CHAPTER I

INTRODUCTION

1.   Over the past few decades, world moved towards the information technology rapidly with tremendous changes in the field affecting every aspect of life. Any country, any organization or any person has to adjust with these changes of information technology in millennium for moving ahead. Due to rapid development of information technology related technologies such as telephone networks, satellites, computers are interconnected each other creating a vast network. Networking is just the biggest thing that has happened to computing since its birth. The biggest manifestation of the networking phenomenon is the Internet which spans across the globe and has more than 90 million users logging on to it at some point of time or the other.[1] The Intranet was derived from Internet connecting a small private network with in an organization to distribute the organizational information internally among the employees. Intranets connect people together with Internet technology, using web servers, web browsers and data warehouses in a single view.[2]

2.   In the past years more private and government institutes more concerned about the Intranet and its ability to access to information. It is the outcome of many years of technological advances and rapid development in Internet computing. The commercial and government institutes are realizing saving money, high productivity and resource sharing by utilizing this low-cost, easy-to-set up, self-governing, universal network. One of the greatest achievements brought by Intranet is easy to go through the information which is available universally for the unlimited number of employees in a particular organization.

3.   The Sri Lanka Navy maintains her web site under the Uniform Resource Locater (URL) http: // www.navy.lk and her Intranet under https: //intweb.navy.lk at present. The Sri Lanka Navy introduced the Intranet system to the setup with the purpose of utilizing the

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[1].   Parag diwan, KK Suri, Sanjay Kaushik, ed. IT ENCYCLOPAEDIA.COM :Volume 5: COMPUTER NETWORKS AND E-COMMERCE. New Delhi: PENTAGON PRESS, 2000.Print.

[2] .   Parag diwan, KK Suri, Sanjay Kaushik, ed. IT ENCYCLOPAEDIA.COM :Volume 1: Fundamentals of Information Technology. New Delhi: PENTAGON PRESS, 2000.Print.

Intranet as a communication tool, knowledge sharing tool and a decision support/making tool on 29th August 2005 with the purpose of enhancing the performances and efficiency within the organization. Especially the Intranet was developed to ease for making decision and sharing knowledge with the available information and easy access to the information. However, utilization of Intranet system effectively by users in the Navy still remains unanswered. The naval personnel have not been using the Intranet actively as the organization had expected. In the long run, when the global Intranet is becoming the main internal communication channel, navy is going backward. The aim of this study was to find answers to the following three questions,

    a.   Do naval personnel use the Intranet effectively?

    b.   To identify, the reasons for not utilizing the Intranet effectively by naval personal if any.

    c.   How to improve the effective utilization of Intranet among the naval personal?

4.   Finally, the ultimate goal of this thesis work is to identify the drawbacks of utilization of the Intranet by the naval personnel and give the concrete recommendations to enhance the utilization of Intranet by naval users. It will enable to increase the performance efficiency in the organization by reducing time wastage. Further it reduces the use of papers and save money.

Limitations

5.   Non availability of the academic research materials related to the navy Intranet at present is the main limitation of the study. Another limitation is the population and sample of the survey. The population of survey selected by researcher consist with officers in various ranks and may lean towards the middle rank and junior rank officers. Other thing, in this study has been focused on the officers but there are sailors and navy civilians who utilize the Intranet but they are not concerned here. So result may not be justified. In addition actual sample size is not valid evaluate the entire navy utilizing of Intranet because navy bases have been established all over the country and it is practically difficult to study entire cadre in the navy with the limited time duration, limited resources and due to official commitment.

Another limitation is few satellite bases of navy do not have the Intranet facility and therefore unable to evaluate entire navy.

Literature Review

6.   The exploration of previous literature and research, on Intranet, presented in this chapter gives a general understanding of Intranets and their use as a communication tool, knowledge sharing tool. Although, any research or survey on Sri Lanka Navy Intranet, has not been carrying out yet.

7.   In year 2001, Meera Gopinath has done a research on the topic of Effectiveness of the Intranet as an Employee Communication Tool. According to this research, the author has found that the majority of the employee considers the Intranet as a useful tool due to its numerous benefits. For example, it reduces cost, save time, provides high storage capacity for current and archived information, centralize information database and is easy to use without much training.[3] The Sri Lanka Navy also introduced the Intranet with the purpose of enjoying above benefits. The letters, memo, policy decisions, appointments, orders and instructions etc.... which are promulgated by the Naval Head Quarters, are displayed on the Intranet. Otherwise it has to be informed by a letter to relevant authorities. So it has been drastically reduced the use of paper and there by reduces the cost. As well as it cuts down the time which taken to receive the message and naval personnel are able to get up to date information immediately. Further, the Intranet gives large storage capacity to store information. As Meera Gopinath reviled by his study, Navy intranet is also user friendly and can operate without much knowledge.

8.   According to the study, The Role of the Intranet in Enhancing Communication and Knowledge Sharing in Multinational Company by Marja Rajalampi in 2011, the finding indicates that the Intranet is mainly used as an information distribution channel at the moment. Employee appreciate having one common place where they can find all work related instructions, documents, templates and tools that ease their everyday work.

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[3]   Meera Gopinath, 'Effectiveness of the Intranet as an Employee Communication Tool' 15 sep 12, < domapp01.shu.edu/depts/uc/apps/libraryrepository.nsf/resourceid/33704D80EC4F367B85256E23005244F2/$File/Gopinath-Meera.pdf>

Furthermore, they are pleased to find there details of other office and colleagues so that they can quickly contact each other. According to the research people are also keen on reading the Intranet what happens both with in the company (internal news, appointments and organization changes) and out side it. The survey finding has clearly indicated that employees are expecting to find more local news in the Intranet. As per the research, the most important reason why people go to the Intranet seems to be reading latest news.[4] As well as Navy Intranet is also enriched with relevant instructions, orders, documents, manuals, templates and tools. Naval personnel can find all work related matters which are required to perform their duty and role effectively. Some times they can find the information quickly. Further, as revealed by Marja's research most of the naval personnel are surfing the Intranet to find internal news, appointment and welfare matters.

9.   Lindiwe Mpindiwa has studied in 2010 the Impact of Intranet as a Knowledge Sharing Tool with the Experience of Zimbabwe Revenue Authority. According to this research, there are many challenges that are met in the quest to achieve the goal of using Intranet. First most people in different offices and departments do not have personnel computer technology. Another problem they are facing unreliable connectivity, lack of connectivity due to poor infrastructure lack of information that one needed most some of respondents has been indicated that they did not know all the Intranet tool, because they do not use them. Further this study reveals that all the employee are aware of the existence of the Intranet and do not really understand. Further respondents of this study highlight that the issues that affect the effective use of intranet. They are,

a.   Inability to fully utilize the tool available in the Intranet to share or access knowledge, inadequate training.

b.   Limited computing resources, poor and slow connectivity[5]

10.   As well as the Navy also has to face those challenges. All the satellite bases do not have the infrastructure facilities for the Intranet and still construction of few bases for the Intranet is in progress. Another problem the Navy face is unreliable connectivity. In some

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[4]   Marja Rajalampi, 'The Role of the Intranet in Enhancing Communication and Knowledge Sharing in multinational Company' 15 Sep 12< https://aaltodoc.aalto.fi/handle/123456789/722>

[5]   Lindiwe Mpindiwa, 'The Impact of Intranet as a Knowledge Sharing Tool with the Experience of Zimbabwe Revenue Authority'< http://conference.ifla.org/past/ifla76/107-mpindiwa-en.pdf>

areas Intranet connection is break down due to weather, trafficking and technical failures. All the naval personnel are not familiar with the computer and they are having very limited knowledge in computer literacy. With this knowledge in computer literacy, all the personnel are not well aware of the Intranet and unable to utilize the system effectively. Although some are having required knowledge to use the Intranet, resources are very limited.

11.   According to the case study done by Ramalah Hussein and his group at selected Malaysian Company, three types of utilization user modes can be recognized from an Intranet environment in an organization. Those are transacting mode, searching mode and interacting mode. The employees surf the Intranet time to time through those modes with the intention of decision support/making or knowledge sharing. This is directly affected to the performance and effectiveness of the individual employee and ultimately to the organization.

12.   **Transacting**.   Today, many organizations have integrated their Intranets with functional business information systems such as Human Resource Information Systems, Financial Information Systems, Customer-Relationship Management Information System, E-commerce systems etc. This integration makes the Intranet as the universal front end and facilitates users with single sign-on. Studies have demonstrated that the most commonly found systems that are integrated into the Intranet is the Human Resource Information Systems. Within the systems, enable employee to monitor and update their records effectively. The system also allow employees to commit to numerous on-line transactions such as training request, leave request, expense reimbursement request and individual profile update.[6]

13.   **Interacting**.   The literature suggests that one of the main functions of utilizing Information Technology is for work integration. Work integration denotes that Information Technology can be exploited for enhancing and promoting collaboration with colleagues, superiors or subordinates. In the context of Intranet, Intranets have been utilized to serve this purpose. Intranet functionalities such as E-mail, E-group, forum room, mailing list and discussion list can be utilized not only for communication purposes but also for workgroup cooperation and collaborations. According to, in the interacting mode of

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[6]   Ramlah Hussein, Mohamad Noorman Masrek, Nor Shahriza Abdul Karim, 'The Utilization and Effectiveness of Intranet: A Case Study at Selected Malaysian Organizations',12 Sep 12 < http://www.ibimapublishing.com/journals/CIBIMA/volume4/v4n27.pdf >.

utilization, people share information with the goal of being able to modify them and send them back; hence this configuration allows a bidirectional flow of information.[7]

14.   **Searching**.   Prior to the arrival of the Intranet, organization information searching has always been very cumbersome task to many employees especially those working in large organizations. The difficulty of locating required information has caused great problems not only to individual but also groups, departments and even organizations. Timely information has always been critical in situation where decision has to be made instantly. With the implementation of the Intranet, information searching and retrieval is no longer seen as problematic. Just by a click of a button, the required information is readily available. This is because a huge amount of organizational information such as organization profile, reports, minutes of meetings, job manuals, ISO documents is usually loaded on to the Intranet and the search functionality within the Intranet allows users to easily search and locate required information. Previous studies have demonstrated that information searching has been one of the primary purposes for users utilizing the Intranet.[8]

15.   **Intranet Usage for Decision Support**.   Previous studies have widely explained the utilization of Information Technology for decision support/making and components of decision support. Components of decision support are categorized in to two as problem solving and decision rationalization. Problem solving has defined as the "extent that information Technology is used to analyze cause and effects relationships". Decision rationalization has defined as the "extent that Information Technology is used to improve the decision making processes or explain/justify the reasons for decisions". So, decision maker must have sufficient, required information such as data bases, memo, video clips to achieve the both components of decision support. In an Intranet computing environment, certainly decision maker can go through this information available on Intranet. This information help decision maker for the making decision or solving problems.

16.   **Intranet usage for Knowledge Sharing**.   Many organizations have utilized the Intranet as "Knowledge Management Initiative Programmes" with the understanding of importance of knowledge sharing. The past studies reveal that how the Intranet is facilitating

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[7]   Ibid

[8]   Ibid

for knowledge sharing. According to the literature, utilization of Intranet for knowledge sharing can be seen three points of views as "Information, Awareness and Communication". In view of Information, the Intranet gives the information to the members of organization in the form of database or documents. Further it is necessary to access to different kind of information for knowledge creation. The Awareness means remaining the users with well knowledge and continuously connects to information and members in the organization by using Intranet. Such a network creates successful communication and collaboration in an organization. The communication gives the organization members to extract the available information which are helpful for conversation and negotiations. When users engage in work with peers, they can share knowledge views and objectives.

17.   Three utilization modes searching, interacting and transacting are interconnected each other and significantly related to effective utilization. Effective utilization enhances the performances and effectiveness of individual. Prior to introduce the Intranet system to the Navy, engage in functions related to the three user modes were very difficult task to the naval personnel. Integration of human resources management system to the Intranet allowed Navy to update and monitor the employee's details and records very easily. Further it was helped to divisional officers to maintain sailor's service documents up to date effectively. Another major function of utilization of Intranet in the Navy is sending and receiving of E-mails. This function is used not only for communication purpose and to enhance the work group cooperation among the colleagues and senior officers. Web casting is also a main interaction function to share the information with the aim of achieving Navy's goal. Before introducing the Intranet system to the Navy finding information was a time wasting boring task. Today all the required information such as letters, manuals, memo are available on Intranet. One click function allows appearing required information on the screen easily. This was the primary aim of introducing Intranet system to the Navy and presently it is the primary purpose of utilizing the Intranet by naval personnel. Eventually all these utilization modes of Naval Intranet system directly affect for the decision supporting and for knowledge sharing. Further effective utilization of three user modes enhances performance and effectiveness of individual and at the end entire organization.

Conceptual Frame Work

18.   The conceptual framework is provided and explained in this section, to conclude earlier discussion and form the frame for the present study. The conceptual framework aims to illustrate the construction of the theoretical literature review and the practical focus of the study. The concepts presented in above sub paragraphs are combined and created a framework as a basement for this study.
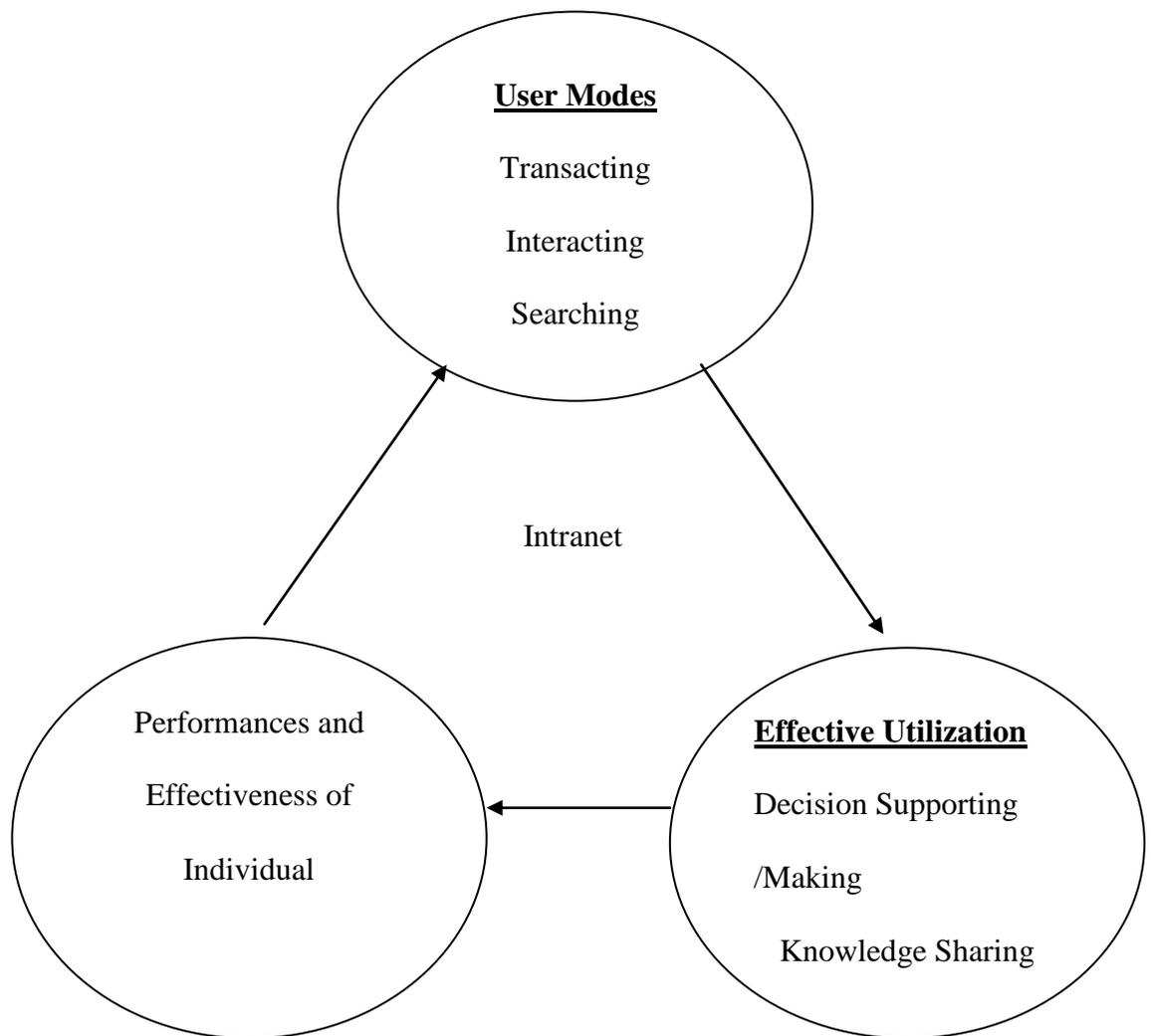
Figure I : Interconnecting of Three User Modes, Effective Utilization and Performances [9]

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[9]   Prepared based on Conceptualized Research Model of Ramalah Hussein and his group's research at Malaysian Company

<u>Hypothesis</u>

19.   Hypothesis of this study is naval personnel are not utilizing Sri Lanka Navy Intranet effectively.

CHAPTER II

METHODOLOGY

20.   This chapter is consisted of the research method which is used to carryout the survey and explains the data analysis of the thesis.

Research Methods

21.   The research method is a single case/one organization study (Sri Lanka Navy) which can be justified by using following reasons.

     a.   In order to explore the area more in detail, seen from the Navy's point of view, there was no reason to involve any other organization in the research.

     b.   The researcher of this study is working in the Sri Lanka Navy and therefore he has a reasonably easy access to the necessary data and interactions.

22.   The research is carried out in the Eastern Naval Command, among following bases. The hundred numbers of officers were selected from those bases based on cluster sampling method to obtain the primary data.

     a.   Naval and Maritime Academy
     b.   SLNS Tissa
     c.   SLN Dockyard
     d.   Special Boats Squadron
     e.   4th Fast Attack Flotilla
     f.   Fast Gun Boats Squadron

23.   Eastern Naval Command is remotely situated from Colombo and Naval Headquarters and branches and ranks of officer cadre in this area are considerably varied. The officers were selected from various branches belonged to various ranks because it would be helpful to see

how officers in different level and in different job role use the Intranet and how they utilize it effectively. The research integrates an Intranet survey. The survey questionnaire included both multiple choice and open-ended questions. The survey, is entirely focused on the Intranet and its role and usage, was carried out in December 2012. The objectives of the survey were to find out how often officers go to the Intranet, why they visit it, how satisfied they are with certain qualities of the Intranet , to identify whether they are utilizing it effectively and how to improve the effective utilization of Intranet among the officers. They were also asked to give their opinions to improve effective utilization of Intranet among the naval personnel.

Data Collection

24.   A questionnaire was used as the tool to carryout the survey for the purpose of this study. The researcher used E-mails and printed papers to distribute the questionnaire among the officers. The researcher sent out 43 E-mails via Navy Zimbra E-mail server to the officers and distributed 57 printed papers among the officers. The researcher was able to receive back reply for all the emails collected all the distributed papers. Some participants had not replied to open ended questions and considerable amount of officers had not given or replied for the improvement of Intranet.

CHAPTER III

FINDINGS

25.   Findings of the survey are included in this chapter. This chapter is divided in to four sections. The first section is consisted of the information regarding use of the Intranet. In this part, answers for the questions are described the frequency of visiting Intranet and late reasons for it. Further, it is elaborated to describe which section on the front page of the Intranet is used by officers and which section is beneficial for their daily work. Next question is focused on the satisfaction level of officers regarding the Naval Intranet. This section is ended with the question regarding failures while accessing or surfing Intranet faced by users. Next section describes the way of finding information and type of information. Further, last question gives the opinions for what should be improved on the Intranet. Finally, last section summarizes all findings and tries to find out whether the Intranet used effectively and if not what are the reasons.

Use of Intranet

26.   According to the finding 61% of officers visit the Navy Intranet at least once during every working day. 25% of officers visit once a week or more often. While 8% is visited the Intranet two or three times per month, 6% visit about once a month. This finding is shown on the **Graph-I** below.
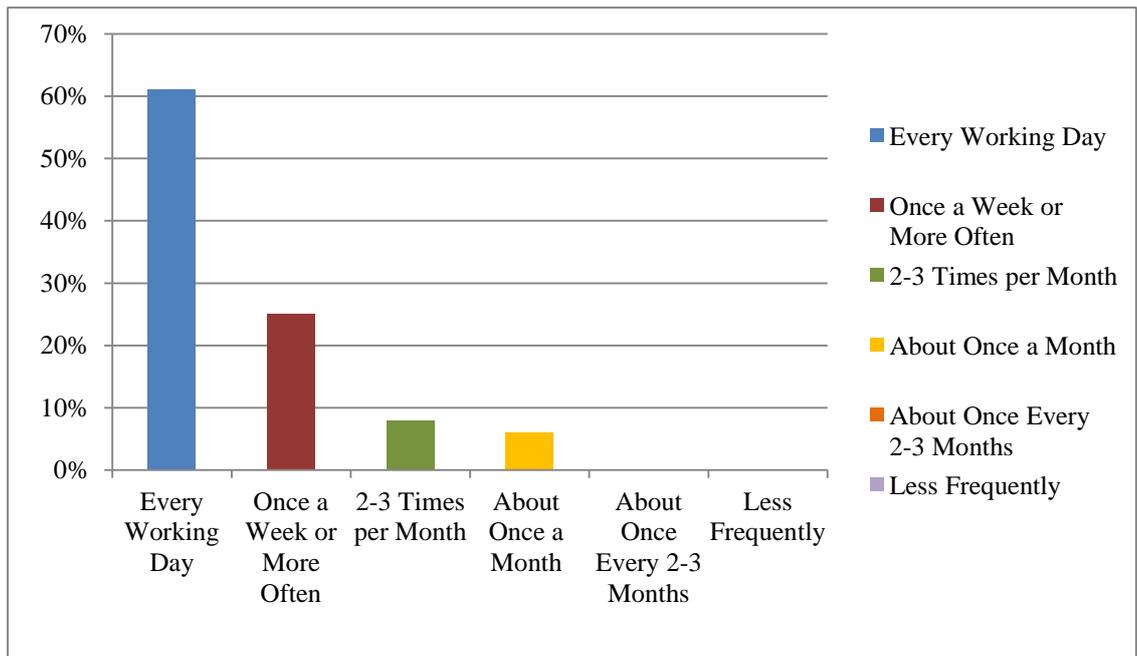
Graph-I: Frequency of Visiting Intranet

27.   The respondent officers were asked to indicate the purpose why they use the Navy Intranet. Seven answers were given in the questionnaire to choose only one among them. Eighth answer was an open ended question to indicate looking for specific information if any. Most of officers (31%) have selected the reason for visiting Intranet as searching for information about naval official matters. 23% of respondents have selected obtaining information related to divisional matters. Third, 17% of officers visit the intranet to obtain information related to welfare matters. Among participant officers 14% answer was to check E mails using Navy E-mail sever. 3% of officers have not any special reason to go to the Intranet and nobody has replied to open ended questions, which are looking for specific information. Responded percentages for reason for visiting Intranet is shown on the **Graph-II** below. When looking at the answers, most of officers visit the Intranet for looking information which is helpful for their day today work.
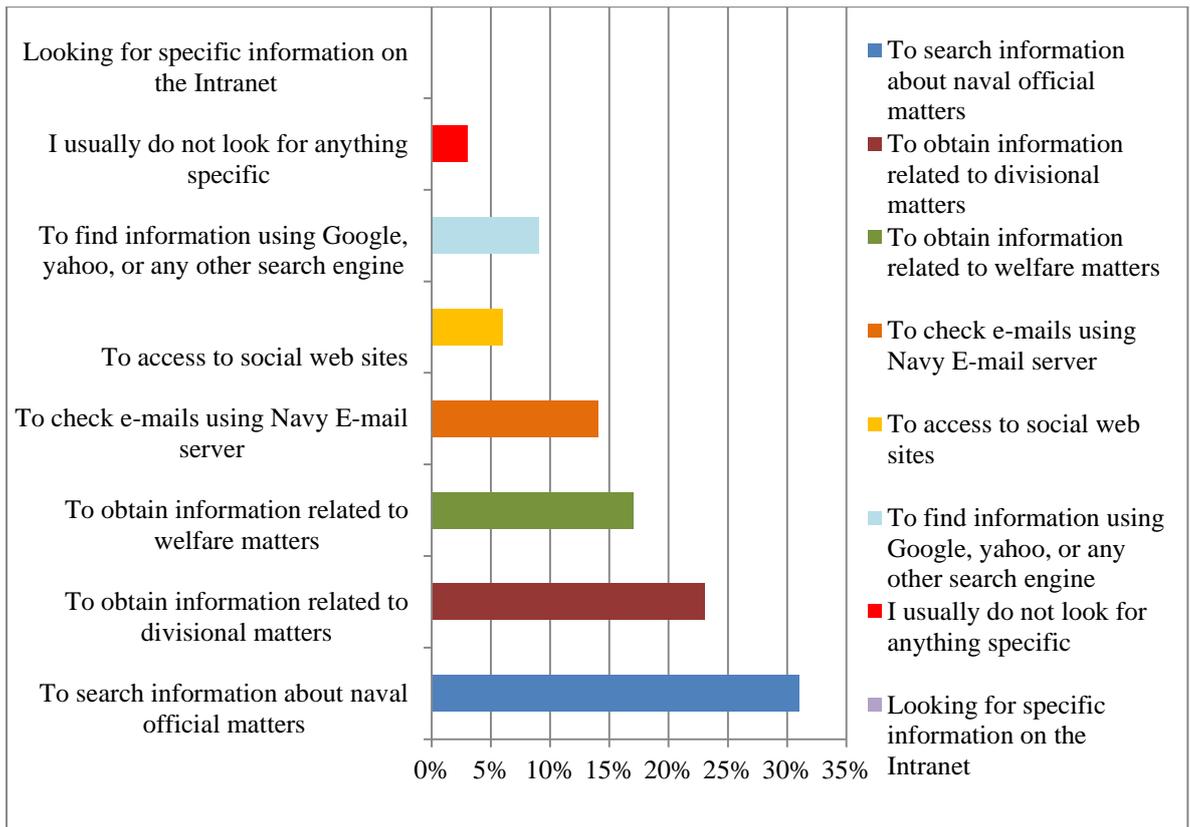
Graph-II: Responded Percentages for Reason for Visiting Intranet

28.   The fourth question covers the selection menus available in Intranet front page which is used to follow. The participant officers were given the opportunity to select several alternatives. The most popular six selections were navy Generals (94% of responses), check mail (67%), memorandum (51%), welfare (41%), SLNO's (36%) and personal (32%). 15% of respondents have given the answer as accessing to other web sites by typing on address bar of Intranet to the open ended questions. Percentages of respondents for each selection menus on Navy Intranet are shown on the **Graph- III** below.
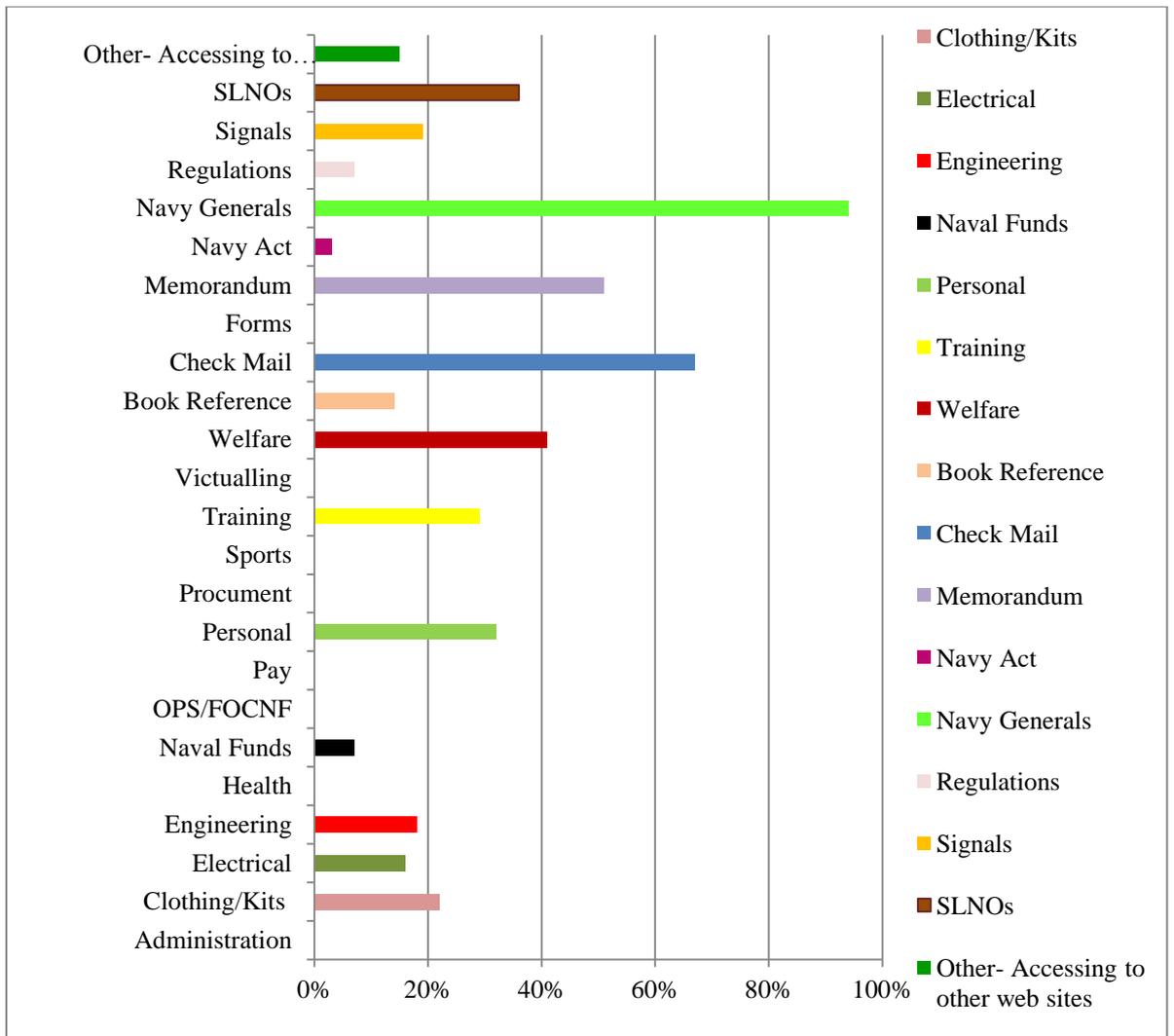
Graph-III: Use of Selection Menus Available in Intranet Front Page

29.   In the fifth question, the participant officers were asked to indicate their satisfaction or dissatisfaction level about the Navy Intranet under different eleven qualities of an Intranet environment. The result is shown on **Table-1** below.

**Table-I: Participant Officer Satisfaction with different qualities of the Intranet**

Quality	Dissatisfied or Fairly Dissatisfied (%)	Satisfied or Fairly Satisfied (%)	Neither Satisfied Nor dissatisfied (%)
Page loading time	18	54	28

|			
Visual look of the Intranet	18	52	30
Content and structure	38	33	29
Readability	22	44	34
Ease of finding information	30	48	22
Clarity of top, Right and left navigation	26	34	40
Up to datedness of information	16	52	32
Usefulness of information	12	55	33
Usefulness of the search function	46	26	28
Possibility to interact through the Intranet	55	28	17
The Intranet as a whole	22	61	20

30.   According to the table, quantity of officers dissatisfied with the searching and finding information functions in the Intranet is significantly shown the requirements of improving search and finding functions of Intranet. The four qualities which have taken high grades of dissatisfaction from respondent officers such as easy of finding information, use fullness of search function, content and structure and clarity of top, right and left navigation indicate popularity of Intranet among the naval personnel and seems to be it is not much. Further, it indicates the difficulty to find information. However 48% of officers have indicated that they are satisfied or fairly satisfied with the quality, easy finding information. About half of respondent officers from 44% to 55% of the respondents are satisfied with the qualities such as page loading time, visual look of the Intranet, up to datedness of information and readability. Almost half of respondents are dissatisfied with the quality regarding possibility to interact through Intranet. Because, presently available interaction tool in the Navy Intranet is only the E-mail facility. The dissatisfaction level of respondents indicate the necessarily of improving interaction facility in the Intranet such as E-groups, forum rooms. Eventually, 61% of officers are satisfied or fairly satisfied with the Intranet as a whole. Twenty two percentage (22%) of respondents are dissatisfied or fairly dissatisfied.

31.   Six and seven questions have been focused on failures which are faced by users while accessing or surfing in the Intranet and reasons for that. According to the finding lots of users

are facing to failures or break downs frequently specially due to technical reasons or bad weather. 61% has faced always failures on Intranet and 29% it has been experienced most of time. All the participant officers have experienced this at least once and no one has answered for never. 71% of officers have identified bad weather as the reason for these failures and 63% have indicted the reason as a technical matter. How ever this finding critically indicates the requirement of improving the entire system. Results for these two questions are shown on **Graph IV and Graph V**.
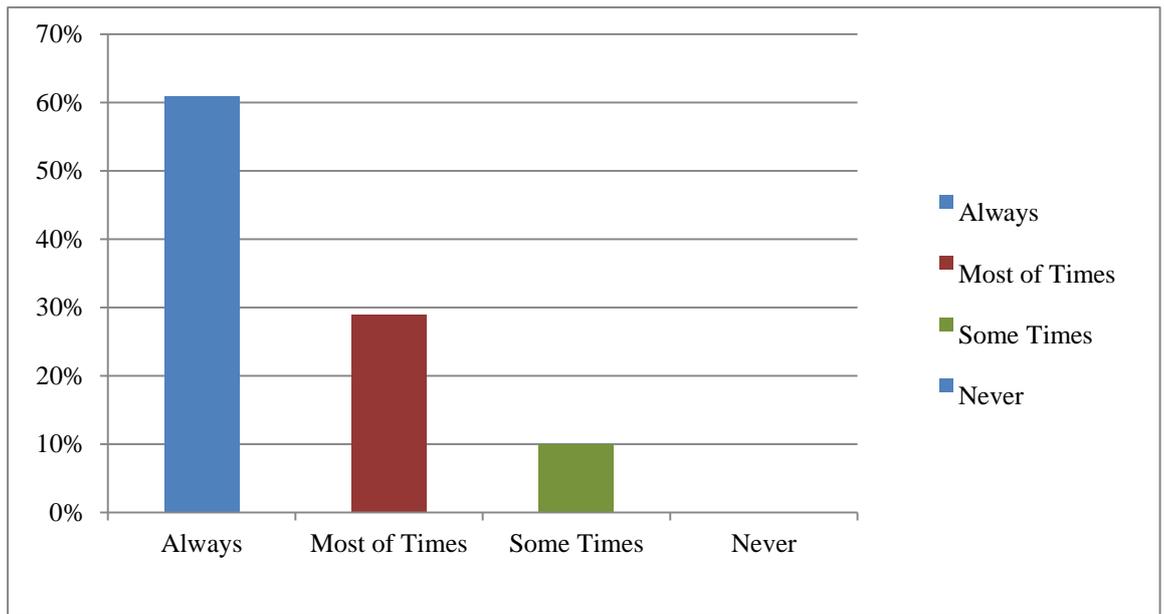

Graph IV: Frequent of Failures while Accessing or Surfing the Intranet
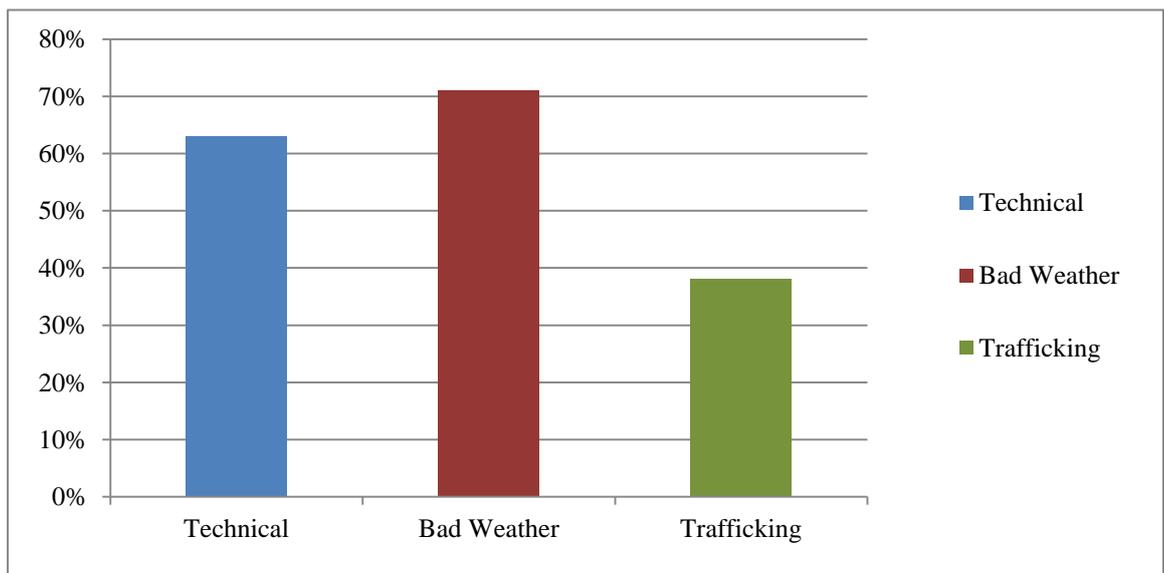

Graph V: Reasons for Failure of Intranet

32.   **Finding Information**.   This has been focused on the views of finding information from the Navy Intranet. The first question in this section is "Do you find the information you are looking for on the Intranet?" The half of officers (51%) has selected always while 27% of respondent officers have selected Most of time. 16% of officers have selected some times and 6% is never. This result is shown on **Graph VI** below. In this situation, it is observed that there is a relation between the result of the question available in previous section under use of Intranet where 48% of respondent officers said they are satisfied or fairly satisfied with the easy of finding information. As well as in previous section thirty percentages of officers are dissatisfied or fairly dissatisfied with the easy of finding information and it is interconnected with the rest 49%.
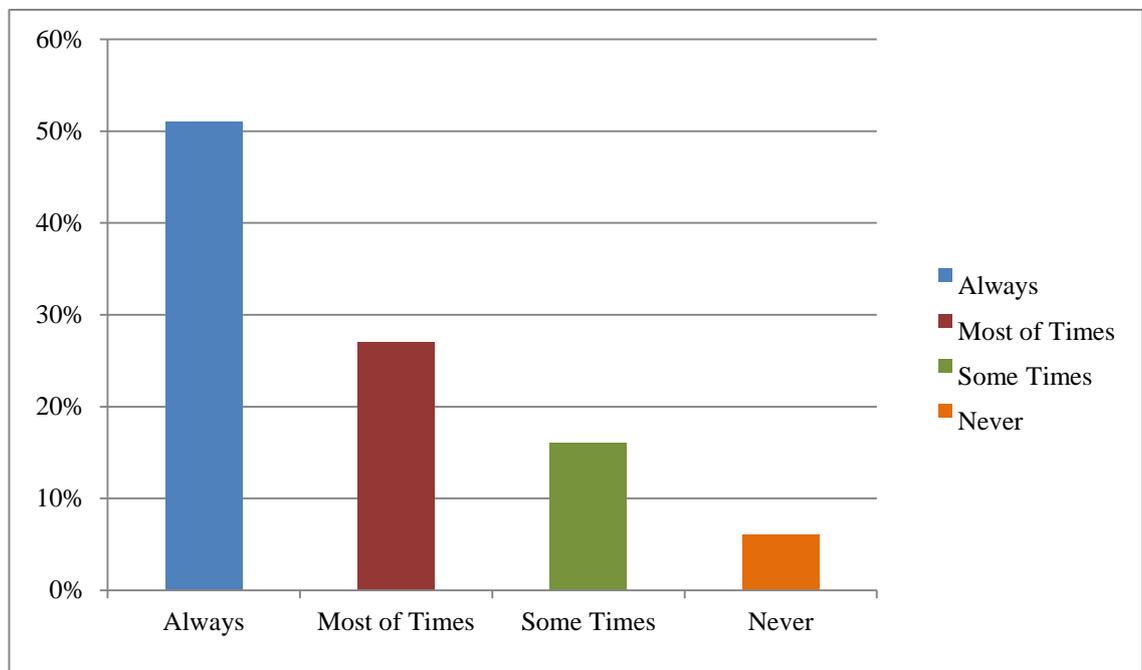

Graph VI: Finding Information Looking for the Intranet

33.   There are three alternatives given for the question "Which of the following ways do you use mostly for finding information in the Intranet?" The first alternative, top, right and left navigation, is used nearly 74% officers indicating main way to find information. The officers were given the opportunity to specify the reasons they had indicated that it is the available easiest way to find information. 09% of officers have selected search function and 17% are used to browse through various sections and result is shown below on **Graph VII** below.
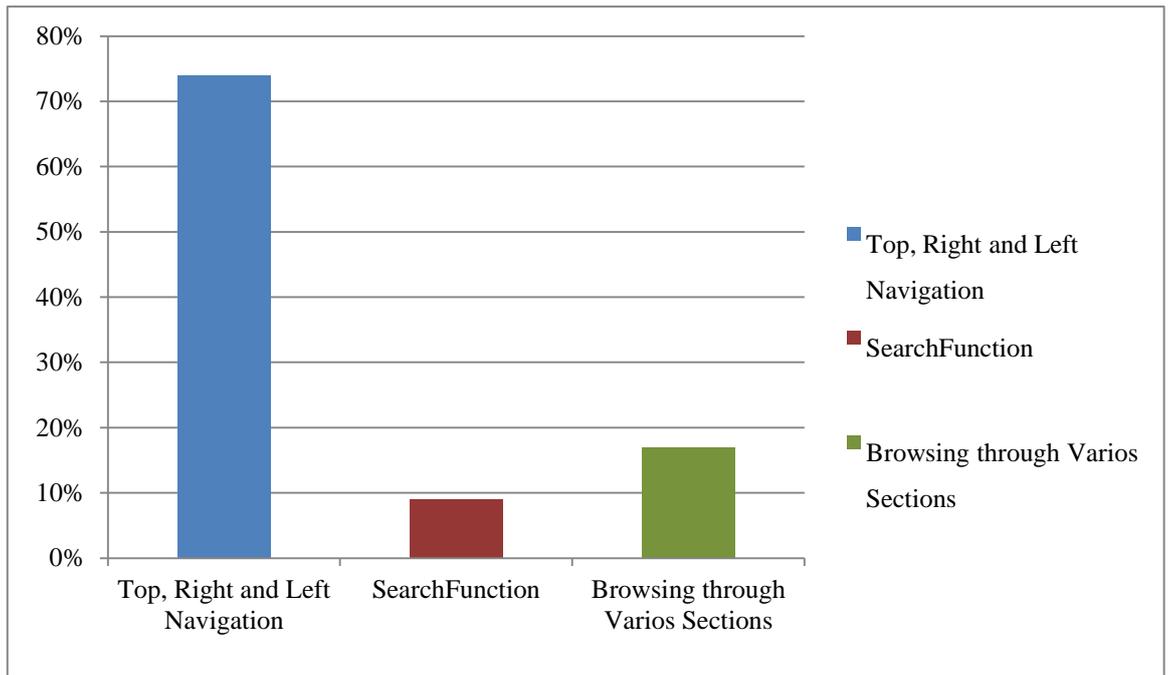
Graph VII: Methods Use for Finding Information

34.   Further, I asked from the respondent officers what kind of information do they look for /would like to have in the Intranet. Five alternatives were given with the opportunity to select several alternatives and result is shown below **Graph VIII**. All the participant officers are like to have Local and Foreign Information/news and Job related information on the Intranet. 76% of officers like entertainment and information and 48% of officers like to have recreational activities in the Intranet.
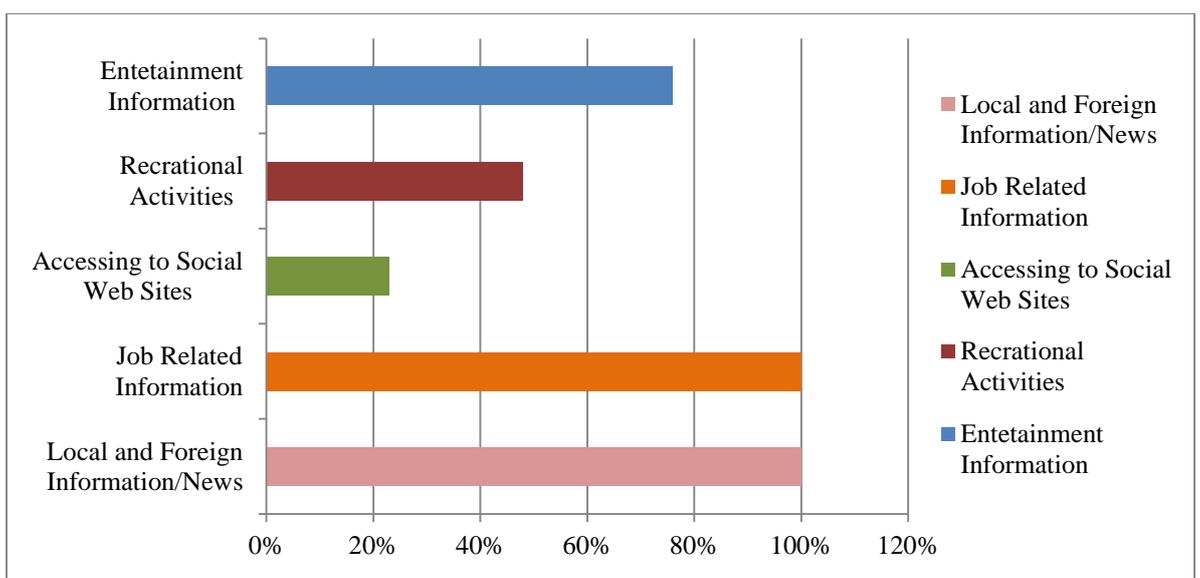
Graph VIII: Information Like to Have on Intranet

35.   Forty three percentage (43%) of officers have responded for the last open ended question was 'Do you have any other comment to improve effective utilization of Intranet among the naval personnel?' Among them there are few useful positive comments below, made by respondent officers, which can be helpful to enhance the effective utilization of Intranet among the naval personnel and future development of the system.

    a.   It has been observed existing Intranet data receiving speed is slow and take some times to obtain data. Therefore, propose to increase the band width of data transmission to uplift the facility.

    b.   Improving computer literacy among junior naval cadres.

    c.   It should be more attractive, user friendly and accessible.

    d.   Need to change the attitude of SLN personnel wrt utilization of Intranet in the SLN.

    e.   Provide more facilities to access the intranet.

    f.   Updating the Intranet branches wise and include more information such as past events, developments, present works, progress and job related links.

Summary of Finding

36.   When concerning the role of the Intranet, in the Sri Lanka Navy, the findings of the survey indicate that the Intranet is mainly used as an information distribution channel at the moment. Naval officers appreciate having one common place where they can find all job-related instructions, orders, documents, and signals that ease their everyday work. The naval personnel are also keen on reading the Intranet to know what happening within the organization (appointments, organisational changes, policy changes, decisions). Nevertheless, the survey findings clearly indicate that the officers are expecting to find more local and foreign information/news and job related information in the Intranet (e.g. metrological data, shipping data).

37.   Navy's aim is to develop the worldwide Intranet into an effective internal communications tool in the Navy. According to the findings of the survey where 61% of the participants say that they visit the Intranet at least once during every working day. Another 25% use the Intranet services at least once a week. Among them 94% visit the he

Intranet to read Navy Generals. The most important reason why people go to the Intranet seems to be obtaining the information about naval official matters, information related to divisional matters and welfare matters.

38.   When concerning the knowledge sharing role of the Intranet, yet, navy is not ready for using her Intranet for that purpose. The Navy Intranet does not provide any social media type of solution in the Intranet at the moment rather than E-mail facility. It is found in the survey lot of naval personnel (55%) are not satisfied with the available interaction facilities and seem to be they are very interested in having those functions there.   Internal social media is one of the subjects the development team of   Navy Intranet should start preparations. Even though approx half of participant officers informed that they were not interested in tools like this, Navy has to follow the lessons and experience of social media learnt by other multinational company in the country and the world in terms of activating naval personnel to share knowledge and communicate more actively with each other.

39.   The issues creating most dissatisfaction with the Intranet seem to be connected with the difficulties in finding information and the poor search function. The survey clearly indicates the four qualities, easy of finding information, usefulness of search function, content and structure, clarity of top, right and left navigation which have taken the high grades from the respondent officers, difficult to find information. The search function of the Intranet home page which has taken 46% of dissatisfaction level is not fully supported to find a required document. The user must know the exact spelling of the key word to find a document using search function. As well as the content and structure is also not user friendly to a beginner. The complicated terms of the structure and content seem to increase difficulties in surfing in the Intranet and finding what one is looking for to a beginner. Further, it is difficult to know content in side the main menu of Intranet home page at a glance for a normal operator except for an expert. To know what is inside, it is required to open the menu and it is a time wasting task. As an example, phone directory is available inside electrical menu and there is no method to know that early.

40.   Another major finding revealed by the survey is frequently failure or break down of the Intranet network. 61% of participant officers have experienced that it always and 27% have most of times. Together, 90% of participant officers have experienced this break down or failure at least most of times. This value is a very large amount and immediate

development of network is highly essential. When concerning the reasons for failures or break downs, technical matters and bad weather factors are equally behind the failures which attention is highly required.

41.   The survey revealed presently, there is no possibility to follow local and foreign information/news and job related information. The result of the survey highly indicates the enthusiasm of the respondent officers for the local and foreign information/news and job related information. Additionally, the open comments reported that people are not very familiar with the system and would need training and guidance. Part of the content seems to be complicated, requesting password often and unfriendly user modes which causes inconvenience and reluctance to use the Intranet actively. Further speed of the bandwidth and the frequent failure of the network are also caused to keep the users away from the Intranet actively. Eventually, finding reveals that average number of naval personnel uses the Intranet daily. That why, navy uses to get the print out of Navy Generals daily and distributes among the offices whether the Navy Generals are available in Intranet. Simply, that is indicated that naval personnel are not utilized the Sri Lanka Navy Intranet effectively. To achieve the aim of introducing Intranet to the Navy, it is required to rectify the draw backs which have been identified by this survey.

CHAPTER IV

CONCLUSION

42.   Over the past few decades, information technology has been developed rapidly with the related technologies such as telephone networks, satellites, computers are interconnected each other creating a vast network. The biggest achievement in the network field is introducing World Wide Web at present more than 90 millions users are logged to Internet. The Intranet was derived from the Internet use same technology such as web servers, web browsers, computers, telephone network and connect a small private network with in an organization. The Intranet system enables to distribute information among the employees rapidly and securely. In the past few years in the country more private and government institutes turned towards the Intranet and ability to access to information rapidly. The commercial and government institutes realized saving money, high productivity and resources sharing by utilizing low cost, easy to set up, self governing and universal network. Apart from that the biggest achievement brought by Intranet is easy access to the information universally available.

43.   The Sri Lanka Navy launched her Intranet on 29th August 2005 with the purpose of enhancing the performances and efficiency with in the organization. Especially the Intranet was developed to ease for making decisions, and sharing knowledge with the available information. However, the naval personnel are not utilized the naval Intranet effectively as expected by the organization. The aim of this research is to find out the answers for whether the Intranet in Sri Lanka Navy used effectively, to identify, the reasons for not utilizing the Intranet effectively by naval personal if any, how to improve the effective utilization of Intranet among the naval personal? The ultimate goal of this research study was to identify the drawbacks of utilization of Intranet by naval users and to give the recommendations to enhance the utilization of Intranet.

Research method

44.   The research method is single case study based on Sri Lanka Navy, in order to explore the area more in detail, seen from the Navy's point of view. Accessing to the necessary records and interactions also was reasonably easy being the researcher also an employee in the Navy. The research is carried out in the Eastern Naval Command among six bases. Those bases are Naval and Maritime Academy, SLNS Tissa, SLN Dockyard, Special Boats Squadron, 4th Fast Attack flotilla, Fast Gun Boats Squadron. Hundred numbers of officers were selected from those bases based on cluster sampling method to obtain the primary data.

45.   Naval bases of The Eastern Naval Command were selected due Eastern Naval Command is remotely situated from Colombo and Naval Headquarters. Apart from that branches and ranks of officer cadre in this area are considerably varied. The officers were selected from various branches belonged to various ranks because it would be helpful to see how officers in different level and in different job role use the Intranet and how they utilize it effectively. The survey includes both quantitative and qualitative research due to the fact that the survey questionnaire included both multiple choice and open-ended questions. The survey, is entirely focused on the Intranet and its role and usage, was carried out in December 2012. The objectives of the survey were to find out how often officers go to the Intranet, why they visit it, how satisfied they are with certain qualities of the Intranet , to identify whether they are utilizing it effectively and how to improve the effective utilization of Intranet among the officers. They were also asked to give their opinions to improve effective utilization of Intranet among the naval personnel.

46.   A questionnaire was used as the tool to carry out the survey for the purpose of this study. The questionnaire was consisted with eleven closed ended and one open ended questions. The researcher used E-mails and printed papers to distribute the questionnaire among the officers. The researcher sent out 43 E- mails via Navy Zimbra E-mail server to the officers and distributed 57 printed papers among the officers. The researcher was able to receive back reply for all the E-mails collected all the distributed papers. Some participants had not reply to open ended questions and considerable amount of officers had not given or replied for the improvement of Intranet.

Finding

47.   Findings of the survey are summarized in this section. This section is consisted of four sub sections. The first section is consisted of the information regarding use of the Intranet. In this part, answers for the questions describe the frequency of visiting Intranet and late reasons for it. Further it is elaborated which section on the front page of the Intranet is used by officers and which section is beneficial for daily their work. Next question has been focused on the satisfaction level of officers regarding the Naval Intranet. This section is ended with the question regarding failures while accessing or surfing Intranet which are faced by users. Next section describes the way of finding information and type of information. Further last question gives the opinions for what should be improved on the Intranet. Finally last section summarizes all findings and tries to find out whether the Intranet used effectively and if not what are the reasons.

Use of Intranet

48.   According to the research finding use of Intranet during every working day by the officers of above bases take an average value. 61% participant officers visit the Intranet every working day. Approximately 25% of officers visit the Intranet at least once a week or more often and 8% visit the Intranet two three times per month.

49.   The respondent officers were asked to indicate the purpose why they use the Navy Intranet Most of officers (31%) have selected the reason for visiting Intranet as searching information about naval official matters. 23% of officers has selected obtaining information related to divisional matters. Third, 17% of officers visit the Intranet to obtain information related to welfare matters. Among participant officers 14% answer was to check E-mails using Navy E-mail sever. 3% of officers have not any special reason to go to the Intranet and nobody has replied to open ended question, which is looking for specific information. When analyzing this result it is denoted most of officers (71%) have visited the Intranet to find information which are required to perform their daily works.

50.   The fourth question has been covered the selection menus available on Intranet front page which are used to follow. The participant officers were given the opportunity to select

several alternatives. The most popular six selections were navy Generals (94% of responses), check mail (67%), memorandum (51%), welfare (41%), SLNO's (36%) and personal (32%). 15% of respondents have given the answer as accessing to other web sites by typing on address bar of Intranet to the open ended question.

51.   In the fifth question officers graded the satisfaction level on some certain qualities of intranet. The quantity of officers dissatisfied with the searching and finding information functions in the Intranet are indicated the necessity of improving those functions of Intranet. The four qualities which have taken high grades of dissatisfaction from respondent officers such as easy of finding information, use fullness of search function, content and structure and clarity of top, right and left navigation indicate popularity of Intranet among the Naval personnel and seems to be it is not much. How ever 48% of officers have indicated that they are satisfied or fairly satisfied with the quality, easy of finding information. About half of respondent officers from 44% to 55% of the respondents are satisfied with the qualities such as page loading time, visual look of the Intranet, up to datedness of information and readability. Almost half of respondents are dissatisfied with the quality regarding possibility to interact through Intranet. Eventually, 61% of officers are satisfied or fairly satisfied with the Intranet as a whole. 22% of respondents are dissatisfied or fairly dissatisfied.

52.   Six and seven questions have been focused on failures which are faced by users while accessing or surfing the Intranet and reasons for that. According to the finding lots of users are facing to failures or break downs frequently specially due to technical reasons or bad weather. 61% has faced always failures on Intranet and 29%, it has been experienced most of time. All the participant officers have experienced this at least once and no one has answered for never. Seventy one percentages of officers have identified bad weather as the reason for these failures and 63% has indicted the reason as a technical matter. However this finding critically indicates the requirement of improving the entire system.

Finding Information

53.   This section has been focused on the views of finding information from the Navy Intranet. The first question in this section is "Do you find the information you are looking for on the Intranet?" The half of officers (51%) has selected always while 27% of respondent

officers have selected most of time. 16% of officers have selected some times and 6% is never. In this situation, it is observed that there is a relation between the result of the question available in previous section under use of Intranet where 48% of respondent officers said they are satisfied or fairly satisfied with the easy of finding information. As well as in previous section 30% of officers are dissatisfied or fairly dissatisfied with the easy of finding information and it is interconnected with the rest 49%.

54.   For the ninth question "Which of the following ways do you use most for finding information on the Intranet?" The first alternative, top, right and left navigation is used 74% officers indicating main way to find information. The officers were given the opportunity to specify the reason they had indicated that it is the available easiest way to find information. 9% of officers have selected search function and 7% are used to browse through various sections.

55.   For the question what kind of information do you look for /would like to have on the Intranet all the participant officers are like to have local and foreign information/news and job related information on the Intranet and percentage is 100%. 76% of officers are like to entertainment information and 48% of officers are like to have recreational activities on Intranet.

56.   43% of officers have indicated that their comments and suggestions to improve the Intranet. Among them there are few useful positive comments below which can be helpful to enhance the effective utilization of Intranet among the naval personnel and future development of the system.

a.   It has been observed that existing Intranet data receiving speed is slow and take some time to obtain data. Therefore, propose to increase the band width of data transmission to uplift the facility.

b.   Improving computer literacy among junior naval cadres.

c.   It should be more attractive, user friendly and accessible.

d.   Need to change the attitude of SLN personnel wrt utilization of Intranet in SLN.

e.   Provide more facilities to access the intranet.

f.   Updating the Intranet branches wise and include more information such as

past events, developments, present works, progress and job related links.

Summary of Finding

57.   Presently Intranet is mainly used as an information distribution channel. Intranet home page is consisted with all the naval information, instructions, documents and signals which are eased the officer's daily work. Average numbers of officers are keen on reading the Intranet to know what happens with in the organization. Among them, nearly 100% of officers visit the Intranet to read the Navy Generals. Although the Intranet is updated with latest information, documents, letters and signals visiting of Intranet by naval personnel is taken an average value. The most important reason why people go to the Intranet seems to be obtaining the information about naval official matters, information related to divisional matters and welfare matters.

58.   When concerning the knowledge sharing role present Intranet does not provide any social media type solution rather than E-mail facility. About half of personnel (55%) are not satisfied with the available interaction facility. Most dissatisfaction grades were obtained by the qualities which are related finding information and search function. These qualities and search function are not fully supported to find and information for an operator. The complicated terms of the structure and content seem to be increased difficulties in surfing the Intranet and finding what one is looking for. Another major problem which is faced by users is frequent failure of Intranet while surfing due to technical failure or bad weather.

59.   Survey revealed that presently there is no possibility to follow local and foreign information/news and job related information. The result of the survey highly indicates the enthusiasm of the respondent officers for the local and foreign information/news and job related information. Additionally, the open comments reported that people are not very familiar with the system and would need training and guidance. Complicated content, requesting password often and unfriendly user modes which causes inconvenience has amplified the reluctance to use the Intranet actively. Further speed of the bandwidth and the frequent failure of the network are also boosted the unwillingness to use the Intranet actively. All these drawbacks have been caused to keep the naval officers away from the Intranet. Although, seven years have been completed after launching the Intranet, surfing of Intranet

by naval officers takes an average value.

Recommendations

60. Based on the survey carried out in the Sri Lanka Navy Intranet, recommendations on how to develop the Intranet will be given in this section. Results of the survey of this research clearly indicate the requirements to improve the Intranet as a common internal communication channel which can be utilized by the naval personnel effectively. This can be achieved by improving the content and usability to a certain level which meet the user's requirement. More detailed recommendations in the following five sections are given in the following issues that should be improved.

    a. Information search
    b. Employees' training
    c. Content and structure
    d. Use of interactive features and social media
    e. Personalisation

Finding Information and Search Function

61. The survey results show that 38% of the respondent officers are dissatisfied or fairly dissatisfied with finding information in general and that 16% sometime and 27% most of times find information they are looking for. Furthermore, 46% are dissatisfied or fairly dissatisfied with the usefulness of the search function. As earlier mentioned, feeling difficulty to find what users are looking for, ends up in inactivating the use of the search function and the Intranet in general. To avoid this, the following suggestions are given.

    a. Results received from search should be listed in relevant order to implement.

    b. Use of keywords and free text search should be improved in the search function.
    c. Separate searching should be created for finding information.

    d. Help function could be one solution to ease finding information.

Training of Users

62.   Most of junior naval officers and sailors are not fully aware about the Navy Intranet. They do not have an idea what information they can obtain through the Intranet and oftenly they are reluctant to use the Intranet. Lots of comments were made by respondent officers to educate the junior naval cadre regarding the Intranet. Hence, suggest conducting refresher work shops by command IT staff for junior naval officers and sailors.

Structure and Content

63.   More than one third (38%) of the respondents were dissatisfied or fairly dissatisfied with the content and structure of the Intranet. Present content and structure is little bit complicated for a recruit user. Therefore, these proposals are given to improve the content and structure.

    a.   Visual effects help to clarify the structure and also get the visual look more attractive.

    b.   There is a lot of empty space in the screen, redesign of this part is recommended.

    c.   Under each function, available sections could be created to popup with the cursor to find the necessary information without delay.

    d.   Local and foreign news link, job related information link should be published on the site.

    e.   The Intranet maintaining team must make sure all its contents are up-to-date, well structured and easily found and that all links work. The name and contact information of the team are to be published on the page thus letting users ask for more information or give feedback.

    f.   Out-of-date material, letters and signals should be removed.

Interactive Features and Social Media

64.   The study shows that 55% of the respondents are dissatisfied or fairly dissatisfied with the possibility to interact through the Intranet. When thinking of the advantages that could be gained through this network we can mention the following.

   a.   It would offer a forum for knowledge sharing between different branches and different officers

   b.   Adding comments or tags would improve creation of new ideas, finding best course of action and solutions.

   c.   Implementing a discussion room or forum function to the Intranet is beneficial to select best course of action when required.

   d.   Recommend to implement an Internal You Tube and include all naval happenings.

   e.   Suggest to install a knowledge bank which may helpful for sharing technical solution and ideas.

Personalisation

65.   Personalisation of the Intranet is important because, based on the survey findings, people do not seem to have time or interest in reading through all signals or letters and all material but would prefer finding quickly the specific information they need in their work. Alerts could be used to inform employees through their E-mail or mobile phones when news or material of interest is placed into the Intranet. This is technically possible when using personalisation.

66.   Further, all the naval personnel can be granted naval E-mail addresses and can personalise the system to send the Navy General to that E-mail daily. Then it is not required to surf the Navy Intranet, employees can log in to the Navy E-mail server even via through the personal Dongles. Apart from that an Electronic Bulletin Board can introduced to the Intranet system. The Electronic Bulletin Board indicates all the latest amendments and added items when some one log in to the system. These suggestions reduce the time wasting, paper wasting and save the money.

<u>Suggestions for Future Researches</u>

67.   There are several interesting areas in this study that were only discussed in brief but that is required researched further in the future. First of all, this study focused on studying the Intranet from the users' point of view, the perspective of other groups as an example, content producers or site developers could be studied. Second, a similar study is recommended to be repeated in the same naval command area after a couple of years after the implementing the ideas introduced by this study.

68.   Finally, another view for further research would be to carry out a similar study of Intranets in Army and Air Force. It would be interesting to make comparisons between services in terms of how actively Intranets are used as information and knowledge sharing channels utilising modern technology.