

CHAPTER FOUR

4

CONCLUSION AND RECOMMENDATIONS

This comprehensive study high-lighted several important issues relating to the benefits of implementing EDI, as a "tool of trade", at the Port Klang Community System.

Firstly, it verified that this technology is in the early stages of the adoption curve, and will therefore reach an even more accelerated rate of adoption in the future.

Secondly, the success of the implementation of PKCS depended on the total integration of the relevant parties, namely the Forwarding Agents, the Shippers, the Bankers, the Hauliers, the Customs, the Port Operators etc. At this point in time, the study revealed that only about 25% of the total "Community", had been "connected" to the Network system. Hence the evaluation program had to be confined to information gathered from, the Customs and some of the Forwarding Agent' points of views.

Thirdly, the study found that the application of the concept of EDI at PKCS, did result in an overall cost benefit to all the parties concerned. The benefits were in relation to time savings, labour hour savings, and cost savings in the reduction of paperwork and manpower usage.

It is widely believed that conventional technologies, usually have an incremental impact on the functioning of the firm. In the process of transforming inputs to outputs, these technologies contribute to the overall efficiency or productivity of the firm. Certain

technologies however, engender paradigmatic shifts in the ways businesses function. The focus of paradigmatic technologies is on revamping organizational processes.

They create opportunities to question and evaluate the efficacy of the existing processes. In the light of these technologies, industries usually go through what are called periods of technological discontinuity. During these periods, the innovative firms, through top management support, adopt, diffuse, and manage the emerging technology in an aggressive but orderly manner.

The laggard companies do not have the strategic vision to see the potential of paradigmatic technologies to improve comparative efficiencies or create sustainable leaders rather than followers.

In recent years, even though we have witnessed the advent of many technologies, only a few fall into the paradigmatic category. In the 1980s, personal computers brought about profound changes in the way individuals collected and processed information. This phenomena, in turn, caused fundamental changes in firms' organizational structures and control systems, thus leading to re-engineering of almost all organizational processes.

Another paradigmatic technology that appears to have a staggering impact on organizations is EDI. And EDI is still in an early stage of expansion, growing at an annual compound rate of 45%.

4.1 ISSUES TO CONSIDER - RECOMMENDATIONS

Modern technology such as EDI, which enables structured trade data to be transmitted electronically via the telecommunications network among the trading partners' computers, is fast evolving to be the defacto mode of business communication in international trade in the 90's.

EDI means, trade data transmitted at a speed next to light and independent of the geographical distances, also has another very powerful impact. Agreeing to do business by EDI, means that the trading partners agree to simplify and harmonise many aspects of business practices, e.g. the precise meaning of Purchase Order, the Legal Framework, etc.

It is also being envisioned that once the Single European Market program is fully implemented, any data required by the national boundaries, e.g. data for Customs Declarations or statistics, will be progressively collected by EDI using United Nations Standards (UN/EDIFACT) messages. It has been targeted that the ultimate objective will be to collect over 80% of the relevant data by EDI. The emergence of EDI as a standard business communication culture in the global arena, will inevitably pose a new frontier to the developing countries in the 21st century.

In the absence of an efficient national EDI infrastructure, developing countries will be handicapped by the inherent deficiencies of their traditional document processing procedures. Soon, the traditional economic advantage of lower cost of land and labor offered by Malaysia will not be commercially attractive to the overseas trading partners,

especially in the following areas:-

1. Large corporations demanding that their suppliers acquire compatible communication capabilities in order to efficiently do business with them.
2. Overseas intermediary service providers such as the banks, insurance and shipping companies are implementing EDI applications to improve customer service. Exporters can use such EDI services to save cost and improve information lead time.
3. Large manufacturing corporations using "JUST-IN-TIME", manufacturing to cope with rising competition, high cost of storage space and handling charges. This international business reality demands the overseas suppliers to possess similar EDI communications capability in order to complete the supply-production cycle.
4. The destination frontier agencies such as the Customs and Port Authorities in the major markets, are relying on Information Technology to improve their operating efficiency. Many of them have started EDI way to process cargo declarations since the 70s. These agencies are now requesting the overseas shippers to submit their declarations electronically so that 80% of the document processing can be completed by computers prior to arrival of cargo. Otherwise, a penalty will be imposed on cargoes that fail to comply with such a requirement.

The following (Figure 14) would be a good indication of

the factors to consider, in priority, as recommendations, for the success of an EDI systems application, specifically in relation to the implementation of the PKCS>

- o The need for top management's commitment towards the idea of EDI.
- o One of the issues highlighted during the research study was that, there was insufficient awareness amongst the potential EDI users. The most difficult being the lack of EDI education and awareness. A lot of companies are still unfamiliar with EDI. Some think they are doing EDI when they fax paper documents. Unfortunately, fax does not solve other business needs that are just as important, but not as urgent, such as reducing costs and shortening the business cycle by eliminating paper handling and increasing the accuracy of data by eliminating the rekeying of information.
- o The Customers who wish to apply EDI, should be given thorough implementation support, so that the re-engineering process is made as painless as possible.
- o For an EDI system to succeed, it is necessary for the potential user-parties to be given proper training in the usage of the computer systems, and its beneficial potentialities.
- o The volume of transactions would determine the aptness of using EDI. In a low volume operation, implementing EDI, would not serve the purpose as effectively as in a high-volume scenario. This was one of the vital features that determined the application of EDI at the Port

SUCCESS FACTORS IN EDI IMPLEMENTATION

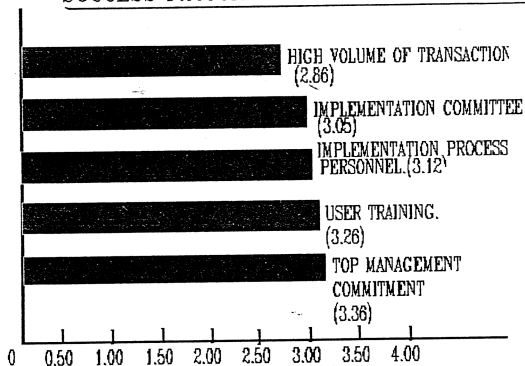


FIGURE 14

Klang Customs, in view of the colossal volume of documentation that the Customs Department had to process, in a trade transaction.

- o Finally, many different applications of EDI are possible within a business environment. The maximum benefits of EDI will be achieved only when the circle is complete and all applications are INTEGRATED - when all parties of the business cycle are inter-connected electronically. If part of the cycle is running at 10% of the speed of the rest, the whole system is dragged down. Putting a powerful motor in a car does little good if it has the aerodynamics of a box !

EDI, however necessary it may be to corporate survival, in the future , it is not in and of itself sufficient to ensure success. As Michael Hammer, the information technology consulting guru, expressed so neatly, "being a user of leading-edge technology is not the same as being a leading-edge user of technology".

Adopting EDI does not mean that survival is assured. To use an old example, it would have been impossible to do calculus with Roman numerals, the old technology. Arabic numerals allowed calculus to happen, but did not ensure that it would happen.

EDI needs to be integrated with other information technologies like bar coding, image processing, database management systems, electronic mail, video conferencing, and telecommunications networks to build new competitive organizations. It also must be aligned seamlessly with quality

programs, personnel and training policies, and product innovation to fulfill its true promise.

In the 80's, the newly industrialised economies (NIE), in envisioning the above global trend in the 90's, have opted for a systematic, planned approach to prepare themselves for the new challenges. Today, based on the consortium approach, the NIEs are at the advanced stage of setting up their respective nationwide electronic trading infrastructures.

This development will inevitably pose a new challenge to Malaysia - a challenge which, in the common interest of National competitiveness, will require every organisation, regardless of size and interest, to work together selflessly. Only then, can we achieve the common goal of transforming our country into a world class trading nation, by the year 2020.