwork across many functions and organisations – creating an environment to support collaborative working, data sharing, and synergies which will result in levels of performance substantially beyond what can be otherwise achieved.

The above apply to both the public and private sectors, as do many of the following, although they are particularly applicable to the public sector.

e.business.can -

- i. Provide individuals with more systematic and integrated information on regulations, rights, benefits, etc.
- ii. Take data more easily and accurately from individuals, businesses, etc - and then process, analyse and disseminate management information.
- iii. Support more speedy and integrated methods for providing authorisation e.g. planning permission
- iv. Pay benefits to claimants more cost effectively
- v. Receive payments from individuals and businesses
- vi. Monitor actions and movements e.g. at ports via an integrated method of collecting and disseminating data for all authorities without hindering trade
- vii. Improve the ease and accuracy of doing business e.g. completing international trading documentation online via SITPRO's ElecTra
- viii. Buy and sell more cost effectively, including auctions : tender and contract – see 4 x/xi below
- ix. Undertake intra- and inter-governmental transactions.
- x. Undertake voting and seeking people's views.
- xi. Support education and training, in the office, at home, etc
- xii. Plan and manage major change projects - see 4 i/ii/v below

e.business enables the above to be undertaken with a higher level of interactivity with the citizen, client or consumer than is practicable by conventional means e.g. by paper forms. Within an agreed, secure framework of personal privacy, it is desirable to use the opportunities presented by e.business to integrate the above as much as is practicable. e.g. collecting and

storing data once only. This will help to provide a better service to the citizen and to business at a lower total cost.

3. the potential of e.business will only be realised when:-
 - a. facilities are focused most on meeting the recipient's or user's individual requirements, and not just on the sender's need to communicate. The wealth of information now available electronically results in a poverty of attention unless it is well structured.
 - b. there is high speed, low cost access. Delays and complexities in accessing information result in low use of e.business facilities. It is important to recognise that the power of electronic communications to reach most people in most locations is limited at present. The potential capabilities are huge; but a realistic assessment is needed of the facilities required by each end user to make full use of the potential services.
 - c. data are collected, stored and disseminated the minimum number of times. Data need to be consistent and accessible at all key points in each value chain
 - d. there is a high level of security, and confidence in the safety of applications, data and communications.

All the above can be achieved with due thought and preparation. Contact the UKPeb partners for more details e.g. on security and legal issues, (which can be particularly important when dealing with consumers at home and abroad).

4. E.business enables value chains to achieve a far higher level of performance than at present i.e. a better service linking customers, suppliers, individuals, agents and authorities at a lower cost. Key opportunities are:-
 - i. **design and development** – of new products, including engineering development and scientific research. Lead times and costs can be greatly reduced by electronically linking all the participants within a well-defined development process.
 - ii. **managing complex product changes** throughout their life cycles e.g. aircraft engines with all modifications known wherever they are to be serviced.
 - iii. **sharing knowledge** – knowledge management using “intelligent” software to make it easier to access the relevant data. Ready access to relevant data via well structured data bases.
 - iv. **structuring key master data** on - value chain *participants* (buyers, sellers, agents, authorities, individuals and teams),

products and services (descriptions, characteristics, prices/costs and technical specifications),

processes (how to make, treat, etc.)

physical assets.

Pre-aligning master data electronically among participants is vital before transactions are communicated e.g. confirming product codes and prices between buyers and sellers via electronic catalogues or EDI. Failure to do so results in extra costs and in poor service, refused deliveries, rejected invoices and delayed payments, etc.

- v. **managing projects and events collaboratively** – project definition, planning, simulation, costing, management and control, risk analysis, and integrated testing, etc. within shared electronic working environments. Collaborative Event Management software can be used to link all key decision-takers within a structured workflow, and to communicate all agreed decisions and data directly into all related computer applications. The above will support the achievement of shared objectives for performance, time and cost.
- vi. **joint management of the value chain** by sharing key plans and actual data to reduce the costs and failures caused by uncertainty between business partners – providing a higher level of customer service with lower inventory and waste and better capacity utilisation. This includes the use of Co-Managed Inventory and Continuous Replenishment techniques.
- vii. **sharing of performance data** on sales, output, quality, etc. in order to improve subsequent levels of service and operation.
- viii. **communication of transactions with speed and certainty**. The more that i) to vii) above are well implemented, the more data that can be communicated, processed and actioned automatically without delay.
- ix. **improved administration and accounting** through simplification and standardisation of joint processes – outsourcing work to wherever it is best done e.g. suppliers could do your accounting and administration on their computer systems, as well as holding inventory to provide high levels of service at a lower total cost. Work can then be done efficiently at any appropriate point in the value chain, whether remotely or locally, thereby supporting greater future flexibility of operation.
- x. **market making**, selecting suppliers (and/or customers), establishing prices – includes use of e.market places and auctions to gain best prices for defined products and services.
- xi. **agreeing contractual frameworks** on how business is to be done- including e.tendering and contracting, and thereby reducing the total cost

of procurement. There is great potential in e.procurement which includes many of the areas outlined above .

- xii. **managing financial flows** including payments, so that physical and financial flows are better integrated at a lower total cost.
5. These developments will allow businesses to sell more and to reduce costs, i.e. to enhance profitability. They will support improved performance through more effective joint working by all those whose collaboration is essential to achieve the agreed result. They will allow the public sector to provide a better service at lower total costs – of great importance when demands for improved services are ever growing, while willingness to add to taxation is small.
 6. The above potential improvements to our national and global value chains will only be realised if:-
 - i. **You** redevelop your value chain processes in much more simple, standard, speedy, certain, and thereby cost-effective ways. Applying e.business to unreconstructed ways of working is not going to be profitable. Complexity, clutter and paper (including computer-produced paper) need to be minimised.
You first need to develop new business processes and then enable these electronically-“B.e.e.”
 - ii. **You** develop the skill sets to do this in the public and private sectors – these are above and beyond IT skills and include process analysis and value chain management skills
 - iii. **You** encourage commitment by all key players to run e.enabled value chains much more collaboratively than hitherto. Competition needs to be promoted; but e. will not enable modern value chains to work well unless there is a cultural change which supports genuine collaboration.
 - iv. **You** support the development and use of common data and e.business standards (Simpl.eb, ebXML, GCI, STEP, EAN coding etc. - please ask the UKPeb Partners for details, particularly on the work to protect standards and best practice from technological change) especially in relation to defining standard data elements, key master data, shared data environments, messages and codes to link the physical movements of goods to information flows and to facilitate design and development. There are no quick fixes in implementing e.b, and your management teams need to understand the agreed standards and best practice.
 7. The benefits of e.business can now be realised in a variety of ways because of the development of new technologies, most notably the Internet. It is now practicable to choose where it is most economic to hold, process and communicate data in a variety of locations:-

- On your own computers
 - On those of suppliers or customers. Note that a supplier is likely to know most about his products, and therefore he can be the best source of product data.(Indeed you should consider insisting that your suppliers are up-to-speed in e.business so that they are minimising their costs and maximising their service levels).
 - On third party computers providing particular services
 - In industry electronic catalogues
 - On e.exchanges providing a wide variety of facilities
 - On value added networks, where data are not actually processed, but routed in bulk to trading partners for automatic processing and actioning
8. Senior management in the public and private sectors now need to take effective action to sow the seeds which will enable the fruitful harvest of e.business to be realised in the years ahead.

You should :

- quantify your objectives to improve service, sales and profits and to reduce costs and uncertainties
- assess your opportunities for improvement and your readiness for enabling your business electronically via special tools which are available from the Partners (UKCeB and e.centre)
- define better joint processes with all key participants in your future value chains which will support the achievement of agreed objectives
- develop skill sets in process improvement and value chain management as well as e.business
- define your required master data and catalogues; your data bases and shared data and working environments, and your structured communications
- define your e.business architecture, standards and facilities required to support the above.
- develop a cost/benefit plan for better business enabled electronically which will produce acceptable returns.
- **invest now in strong foundations for future business and administrative benefits, enabled by e.business**



The Partners have a wealth of experience in best practice and standards for e.business to aid your progress. Contact them now for each key e.business topic.

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