Chapter - 1

Introduction

1.1 Research Backdrop
1.2 Effectiveness and Collaboration
1.3 Research Problem
1.4 Thesis Outline
1.5 Definitions

References
Introduction

1.1 Research Backdrop:
Achieving Organisational Effectiveness is the major concern of all kinds of organisations in the world. An organisation may be outputting efficiently but the question always arise - Are the customers and stakeholders well satisfied with the performance of the organisation? If answer is positive, one can conclude that the organisation is heading towards right direction and it is an effective organisation; and if the answer is negative, the members of the organisation are required to examine the internal processes to analyze and adopt corrective measures so as to do the ‘right things’\(^1\) as explained by Peter Drucker for effectiveness.

The organisations include group of people involved in number of processes to achieve common goals. This needs a considerable degree of collaboration among actions of the people involved in the processes. Therefore it can be understood that collaboration is one of the most important element in the success of any organization in achieving its objectives. In other words, having an adequate level of collaboration is essential for achieving organizational effectiveness. The modern age is better known for the advancement in the field of Information Technology. Development of digital collaborative tool known as Groupware is one of the major contributions of Information Technology in supporting collaborative work in group environment. Therefore, it stimulates to understand the role of Groupware in collaborative activities of the organisation in achieving goals. This research work is concerned with understanding the use of Groupware in the organisation for collaborative work activities and examining its role in achieving organizational effectiveness.

1.2 Effectiveness and Collaboration:
This research is intended to study and examine the effects of digital collaborative tools on organizational effectiveness. Therefore, it centers around three important concepts, the effectiveness, collaboration and the digital collaborative tool i.e. Groupware. The study starts with the understanding of these central concepts for the purpose of research with the help of available literature on these topics.
**Organisational Effectiveness:** “Organizational effectiveness is the concept of how effective an organization is in achieving its goals.” ² All organizations have been established to achieve some specific goals. In simple words, if these goals are achieved the organization can be considered as effective. In more detail, the term can be understood as organizing and directing the organizational resources in a way that all stakeholders are getting maximum satisfaction from organization’s performance. Business organization is established either to produce something or to provide some kind of service. These products and services are used by people or establishments outside the organizations on which it has no control. They use the product or service willingly under various criteria for being attractive and useful. Products and services are supposed to be fulfilling the maximum requirements of its intended customers and if an organization is able to do so, it can be considered as effective. The effectiveness of an organization can be understood on the two important dimensions: firstly, its product or services provides maximum satisfaction to its customers and secondly, the business is sustainable in long run.

**Collaboration:** Now the question is how the effectiveness can be achieved by an organization. Organization is made of various elements and when all these elements are put together in a specific direction with a defined goal, the organization is sure to meet the desired objective i.e. providing maximum satisfaction to its customers with business sustainability. Human resource is the most important resource in the organization which uses all other resources. In modern business era, people have learnt social skill as the complex environment requires them to work in teams and groups. An organization itself is an integration of various groups structured for specific functions. Within the individual groups as well as among all of them, it is essential to maintain a high degree of collaboration in order to utilize the all available resources in the best way toward meeting organizations objectives. Due to essential nature of collaboration, business organizations have always been concern with the team work, team spirit, team building and team performance. This means, high degree of collaboration among various elements of an organization is very crucial to meet the criteria of being effective.
In modern days the business environment has become very complex. There are various challenges and opportunities in the external environment. Therefore, organizations need to be very careful in selecting the manpower with social skills that are able to work in relation with others; who can collaborate with other members of the team and have knowledge of IT (Information Technology) for better information processing & information exchange. The two main constituent of collaboration are – Communication and Coordination. BusinessDictionary.com defines communication as “A process by which activities of a society are collected and coordinated to reach the goals of both individuals and the collective group. It is a subfield of general communications studies and is often a component to effective management in a workplace environment.” In this definition the communication is viewed very crucial for achieving the goals of individual and group. The focus of this research will be in studying the IT tool Groupware in terms of better communication as part of high degree of collaboration. Another component of collaboration is – Coordination. BusinessDictionary.com defines coordination as “The synchronization and integration of activities, responsibilities, and command and control structures to ensure that the resources of an organization are used most efficiently in pursuit of the specified objectives.” Through coordination various organizational resources including information are optimally utilized.

The collaboration has been very rightly defined by Mr. Carlos Dominguez on Cisco Blogs “Collaboration is highly diversified teams working together inside and outside a company with the purpose to create value by improving innovation, customer relationships and efficiency while leveraging technology for effective interactions in the virtual and physical space.” The groupware is considered to improve the coordination of activities and timely communication in organization. Thus collaboration is one of the most important aspects to achieve the organizational effectiveness.

**Digital Collaborative Tool:** This research work is all about studying the effects of collaboration on effectiveness with the application of Groupware. In very simple words the groupware can be taken to be application software which is used to collaborate the activities of members of the group. It is perceived that this modern tool
for collaboration has the capability to improve the working culture of the group environment and group decisions making and thus, the group is expected to become effective. This research will explore the important milestone in the development of the groupware worldwide. The implementation of groupware is the area of concern for getting the desired result with the use of Groupware. The research will try to throw light on the important implementation issues and suggest the solutions for its effective use.

1.3 Research Problem:

The main objective of this research is to study the role of Groupware in enhancing organisation effectiveness. The Groupware, a modern tool of collaboration, is being used by almost all modern organisations up to some extent. Therefore, this research proposes to examine the role of Groupware in enhancing organizational effectiveness with the data collected from Fertilizer Industry. This is the major research problem for the present work.

To examine the role of Groupware it is essential to understand the terms (1) Organisational Effectiveness (2) Collaboration and (3) Groupware. Apart from this research problem, the secondary objectives of the research are also proposed as mentioned below:

(i) Being effective is the only widely accepted criteria for an organization to flourish and remain sustainable for long time. But the question is – what is effectiveness for an organization? Effectiveness is considered as ‘doing right things’ as mentioned above. What are those right things for the organization? Therefore, one objective of the research is to clearly understand the meaning of effectiveness in terms of Industry.

(ii) The next question is that how an organization can become effective. What are the elements that can make an organization effective? There may be different elements for different organizations. Modern business environment is very complex and responsibilities are generally collective. We can say that present business environment is “group work environment”. In such a business situation proper coordination,
communication, information exchanges are very crucial to organizational performance. Thus another objective of the research would be to understand the importance of collaboration in organizational effectiveness.

(iii) “Groupware” is a modern tool for collaboration evolved through the years as advancement in the field of Information Technology. In general, any software or hardware that facilitates communication and coordination among members of a group can be termed as a groupware. The concept of groupware originated in around 1962 when Douglas C Engelbart published his collaborative concepts “Augmenting Human Intelligent: a conceptual Framework”. Since then research and development is continuously in progress. Today, we have a number of applications that are supporting group work environment. Therefore, third intent of the research is to study the developments in groupware to analyze its role in collaboration.

1.4 Thesis Outline:

The thesis has been divided into nine chapters including Introduction as chapter one. The nine chapters can be grouped into two broad categories: One group as ‘Literature Review’ and second as ‘Empirical Research’. The Literature review starts from ‘Chapter Two’ up to ‘Chapter Six’ which includes study of literature on Organisational Effectiveness, Collaboration, Groupware and insights of Indian Fertilizer Industry for the purpose of this empirical research. The brief introduction of each the remaining eight chapters are given below:

Chapter Two, the “Effectiveness in Terms of Industry” explains the key concept for this thesis, which is Organisational Effectiveness. It includes three aspects (a) Meaning of Organisational Effectiveness (b) Contributing Factors to Effectiveness and (c) Measurement of Effectiveness. The literature has been searched and studied to understand the meaning of effectiveness and its meaning for Industry (business). The various contributing factors have been taken into consideration for the purpose of this thesis. At the end, the chapter includes different measures for effectiveness proposed by literature. This chapter forms the basis for the present work as this research intends to provide ways to enhance organizational effectiveness.
Chapter Three, “Ingredients of Collaboration” has been included to understand the concept of collaboration and its importance in organisational effectiveness. Three topics on this concept have been taken to understand through this chapter: (a) Meaning and Definition of Collaboration (b) Ingredients of Collaboration and (c) Importance of collaboration for Organisational Effectiveness. The present research is trying to examine the role of digital collaboration in enhancing the organisational effectiveness and therefore it is essential to understand the concept of collaboration in view of literature available and also to understand how the literature views its importance in achieving organisational effectiveness.

Chapter Four, “Groupware as a Modern Tool for Collaboration” is included to understand the existing and evolving technical aspects of the digital collaborative tool. The chapter includes definition of Groupware, its Evolution, tools termed as Groupware, Research and Development in Groupware Technology as CSCW (Computer Supported Cooperative Work) and implementation issues as raised by previous researches. The available researches and literature have been explored to understand the different aspect of this new technological term which is still advancing to include more facilities for group environment. The groupware is changing the dimensions of collaboration and thus redefining groups and group dynamics. It extends the capabilities of human beings in group environment through technological tools in collaboration.

Chapter Five, “Fertilizer Industry”, includes (a) Brief History (b) Current Status and (c) Major Companies of Fertilizer Industry. The chapter is important in this thesis as the data collection has been done from fertilizer companies. The Fertilizer Industry has been selected for the purpose of data collection on the uses of Groupware as number of public sector companies are not performing as they are expected and few of them are even declared sick units and referred to BIFR (Board for Industrial and Financial Reconstruction), Government of India. At the same time some private and cooperative companies are doing well in this industry. The research will provide a way to enhance organisational effectiveness through better collaborative practice.

Chapter Six, “Collaborative Needs of Fertilizer Industry” has been included to understand the Groups and group processes along with collaborative needs of the
Industry. A system of requirement analysis for different collaborative tools that support group work has also been explained citing available literature. This chapter will help to understand group dynamics, collaborative requirement and tools for collaboration for the purpose of adopting data collection methods and data analysis. With this chapter the literature review ends and chapters on empirical research start.

Chapter Seven, “Research Methodology” is the first of the three chapters dedicated for empirical research. This chapter starts with summary of literature review delimited by the objectives of present research work followed by the finding of the research gap in view of literature review. Chapter includes the research hypothesis to be tested. It describes the Research Design in detail which includes the Population, Sampling Methods, Sampling Size, Questionnaire Design with pre-testing & Final Structure of questionnaire, defining variable relationship, data handling etc. The chapter includes the details of research tools used for the purpose of data collection, analysis and hypothesis testing. This chapter is a step to step description of the empirical research.

Chapter Eight “Uses of Groupware and its Impact on Fertilizer Industry” is dedicated for analysis of data collected from two fertilizer companies, interpretation of data, testing of hypothesis and findings of the research. In this chapter the empirical research has reached at some conclusion. The data has been prepared for analysis using MS Excel table and charts. The chapter includes charts, diagrams and other tools to analyze the data. After data analysis, the interpretation of data has been done on the basis of literature review. The research hypothesis has been tested through testing of eighteen sub hypothesis. As the data is of non-parametric in nature Chi – Square test has been used to test the hypothesis. The chapter includes research findings after the analysis for interpretation and reaching at the conclusion.

Chapter Nine “Conclusions and Suggestions” is the last chapter of this thesis. It includes Limitations of Study, Contributions of the Research, Future Scope and Suggestions. The chapter provides suggestions for collaboration in the group environment so as to enhance the organizational effectiveness.
1.5 Definitions:

The Organizational Effectiveness is a widely used term in the organisational literature for achieving intended results and success in satisfying all the stakeholders. The term has been used interchangeably with “effectiveness” in the thesis for the purpose of simplicity.

The two terms “The Digital collaborative tool” and “Groupware” have been used interchangeably in the thesis but meaning of the both the terms have been taken to be same in this research work.

CSCW is the popular acronym used for “Computer Supported Cooperative Work”. The thesis has used both the terms interchangeably at different places, both carrying the same meaning.

This chapter has laid down the base for the thesis. The backdrop of research, effectiveness & collaboration and research problem has been explained in general terms. The key terms “Organisational Effectiveness”, “Collaboration” and “Groupware” have been defined for the purpose of understanding their use in the thesis. The chapter has introduced all the chapters in brief with justification of its inclusion in the thesis.

References


...