

**CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE**

**FACULTY OF ECONOMICS AND MANAGEMENT**

**DEPARTMENT OF SYSTEM ENGINEERING**



**DIPLOMA THESIS**

**INFORMATION AND COMMUNICATION PROCESSES IN THE  
MANUFACTURING COMPANY OF EPYLLION GROUP IN  
BANGLADESH**

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# "INFORMATION AND COMMUNICATION PROCESSES IN THE MANUFACTURING COMPANY"

## **Abstract**

The main objective of this thesis is to analyze current state of information system and communication process on the Textile manufacturing sector. An empirical case study of existing system of Epyllion Group (Leading manufacturing industry in Bangladesh) was conducted and a new model was proposed by analyzing current state ICT Infrastructures, considering theoretical part, interview with the Company representative(Corporate IT Manager), documents analysis, research & overviewing the Company data new proposed model was designed. This model include basic functionality and general manufacturing process as well as evaluating usages of ICT communication, analyzing current state ICT Infrastructure, organize it, customized to fit the requirement for new proposed model. The implementation of the new information and communication process Cloud based communication will lead to development and achievements of different business functionalities(ERP, email communication, data security, Software & Applications, documents in cloud, storages etc.) which could not be achieved by the Linear Communication process. The biggest challenge of ICT in the future is security of data, application, software, websites and it could negatively impact the connectivity to public networks and business network where people are involved at every level.

**Keywords:** Manufacturing companies and ICT, impacts of ICT, Current state information and communication process.

## **Objectives and Methodology**

### **Objectives**

The main objective of the thesis is to analyse current state of information and communication processes in a manufacturing company in Bangladesh.

The partial goals of this thesis are such as:

To generate a dynamic overview of a current state of the art in information and communication process in manufacturing enterprise information systems. Further a theoretical and practical explanation of current state of ICT (Information and communication technology) in manufacturing environment will be analysed and address.

To analyse and select an optimum solution of current state information processing and communication arrangement in the selected manufacturing company base on case study.

To develop a feasibility study as well as to evaluate the proposed solution in information and communication process.

### **Methodology**

Methodology of the thesis is based on study and inquiry of the academic papers, journal, Books, online search engine and professional resources of business information processing and communication system. The design of information and communication process and implementation will be based on a case study in selected manufacturing company (Epyllion Group) in Bangladesh. Based on the theoretical finding and outcomes of the practical part of thesis, the conclusion and recommendation part will be framed.

### **Summary:**

Summary of expected results by implementing the new proposed design instead of the old broadband network and communication process the Epyllion Group will not only optimize their business processes and internal communication but also they will reduce the operational expenditures because of the termination of the separate contracts that each of the factories had previously with the internet and mobile service providers. Furthermore, they will have the manageability of the corporate network in their own control. Because of the new IP VPN routing infrastructure, the data traffic within the network will be more equally spread since the factories can easily communicate with each other without the authentication approval from the head quarter. The new network design cloud based communication process will help to run it easier to integration of factory offices and branch offices, just by replicating the current structure of any of the other branches so the implementation of the new information and communication process Cloud based communication will lead to tremendous improvement and achievements of different business functionalities which could not be achieved by the Linear Communication process or system.

### **Conclusion:**

The main objective of the thesis was is to analyse current state of information and communication process in a manufacturing company in Bangladesh, and partially to generate a dynamic overview of current state of the art in information and communication process in manufacturing process in Bangladesh.

The first Partial goal of the thesis was theoretical and practical explanations of current state of ICT (Information and communication technology) analyse and address.

In theoretical and practical part (Case study) already describe current state ICT process and implementation advantages & disadvantage and its details functionality. Which will be very useful information source for Epyllion group as well as others manufacturing companies in Bangladesh.

The second partial goal was to analyse and select an optimum solution of current state information processing and communication arrangement in the selected manufacturing company base on case study.

As per the second goal author analysed current state information communication technology methods of selected company after analysing and interview with company representative new proposed designed is created which is Cloud based communication model that will be the optimum solution for Epyllion group and also others manufacturing company can apply this proposed model.

Now a days Communications is very fast and easier if we know how to use it so that we need to use Cloud based Information & communication technology for business due to its worldwide business value and strong services, flexibility, users friendly and globally useful. However the methodological approach & research finding have great potential to explain, analyze & evaluate usages of current ICT model which is Linear Communication model and solution for future business development will be Cloud based communication to increase effective information & communication process in manufacturing industry of Epyllion group in Bangladesh.

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