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EVALUATION OF E-MAIL REFERENCE SERVICE IN UNIVERSITY DONJA GORICA LIBRARY

Master thesis

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Abstract:
Reference service in academic libraries has been in use for a very long time. The University Donja Gorica Library (UDG) is the first library in Montenegro providing e-mail reference service. The purpose of this research is to examine e-mails containing reference questions at UDG.

This evaluation discusses the first three years (2008-2011) of implementing this service at UDG and shows its importance and usability for library users. The thesis presents and evaluates this service, some improvements are suggested. It is found out that this kind of virtual reference service is efficient and is a very good solution for one-man-library, as the number of received e-mails is rising.
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TABLE OF CONTENTS

1. INTRODUCTION ..........................................................................................................................6
  1.1 PURPOSE OF THE THESIS ........................................................................................................6
  1.2 ORGANIZATION OF THE THESIS .............................................................................................8
2. REFERENCE SERVICE ....................................................................................................................9
  2.1 HISTORICAL DEVELOPMENT ..................................................................................................10
  2.2 VARIETIES OF REFERENCE SERVICES ................................................................................11
  2.3 DIGITAL REFERENCE SERVICE ...........................................................................................13
    2.3.1 Development of digital reference service ........................................................................14
    2.3.2 Definitions of digital reference services ........................................................................15
    2.3.3 Types of digital reference services ................................................................................17
    2.3.4 Digital reference services in University libraries ..........................................................17
3 UNIVERSITY OF DONJA GORICA, MONTENEGRO .................................................................19
4 REVIEW OF LITERATURE ...........................................................................................................21
  4.1 LITERATURE ON DIGITAL REFERENCE SERVICES ..............................................................21
  4.2 LITERATURE ON EVALUATION OF REFERENCE SERVICES ..............................................23
5 METHODOLOGY ........................................................................................................................31
  5.1 RESEARCH PROBLEM ...........................................................................................................31
  5.2 PURPOSE AND OBJECTIVES OF RESEARCH ...................................................................31
  5.3 RESEARCH HYPOTHESES ....................................................................................................32
  5.4 DATA COLLECTION .................................................................................................................33
    5.4.1 Content analysis ..............................................................................................................34
    5.4.2 Quantitative analysis .....................................................................................................37
6 FINDINGS ....................................................................................................................................38
7 DISCUSSION ..................................................................................................................................50
  7.1 INTERPRETATION OF RESULTS ............................................................................................50
  7.2 IMPROVEMENTS ....................................................................................................................57
8. CONCLUSION ................................................................................................................................59
9. REFERENCES ..................................................................................................................................62
TABLE OF TABLES

Tab. 1 Number of UDG students using e-mail reference service..........................38
Tab. 2 Received e-mails by month for research years 2008-2011..............................39
Tab. 3 E-mails selected by type............................................................................40
Tab. 3a Received e-mails selected by type for 2008/2009........................................40
Tab. 3b Received e-mails selected by type for 2009/2010........................................41
Tab. 3c Received e-mails selected by type for 2010/2011........................................41
Tab. 3d Reference questions in e-mails by type.....................................................41
Tab. 3e Reference question in e-mails by type 2008/2009........................................42
Tab. 3f Reference question in e-mails by type 2009/2010........................................42
Tab. 3g Reference question by type 2010/2011......................................................43
Tab. 4 E-mail reference service used by students from different faculties.................44
Tab. 4a Received e-mails for 2008/2009 selected by faculty.....................................44
Tab. 4b Received e-mails for 2009/2010 selected by faculty.....................................45
Tab. 4c Received e-mails for 2010/2011 selected by faculty.....................................45
Tab. 5 Received e-mail by year of studying.............................................................46
Tab. 5a Received e-mails by year of studying for 2008/2009.................................46
Tab. 5b Received e-mails by year of studying for 2009/2010.................................47
Tab. 5c Received e-mails by year of studying for 2010/2011.................................47
Tab. 6 Received e-mails by day on sending.............................................................48
Tab. 6a Received e-mail by day of sending 2008/2009..........................................48
Tab. 6b Received e-mail by day of sending 2008/2009..........................................49
Tab. 6c Received e-mail by day of sending 2008/2009..........................................49
1 INTRODUCTION

Reference service is first step for user who wants to satisfy its need for information in the library. It was changed over the year. From reference service face to face and reference desk between user and librarian until today when reference service is usually digital and reference desk is virtual. The same is user, the same is information need, and the same is librarian who is there for help. Everything else is tool which is changed like everything else in the modern world. The same is evaluation which can help us to see where we are now and what can we do in the future.

University libraries changes as much as university by himself. There are plenty new ways for studying, for employed person, long life learning, distance learning. The requests are faster and the answers have to be faster. Digital reference service in purpose to serve distance learning or regular students is shown as a good way for satisfying their needs. Students’ use all benefits of technical progress. Some libraries use ask librarian service, some pure e-mail service and we have to evaluate present condition to find out are they following all request for information and do we have to move faster to.

Difference between traditional and now days evaluation is only in way and maybe speed, but point is quality and sustainability of method which is used. This work will focus on digital reference service in university library. E-mail reference service at the Library of University of Donja Gorica (UDG) in Montenegro for the period 2008-2011 will be presented; content and quantitative analysis will be used.

1.1 PURPOSE OF THE THESIS

Purpose of this work is to examine e-mails containing reference questions at the library of the University of Donja Gorica (UDG), the only library in Montenegro which use digital reference service. Particular emphasis is placed on increasing number of received e-mails during the period of three years 2008-2011, who sent these e-mails, from which Faculty, from which year of studies and especially kind of questions in these e-mails. Specification of question type and difficulties to put all question in two groups was evident. Every of it should be divided in so many more groups. This problem
awakes a question for standardization how to evaluate virtual reference service. It will help to understand how complex and tiny line is between reference question and research question.

There are some important issues to address to. Is it possible to organize reference service in University library by one librarian? Is it possible to organize reference service in 24 hours open library with open access to the books? The evaluation will show does the present asynchrony virtual reference service satisfy student’s needs and does it have to be changed in synchronic.

This research has tried to investigate e-mail reference service at UDG as a way of communication with patrons, find out the number of e-mails received from 2008-2011, to evaluate the number of e-mails for each year, the number of e-mails from different faculties, the number of e-mails from different years of studying and finally to provide practical recommendations to improve e-mail reference services at UDG.

Research questions are:
1. Does the number of e-mail questions increase from year to year?
2. Are the questions more administrative or reference?
3. What month is more active in sending e-mails?
4. What is the number of students from different faculties?
5. What is the number of students from different year of studying?
6. Which day is more active in sending e-mails?

Research questions are followed by hypothesis:

Hypothesis no.1: The number of e-mails in UDG is increasing from year to year.

Hypothesis no.2: During the year the highest number of e-mails is received in June.

Hypothesis no.3: The number of e-mail reference questions is higher than number of e-mail administrative questions.

Hypothesis no 4: Most reference questions are about authors and title, or year of publishing.

Hypothesis no 5: Most reference questions are about essays, seminars and research work during school year, and more administrative are in June.
Hypothesis no.6: Students from Faculty of Law and Humanistic Studies use digital reference service more frequently than students from other faculties.

Hypothesis no.7: Undergraduate students from the first year send more e-mails than others.

Hypothesis no.8: During the week the highest number of e-mails is sent on Wednesday.

1.2 ORGANIZATION OF THE THESIS

The Introduction contains short overview of the thesis. General about reference service, digital reference service and University library in light of reference services. Purpose of this research and description of UDG library with specific emphasis on organisation of reference service is next part in this work. Review of literature – will cover similar research in this area and some parallel for the research. Research methods – will explain step by step research problem, define of research hypotheses and methods which is used to collect data and understand the problem. Results – present the data collected during research. Conclusion is the master of this work with specific note for some improvements and recommendation for some other libraries.
2 REFERENCE SERVICE

Green (1876) defined reference work as the personal assistance given by the librarian to individual readers in pursuit of information. Bishop (1915, p. 134) defined “reference work is the service rendered by a librarian in an aid of some sort of study…an organized effort on the part of libraries in aid of the most expeditious and fruitful use of their books”.

Ranganathan, Shiyali Ramamrita (1961, p.53) “Reference service is the process of establishing contact between a reader and his documents in a personal way.' His documents' means every one of the precise documents needed by him at the moment... From the first moment of the reader asking for help to the last moment of his getting all his documents, the librarian will have to be personally administering to the needs of the reader. Therefore, reference service is essentially personal service”.

Rothstein (1961, p.12) forward Greens definition and defined “reference service [as] . . . the definite recognition on the part of the library of its responsibility for such work and a specific organization for that purpose”

MacKinnon (1982, p. 82) defined reference services as “direct assistance to users in finding data or sources of information in books and other library materials. It also includes referral to other places or people where this is appropriate.”

Katz (1987, p.3) stated ‘While there is more to reference service than answering questions, essentially that is the primary goal”.

Rettig (1993, p.703) believed reference service is better described rather than defined: “many definitions of reference service have been offered over the years, all of them illustrative, none definitive”. He stated that reference services exist to mediate between library users’ information needs and the information resources of the library and includes readers’ advisory service, bibliographic instruction, and information and referral service.

As an indisputable authority on reference services, the American Library Association Reference and User Services Association (RUSA) defines a reference transaction as ‘information consultations in which library staff recommend, interpret, evaluate, and/or use information resources to help others to meet particular information needs’. Further,
that ‘reference work includes reference transactions and other activities that involve the creation, management, and assessment of information or research resources, tools and services’.

2.1 HISTORICAL DEVELOPMENT

Reference work as a term is showed 1891 in the index to the Library Journal. It replace the older terms “aid to readers” and assistance to reads”.

Bopp, R. (2001) in Reference and Information Services as many other librarians theoretic traced his acknowledge about Reference service with Samuel Green and his work in 1876 from the "Personal Relation between Librarians and Readers". Until then, the materials were collected by librarians, organized and preserved but that few users were using only the materials and satisfy their need for information by themselves. Very quickly it became obvious that they have neither the time nor the knowledge and they needed help. There he saw a place for reference librarian as a bond between each other, those who need information and those who can help them. Such reference work was replaced with aid to the reader in 1890. But even before that, 1883 become first aid classes for reference, and in 1887 there has been some improvement when they established the first school for librarians.

Charles Williamson elaborated Bishops theme in his work for Library Service Training 1923. He tried to distinguish a clerk and library job. And so many years later we have the same problem. He described reference work to try to make curricula of library school.

However, how much has changed over time reference work, it is the same essence to assist users in seeking answers, and to meet its information need.

Ann Casell (2009, p.4) deals with what is and what kinds of information service exist as saying that

“Information service, in the most general sense, is the process of helping library users to identify sources of information in response to a particular question, interest, assignment or problem. Differences between information and reference are that information is not in direct link to reference desk especially in this time of electronic and technical development. There are so many ways as telephone, e-
mail, or making pages for not real users but possible users who might use it as FAQ which will meet their needs”.

Bopp (2001) said that depending of user need reference librarian take different approach to assist.

2.2 VARIETIES OF REFERENCE SERVICES

There are three varieties of reference services: information, guidance, and instruction. Samuel Rothstein (1961) called them tree colours of reference work picture and say that there is no two librarian who mixed it at the same way.

Charles A. Bunge and Richard E. Bopp (2001) talk about:
- Information services take variety of forms. From, does patron come for information how to join the library or where to find specific work to deeper using resources he divides work on?
  a) Ready-reference questions can be answered quickly by counselling only one or two reference tools. Whatever library is public, academic or special there are repetitive questions and repetitive answers.
  In the digital era and the Age of virtual services to these questions, we found that kind of answers at the FAQ.
  b) Bibliographic verification is more professional library work in which we serve with a number of library tools such as indexes and bibliographies. If earlier there was a need for indexes and bibliographies to find out more about a specific part or problem, today we could check citation that is sometimes superficial and misleading.
  c) Interlibrary loan is very useful and those days with computers, scanners and on line catalogues, approaching resources of any library all over the world is easy to everybody.
  d) Information and referral service where the librarian has an important role in choosing the materials borrowed from another library or an institution or agency.
  e) Research questions- ready reference and bibliographic verification questions looks quite simple compared to the research questions, which in academic
libraries have plenty of and which require more time and more expertise. Some libraries have standards how much we can spend with one patron (5-10 min). Then they have to return or schedule meeting for further research and assistance.

f) Fee based Services and Information Brokering are similar services which include paying for extra time which is needed to solve their problem. There are a lot of dilemmas about this question, how deep can reference librarian go in some research for somebody else and when to provide this kind of service. Information brokers can solve that problem, because they are individuals or firms who don’t work for library.

- Guidance is when reference librarian is more assistant to the user to help him find so many different information or materials about his interest. Guidance has few parts: Bibliotherapy, Reader’s advisory service, Selective Dissemination of information and Counseling or Term paper.

a) Bibliotherapy aid in a physical or emotional healing process by direct reading to the users. It has two types: clinical and developmental. Clinical bibliotherapy is used by doctors and hospital librarians with persons with emotional problems. Developmental bibliotherapy is used usually in schools to promote a self-knowledge and self-understanding.

b) Reader’s advisory service can describe a term which Samuel Green understands as aid to readers. It means helping readers to choose the book which best suited to his interests or needs.

c) Selective Dissemination of information informs patrons with a lot of things about some news in the library, as a books bought at the book fairy or some new journals associated to some research project.

d) Specific attention I devoted, as part of the Reference service to Counseling or Term paper which is expressed in most academic libraries. It is connected to peak term paper writing times of school year.

- Instruction

So many people come in library without too much thinking how and in what way the job is done. But there are those who want to know the details. Instructions can take
many forms. The hardest is how to teach users to evaluate and use information that was given from the librarian. Instruction can be one by one or group Instruction. Those days’ instructions are mostly how to use on line catalogues and searching data bases. Group instruction is very useful when teacher and librarian design together activities of a course.

2.3 DIGITAL REFERENCE SERVICE

“Reference service is initiated electronically, often in real time, where users employ computers or other internet technology to communicate with librarians, without being physically present” MARS Digital Reference Guidelines Ad Hoc Committee (2004). The types of technology used for virtual reference service include chat, videoconferencing, Voice over IP, e-mail and instant messaging and all have weakness and strengths Tenopir (2001).

Mc Clure et al. (2002) define a digital reference service as one in which all communication between the user and staff is conducted electronically or digitally. The question must be received and answer must be send digitally. Digital reference service based on e-mails usually takes time from 24 hours to 5 working days in turnaround what usually make lack in using this kind of reference service. Gross, Mc Clure, Lankes (2002) find out that turnaround time is usually shorter for e-mail reference than organizational policy dictates.

This kind of service is mainly used by target audience and the questions are more ready reference. If they get some research question, it is sent anywhere. More than sent to its reference desk and even number a question arises it is still low what make some questions about cost and economy of this kind of service.

The advent of the Internet is at the center of changes in libraries and traditional reference service. Johnson( 2003)said that generation of students who are now at higher education are born with internet and even education is the same, research works too, but tools for it is changed. They rather use computers than go to libraries and that's why library has to be there to meet their needs. Johnson makes a question why e-mail reference service, which is more competitive than some of commercial web sites, is not
so much in use. Problem can be: not user friendliness library sites, or library police, or staff instructing.

2.3.1 Development of digital reference services

The development of technology has caused changes in libraries and work in them. Any segment of library, is changed, it is evident. From catalog cards that were originally inscribed by hand, then printed on special machines to the present time when the majority of library catalogs are electronic and card catalog almost don’t exist. Impact of developed technology was huge to the reference job. From the first eye to eye reference work, through phone and fax until computer development and reference service in virtual world.

The reference librarian was the first person to meet when you enter the library, sitting in its reference table and patrons usually come to him where they have a reference interview. The phone as a tool by which you can get the information you need has never taken a right place. The fax is present when it comes to the interlibrary loan here in Montenegro.

Digital reference service gave a new means used by some of the more advanced technological resources such as computers and internet, video networks or IVP. Digital reference service is moved outside the walls of libraries and reference services in a network environment. It was not long time since digital service developed from sending e-mails to users, which started 80-s of the last century, to today's videoconference. Electronic e-mail as a form of communication started 80-s years of the last century in America, but until the early ’90s did not have a significant impact.

Fast development of society in the next decade led to increased use of e-mail communications. It was used among libraries themselves, in interlibrary loan and the users who could send a question to the librarian at any time and the next day wait for a response.

This type of communication is very useful for one and for others, where the user does not depend on librarian time, does not have to wait long lines in the library lobby, and gets the answer to their own address. The advantage is also that when you arrive to library, literature is already prepared and waiting for you.
It is very useful too, in making base with these records. Academic libraries are at the undergraduate level always in touch with the same or similar issues that students need. This base can be very useful and save the time to seek references for the seminar read and essays.

Disadvantages could be too much waiting for answer and it is very difficult to conduct a reference interview, but if you have 3-4 turnaround it can be made a good interview as well as personally. Ask librarian as one of this kind is very good and in contrary to Ask Expert does not depend on personal knowledge of some problem but deal with facts, bases and information which are verifiable.

The next type of reference service is a reference in the Real time. Reference service, as well as other things, has good and bad sides. There are a lot of wastage of time, regards and thanks notes. While librarian is looking for information user don’t do anything. But for the next generation, where you and librarian can search together this problem will be solved.

Internet Public Library is one of the pioneers in on line services among other 24/7. British Ask a Librarian is developed into the biggest project of Point Question online reference services in the world. And these are some types of consortia that have imposed the need for users. At any time there is someone on the other side who will answer your question. This type of association is very beneficial for the institution where you pay more and more efficiently than the same services in a single institution.

2.3.2 Definitions of digital reference services

Digital reference service, although it occurred at the end of the twentieth century still had some concerns in the formulation. That was a reason for organizing Symposium in Syracuse University where were 20 experts from this field. Few definitions appear:

Digital Reference Services are Internet based services that employ human experts or intermediaries to provide information to users (Whitelatch, 2003)

Digital reference is a service that provides users with answers to questions in a computer-mediated environment (Pomerantz, 2003).
Digital reference services seek to enhance the ability of users to locate needed information through the work of reference librarians providing both direct and indirect services. While one aspect of digital reference services involves assisting users in accessing digital library resources, digital reference services encompass any reference services provided over the Internet and can involve use of print as well as digital resources (Smith, 2003).

Digital reference refers to a network of expertise, intermediation and resources put at the disposal of a person seeking answers in an online environment (Lankes, 2003). From all this can be concluded that the common three concepts are:

- Responding to questions
- The human mediation
- Digital environment.

We can agree that online reference service is a man questions answered in a network environment. The terms digital reference services, web-based reference services and electronic reference services are used interchangeably by Su (2002) as terms with similar meaning.

A digital reference occurs when a question is received electronically and responded electronically (Bertot, McClure and Ryan, 2000). Janes, Carter and Memmott (1999) developed their own definition of digital reference as a mechanism by which people can submit their questions and have them answered by a library staff member through some electronic means (e-mail, chat, Web forms, etc.) not in person or over the phone.

Digital reference service generally comprises the following elements:

a. The user of the service,
b. The interface (e-mail, web form, chat, videoconference, etc.),
c. The information professional,
d. Electronic resources (including electronic or CD based resources, web resources, local digitized material etc.), as well as print resources (Berube, 2003)
2.3.3 Types of digital reference services

Development in technology causes development in reference work. Digital reference services can be divided into asynchronous and synchronous, depending on whether the service is in real time or not.

Asynchronous services are those that occur outside real time and it is often e-mail communication.

Synchronous service is when the communication takes place in real time and to the usual chat rooms or video session.

2.3.4 Digital reference services in University libraries

One of characteristic academic or university librarian is as Professor Otis Robins of the University of Rochester expressed at conference 1876 that “A librarian should be much more that a keeper of books, he should be an educator...” Rothstein (1989, p.15).

New systems and new work put in front of a lot of librarians who have worked for years with a couple of encyclopedias challenge. They must be well educated and informed on an issue before daring to make recommendations to the user, especially in academic libraries in which is the ratio of librarians and colleagues at the specific level.

In the past Winsor replica “book is never so valuable as when it is in use” was not so much understandable. (Rothstein, 1989, p.54)

Collection of reference material was not allowed to remove. As soon as was much circulation of reference books was evident a more using. Rothstein said that unfortunately it was not particularly pronounced in the period between 1896 and the First World War. There were a big influence of German Universities and Ticknor said that “Library is not only the first convenience of the University, but that is the first necessity” (Rothstein, 1989, p. 41).

By the end of the century, sentence “library is the heart of the University” became a common (Rothstein, 1989, p. 42). With the exception of Cornel Colombia and private colleges referencing Library was only occasional. Yale had not reference librarian until 1900. All his work was related only to the part time help in the use of library and bibliographic tools. In 1950 RS was adopted as necessary university library service and there is an indication of the subject librarian.
Subject librarian is very important in academic libraries. Even Dewey in answer to Crunden’s questionnaire of 1885, Columbia reported that it “keeps two reference librarians specially to aid inquirers” (Rothstein, 1989, p. 21). “In 1886 the work of personal assistance was organized in distinct” reference department”. For university libraries it marked a new point in the specialization of services.

In 1999 ARL survey that 75 percent of academic libraries offer e-mail reference service and it is increasing. Johnson said that even there is more to do, e-mail reference service is here to stay, and especially in academic libraries where students do a lot of research work without coming to the library
3 UNIVERSITY OF DONJA GORICA, MONTENEGRO

University Donja Gorica, founded in 2007. There were two faculties at the beginning. Today five years later we have 7 faculties and, postgraduate and doctoral studies. There are 2176 members at our mailing list.

Library job is consisting of several unique units that are as gears of a clock fit into each other and driven by another at the end give precise time as a final product.

In one man library sometimes this is very difficult. When one of those circles fail the library job will not stop unless is reference service.

UDG library has got some specific characteristic. There is free access during the whole day 24 / 7, reading room with 50 computers and 10 000 books are on a continuous service to students and academic staff.

Students become members of the library automatically using only ID card of University. Very often I am calling myself librarian from the shadow, where books are sorted on the shelves, where they get e-mails related to the library or find a message on every table on the rules of conduct, but they cannot see me when they enter the reading room because the reference desk is on the hidden place.

Ellsworth Mason and Joan Mason (2001) mention importance of reference desk where they said that if you don’t see reference desk from the entrance is like you open door of house and nobody is there.

The first week of the first semester, all services at University have a presentation with new students and on that occasion I have a presentation on the rules in the library and ways to communicate with me. As we are all networked with a unique part udg.edu.me and address book that is available to me, e-mail is very useful tool. I begin to sporadically send some e-mails with information of the availability of certain books, or due time for returning it or just some relax notification in order to attract their attention.

My ideas were improved at postgraduate studies at Ljubljana where the first day we have a meeting with library manager who explained us some principles of work. And every next step was a further step in realization of e-mail reference service at UDG. From the first day patrons are able to reach my desk for textbooks, but for seminars, essays and research papers they had to send e-mail first to which I responded within 24
hours. The idea is that they will be answered within 24 hours. My search begins after two o'clock when they finish their classes and they go home. Until then I have to deal with a reference work in real time.

From 2011 we have courses of information literacy called Library and research methods at our University where I teach students how to look for information at the right place and what to do with it, how to find enough not too much and of course not less is needed. From the beginning we have established cooperation with all libraries and very active interlibrary loan.
4 REVIEW OF LITERATURE

This chapter has two parts: literature on digital reference services and literature on evaluation of reference services, traditional and digital.

4.1 DIGITAL REFERENCE SERVICES

Straw (2001) said that computer technology has been at the heart of innovation in reference work. He involved a magic between patrons, technology and reference platform which is not static but virtual.


Kresh (2003) said that patrons are more and more at internet and libraries have to be there to help them locate and obtain relevant information.

She said as in US army, changes is not just a word, if you want to change you have to start with few things and the first one is have a vision.

Lankes (2003) deals with fallacy between synchrony and asynchrony digital reference service. He argue that only difference is in lag of time and mention one specific that if you tell patron in asynchrony reference service that they will get answer in two days he is satisfied and if you tell patron in real time that have to wait three hours he will not be happy.

James (2003) deals with theory and practice of reference and argues that there were not any times with more changes in libraries. He gave a roof average of historical development reference service since Samuel Green, through Dewey.

Kimmel (2003) said that something what started shiny become a river and that every library has to start first with terminology, than administrative and software backup when plan to implement virtual reference service. She used Clifford Lynch comparison virtual reference services and horseless carriage where patron is directed to the point without knowing who direct him. As that virtual reference service is moving, reference librarian behind the walls, should be there just in case.
Kern (2009) suggests how to tailor service for your library and she passes most elements for implementing through 14 chapters.

Bosancic (2010) gives a short overview about historical development of digital reference service. He argues with name by itself, would it be on line reference service, virtual reference service, digital and what it is about.

So he said that whatever they call, it has a link with information communication technology, and exist at net environment. He mentions tinny line between reference and information services.

First on line reference service was sending answer by e-mail in medical libraries in a middle of 80—last century. Since then, this kind of communication, first between libraries during interlibrary loan until those days, is the most popular way in reference service. In America one of most popular ways is Ask ERIC which is different then Ask Librarian. With internet development it is developed a chat, real time reference service. It started with fist steps at 1995 Internet public Library in Michigan to this days at consortium and 24/7 reference service. This is praxis usually, and we can see it in England through Ask a Librarian service. Since 1997 when is founded until 2003 when became a part of the biggest on line reference service Question point to those days.

Khan (2010) describes the emergence, concept and practices of reference services in the digital environment and changes in traditional libraries by electronic impact of development of information and communication technologies. Changes impact libraries and librarian who has to develop new skills.

Through few digital references theory he fined few common elements: The user of the service, the interface, the information professional and resources both electronic and printed.

Wan Dollah (2006) in his paper attempts to describe the paradigm of reference and information services in the digital library environment. Digital reference service is mainly implementing in academic libraries as they have a lot of research work, more than public. He made an overview about how many libraries use which kind of digital reference services in Malaysia, through short description of definitions and models of digital reference services. They started with e-mails since 1984, through Ask librarian
during early 1990s, until those days where most libraries use real time reference services, 24 hours seven days a week.

4.2 LITERATURE ON EVALUATION OF REFERENCE SERVICES

Pierce (1984) made a difference between evaluation from the manager and professional side, where manager thing about organization and professionals about outside organization which means users.

Olson (1984) mentions assess the quality of reference service offered to the public in four segments. Determine the reference staffs current level of performance in response to queries for factual information, to question involving knowledge of library services, in providing instructions in the use of reference services and question involving the need for question negotiation.

Rothstein (1989) said that major problem in justifying reference services comes at the outset: determining at who the case is to be directed. Similar to Pierce he divides at two group users and people who make decisions.

Hults (1992) present a short review of reference evaluation and mention most actual researches from that field. Conclusion is that every library has its own project about evaluation but has some common parts which are valid for every library. She pays attention on unobtrusive methods of evaluation. Librarians do evaluation and assessing to improve their work, but there is no method valuable on every part of work.

Whitlatch (2000) in his book Evaluation of reference service thinks that first we have to plan the evaluation of reference service with questions of purpose of the evaluation, goals and objective and selecting appropriate evaluation methods. He mentioned question why am I evaluating reference service and what do I plan to do with the study results? The purpose of study should be improving reference service. This goes up to next question, which part we want to improve? Do we want more questions for our reference desk, or to be better answered? All this we have to have in mind before we start Whitlatch means. That’s why we need a set of reference standards performance. It brings us back on reasons for evaluating reference services in relation how will you define reference services quality. Among the performance standards often used to measure effectiveness of service is economic, service process, resources
service outcomes. Once the purpose of the evaluation has been clearly established study goals and objectives should be written. Goals should be just few and should describe the nature of the evaluation. Objectives should be narrow, specific statement that is expressed clearly and explicitly. To select appropriate evaluation methods we have to know characteristics good measure. Good reference measures must be valid, reliable, practical and useful. Valid measures are those that measure the concepts that the evaluation intend to measure. Reliable measures are consistent. Practical measures are convenient and easy for both the library and the user. Useful measures provide data that has the potential to improve reference service practice.

Bryce (2001, p.245) Evaluation" of reference services literally means to establish the value of the services offered". Objective of every evaluation of reference services is improvement on it.

Evaluation of reference service started with library statistic, which is in libraries very long. Real evaluation started at 1939 with Edward Henry who proposed criteria for evaluating reference service collection and personnel. But main role has had Rothstein in 1964.

We can evaluate

a) Inputs: Reference materials: Printed or electronic and Staff
b) Outputs: Factual question answered, instruction given and assistance in using information resources provided and
c) Outcomes: Information needs satisfied and Library skills and knowledge improved

Novotny (2001) in Evaluating Electronic Reference Services Issues, Approaches and Criteria said that not so many libraries do evaluation and if usually is statistic means quantitative evaluation, how many e-mails, from whom and similar.

He mention that we cannot compare numbers but make a question why patrons have sent e-mails to Ask Eric even they have a very good library just around the corner.

Sears (2001) in his work analyze 4 month of chat reference question received during fall 2000. He analyzed the type of question and patron who sent it. The problem was short time that service was offered, but very good thing in this work are table where they explain question s one by one in parallel with Katz division of reference service.
We have usually problem with defining of sorting questions by type, because they are mostly mixed.

Lederer (2001) said that librarians are probably first who use e-mail as a service. They use it from the first time they get internet. Researchers, especially at the academic libraries can ask their question no matter what time of day it is. The time frame for a reply varies – if it is sent to a specific person, must wait until that person reads the message and replies to it. In recent years there has been increasing amount of formalization of this type of service, instead of sending the message to one person, a service access is created so that multiple librarians can access it, Ask Librarian, mailto. E-mail with form or not, on the home page or not arise a question in way that if patron see link from the first page will use more service than if he need more than three clicks.

Lankes, Gross, McClure (2002) said Quality standards are necessary for every evaluation but they are not performance measures. The assessment study specifically states that there is no "correct" standard for any specific digital reference service, because maybe one results for one library can be accessible but not for another.

Gross, Mc Clure and Lankes (2003) in Implementing Digital reference services have given first an overview of the key literature on digital reference and then designed study to develop it, test and refine measures and quality standards to assess digital reference services. It also produce guide book how to collect, analyze and report data for these measures and standards. In study also suggested need to build organizational infrastructure and resources to support the assessment process.

Kimmel (2003) mentioned an invisible role of reference librarian who has to step out the patron or he is in great danger of disappearing. We have in mind patron in front of us and ask question but what about patrons who don’t ask a question. Do they need reference librarian?

Facets of Quality for Digital Reference Services Version 5June 2003 clarify digital reference services differ from each other in many aspects including policy and procedure, subject matter expertise, and available resources. For this reason, it is important that quality criteria accommodate the wide range of possibilities of various services and their readiness to meet certain expectations. Each "facet" is presented at two different levels:
• Essential - Required for network membership
• Recommendations – current state and goals of membership

The facets are divided into two main categories: user transaction and service development/management.

Coffman (2003) mention again benchmarking and how virtual service is not as much in use as librarian has thought it will be, if we use the same “arms” as users. Dilemmas about less using libraries because real reference desk, reference interview face to face and printed materials are not for present time and rush to meet patrons at the virtual word doesn’t show as total valid. He said (god) we have to follow all demands but “we have let the genie of virtual reference out of the bottle. And now we should be very careful what we wish for, because we just might get it.”(p. 105)

Bill Katz (2003) said librarian will become important persons in society as so as much information is available. He said that it is need for good professionals because of three facts. One- there is too much data out, second - there is a need for somebody who know how to find a data an find it fast, and third- an increasing respect for knowledge made a question which all librarians should do before start with evaluation. Why we need to evaluate a reference service?

Nilsen, K. (2004) Research in Western Ontario University during ten years period have made differences between virtual and real reference desk. It was found out that the problems are the same which means inadequate reference interviewing, referral to alternative sources without a subsequent check on their suitability, and a lack of follow-up to determine satisfaction in general.

Clanton (2006) after one year of implementing digital reference service find out that they need assessment of success. It has selected both types of reference service. The evaluation measured both the statistical and descriptive data, such as number of question, type, time, number of users, and number of repeat users…The question of evaluating reference service becomes very important. What constitutes a successful virtual reference set? Is it possible or ever desirable to evaluate a virtual reference service using the tools and measures developed for traditional reference service? They questioned students and graduate students and found out that they rarely use the
library, while the majority also says that the most useful service it was a virtual reference service and on line catalog access.

Arendt, J. & Graves, S.J (2011) Examine the period of 6 years of change in SVR transcripts from October and February. Transcripts from October 2004 to February 2010 were coded for type of question, interlibrary loan discussions, and referrals. Subcategories for holding types and referrals were also recorded. Patterns relating to interlibrary loan discussions and referrals were noted. They analyzed questions they have got for many years and have made difference in type of question and volume. The authors were very interested in few questions. Have the types of questions changed significantly over time? Does platform choice have an impact on the types of questions being asked and the volume of questions? Does the presence of embedded widgets in proprietary databases change the nature of reference transactions? They moved through four different digital reference services. Until Today, there is no agreed-on question typology developed for the study of SVR transcripts. One of the main problem is coding a question for any research, which kind of question should be count and in what folder to put it.

Coffman (2004) talks about E-mail which is present in libraries for a very long time. But it was never much in use. Most libraries have moved to chat, but even there was not so effective reference work but it is more than e-mails. If we compare those both services e-mail is chipper and sometimes more effective. Librarian can takes time with researching. E-mail is relatively low-tech, so there is little to break or go wrong. It works with almost any computer regardless of brand or operating system. Most important, e-mail reference is much easier to staff and to integrate within existing reference operations than a chat service. Somebody has to check the inbox regularly in between other tasks. And, because people who e-mail questions don't expect an immediate response staff can work on the question as other duties permit, as long as they make sure to get back to the patron within a reasonable length of time. He mentioned that if library gives fewer hours for waiting on answer then will be more in use. Finally, if libraries offered better turnaround on e-mail questions, our patrons just might use it more. A 48-hour or 2-business-day response time is common in many libraries, and some stretch it even further. The Library of Congress requires "5 business days."
Monica Public Library offers a 2-hour turnaround during regular business hours and 24 hours over the weekend, and it routinely receives more e-mail questions than chat. He suggested that if library wants to reduce costs, but still preserve some reference services online, then try e-mail, but keeps it on a tight schedule. He is talking about importance to put ask lib at the home page because is less question if there have be more than one or two clicks.

Bristow, A and Lin, J. (1992) made a survey about satisfaction their users with e-mail service. They sent a four questions about using computers, about coming to library, their opinion about usefulness that service and asking suggestions about improving this services. At Indiana University, Bloomington something they call “academic e-mail reference service” extends since 1987. They offer e-mail reference service to their students and staff. They find out that service don’t grow as they think it may be. The question what is a problem, because it is not at the home page of most faculties or there is no need for this kind of service. They started survey of the users divide it in two groups those who used the service four or more times within the preceding year and those who used it fewer than four times. They get answers from 62 frequent users and 40% of infrequent user what is encouraged. They try to understand and find answers from different aspects, technical background and similar.

They continue they research with simple question and got few tips that e-mail reference service mostly use patrons who use computer every day and if the reference service is a part of larger information system. In 1999 they counted messages and found out that they get 691 and sent 819 what is natural because they have sent some answers to patrons who have come to the desk. They divided questions they sent in few groups as are from where they get it (Ask librarian or e-mail, what was about: registration, policy, where did they come from and what is the status of patrons: graduated students, under graduated students, staff and similar.

Clark (2003) Museum libraries are different than public and academic libraries, but similar is support which library staff gives to users and researcher in museum. The John D Rockefeller, Jr. Library, the corporate Library for the Colonial Williamsburg Foundation its found 75 year ago and has been receiving questions through e-mail for five years. They started with e-mail reference service spontaneous as a way to improve
their service. The first web site started 1996. They received e-mails through main web until 1998, when library get its first web page. As soon as they get a direct e-mail to their librarian the number of question arise. After 1999 the library s e-mail reference requests increased over 500 percent in one month.

Hill (2003) At Southeastern Louisiana University with 15 000 students mostly distance learners one of the libraries two annual evaluations were performed in 2001 and 2002. The findings of these evaluations were instructive in setting the initial parameters of the new synchronous service. Evaluation was made by questionnaire which collection and use of this data raises some ethical issues. 261 patrons who had asked questions during the most recent semester were asked on few simple questions which could help in making decision would they implement in real time reference service. And they got answers from only 37 maybe because that ethical problem was mention before. They made research on Patrons Served, Peak Times, Response Time, Questions Received and Answers provided; Quality of Answers was helpful for other who wants to start evaluation from where to start. Surprisingly, the digital reference requests were similar to the physical reference desk requests, peaking around midday and during regular working time.

Gobinda (2004): Through tree major libraries in Scotland they discussed the current practice for providing DRS. He find some similar ways where there is direct link for queries on the web page of University and one difference where there is a e-mail boxes in library department but not at the main web page.

Radford and Snelson (2008): in academic library research perspectives and current trends mention that no matter how many researchers do evaluation one thing is together and means differentia that every researcher has his own code for coding his e-mail reference question which can help in evaluation of some reference service.

Domas and White(2003) In this pilot study which use unobtrusive method where few questionnaires were pretended that are a really patrons and make a questions to the librarian from the another side of the chat line. In one part they analyze question response and in another content of the chat. It was usefully in part to detect patterns, suggest additional questions and maybe establish the basis for quantitative measures. Coding schema for the broad categories provide useful insights into the focus and
content of the reference interview. He mentions that preliminary coding is very useful in pre testing a methodological approach to the analyses and suggesting a coding schema that addresses the research questions.

Nicholson and Lankes (2007) present a project DREW. One goal of the DREW project is to maintain a relationship with other major reference archives such as Question Point One of the largest shared archives of reference transactions is Question Point’s Knowledge Base. The purpose of the Question Point Knowledge Base is to provide reference librarians and their patrons with a repository for hard-to-find answers, answers to frequently asked questions, pathfinders and bibliographies on specific subjects, and the intellectual content resulting from aiding scholars in their research. They try through research of more digital reference services to make a standard how it should look like and said that usefulness of this kind of archive will be very big
5 METHODOLOGY

The research design included planning and instrument development, data collection and data analysis and thesis preparation. All e-mails received by UDG library in the period 2008-2011 were collected and read in detail. Content and quantitative analysis of e-mails was used.

5.1 RESEARCH PROBLEM

The aim of this research is to find out does e-mail reference service increase in its function, is it good solution for one man library by investigation of how many e-mails library gets from period of 2008/2011, how many e-mails are sent in each month, from which year students sent more e-mails than others, which faculty use e-mail as a way of communication with librarian, what kind of question they send and what day is more active for sending e-mails.

5.2 PURPOSE AND OBJECTIVES OF RESEARCH

The purpose of this research was to examine does the number of e-mails increase and to understand usefulness of e-mail reference services in UDG University. The goal was to improve reference service in UDG University with possibility to expand this kind of reference service in other libraries in Podgorica and Montenegro.

There were a lot of objectives which could be investigate or evaluate. Researcher decided to start with six main but during evaluation so many new question showed up as long as research go further.

Objectives included:
1. Identify the increasing e-mail communication.
2. Explore how many is increasing from year to year.
3. Evaluate the number of questions, in total and by type (administrative or reference)
4. Evaluate this study’s assumptions.
5. Assess the usefulness of the exploratory study approach.
6. Provide practical recommendations to improve e-mail reference services.
The following research questions were addressed to:
1. Does the number of e-mail questions increase from year to year?
2. What month is more active in sending e-mails?
3. Are the questions more administrative or reference?
3a. What reference questions are more in use?
4. What is the number of students from different faculties?
5. What is the number of students from different year of studying?
6. What day students are more active in sending e-mails?

These research questions directed the development of the data collection and data analysis in this research.

5.3 RESEARCH HYPOTHESES

Developed on the research questions eight hypotheses were set.

RQ 1: Does the number of e-mail questions increase from year to year?

Hypothesis no.1: The number of e-mails in UDG is increasing from year to year.

RQ2: What month students are more active in sending e-mails?

Hypothesis no.2: During the year the highest number of e-mails is received in June.

RQ 3: Are the questions more administrative or reference?

Hypothesis no.3: The number of e-mail reference questions is higher than number of e-mail administrative questions.

Hypothesis no 4: More reference questions are about authors and title, or year of publishing.

Hypothesis no 5: Most reference questions are about essays, seminars and research work during school year, and more administrative are in June.

RQ 4: What is the number of students from different faculties?

Hypothesis no.6: Students from Faculty of Law and Humanistic Studies use digital reference service more frequently than students from other faculties.

RQ 5: What is the number of students from different year of studying?

Hypothesis no.7: Undergraduate students from the first year send more e-mails than others.
RQ 6: What day students are more active in sending e-mails?

Hypothesis no.8: During the week the highest number of e-mails are sent on Wednesday

5.4 DATA COLLECTION

Research started with counting e-mails one by one for every year. It was count 1398 e-mails in total. First e-mail was sent in December 2008 and until July 2009 was sent 129 e-mails at library address. The total number of collected e-mails was 1 398. In school 2009/2010 was sent 436 e-mails and in 2009/2010 were received 833 e-mails. Every e-mail has been read what means check out content of e-mail with deep understanding of patrons need.

Data collection included the following steps

1. Collected e-mail transcript data

Data was collected from the period November 2008- September 2011. All e-mails received from that period of time were collected in one folder.

2. Cleaned data and removed unusable transcripts

Every e-mail was read several times and cleaned removed if doesn’t have any of needed characteristic for this research.

3. Categorized the types of questions

Every e-mail was read and in specific columns was marked type of question, year of studying, day when is sent et. ct.

4. Ascertained does collected data can answer at research question

Each e-mail has read out and has tried to follow research question with collected data from it.

This methodology took 4 month to collecting data and read it, sorts it by type of question: administrative and reference, by user’s faculty, by year of studding, by day of sending e-mails. First selection was just trying to count and understand that every year there were more and more questions sending by e-mail. Second selection was sorting by months to found out which is more active in receiving e-mails. Third selection was trying to count from which faculty students are more familiar with this kind of communication. Fourth selection was by year of studding. Which year is more active in
this kind of reference services? Fifth selection was trying to count which day is more active in form to employ somebody to help in answering question. Sixth selection was coding reference questions and trying to separate it in four boxes. This question was shown during research.

In addition, findings provided data indicating the prevalence of total number of patrons and how many of them use e-mail communication by analyzing data collected.

5.4.1 Content analysis

Powell (2010, p.50) said that “Content analysis is essentially a systematic analysis of the occurrence of words, phrases, concepts, etc. in books, films and other kind of material" Developing an appropriate content classification scheme is an important step and categories chosen should be exhaustive, clearly defined, and conceptually valid in relation to the research question. In e-mail reference research, researchers extensively use content analysis and quantitative analysis to analyze the content of the question-negotiation process and calculate statistics on e-mail transcripts. Content analysis included a review of reading every e-mail sent to reference service at UDG library.

Powell (2010, p.419) use Kaplans (1964) definition for content analysis as research technique for making replicable and valid inferences from data to their context. In same part Powell use Webers definition as research method that uses a set of procedures to make a valid inference from text. These inferences are about sender of text message, message itself or the audience of the message. Content analysis is a way of transforming qualitative material into quantitative data.

One of the key activities of qualitative analyzing is the “coding of data" Coding which is similar to indexing is a critical process since it serves to organize the raw information that has been collect data because it represents the first step in the conceptualization of the data. The classification procedure that is used to accomplish this reduction must be consistent so that anyone would get the same results. Data analysis involves working with data, organizing or, breaking it into manageable units, synthesizing it, discover what is important. (Powell, 2010, p.153)

“Three different types of coding generally follow the progression of content analysis. Open coding is initial, provisional work done on an unrestricted basis to
produce concepts that seem to fit the data. Axial coding takes place during the latter portions of open coding as major categories emerge from the data. By focusing on one category in terms of its conditions, consequences, and other features, the researcher develops cumulative knowledge about the category as well as its subcategories and related categories. Selective coding takes places as soon as open and axial coding has begun to establish core categories”. (Powell, 2010 p. 156)

**Coding reference question**

All e-mails are divided into two groups: reference and administrative questions.

Reference questions are all questions about literature, some examples:

- Does library own a certain book?
- Can patron reserve a book?
- Does the library have anything on specific theme?
- Can we find the publication year for a book?
- Can we get library material by the interlibrary loan?

Researcher was led with Katz (2002) characteristic of reference service.

Reference question were divided on Ready reference question, Research question, Instruction question and Guidance question.

Few examples is given, where Ready reference question are about specific book but patron don’t know the author, or publishing year and similar. Research questions are about specific topic students get for their essays or graduation. They get a theme but they don’t have the literature and research work is needed. Very soon students discover how useful e-mail reference service especially in this part of reference service. They save time; they keep data on their inbox and can use this kind of instruction for the next time to. Instructional questions are more about location some books in our reading room, some instructions and reservation some books.

Guidance questions are more about things not directly connected with books or leading books or literature, but anything else about library. There are most about reading club which is active in library.
### Example

<table>
<thead>
<tr>
<th>Ready reference question</th>
<th>Research question</th>
<th>Instruction</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching the internet I saw that there is a book, &quot;Managerial Accounting&quot; - Vinko Belak, issued in Zagreb, which would be for my topic - The importance of accounting for managers, it was ideal. Do you have information on whether the book can be found here?</td>
<td>Does library has books with explanations of extreme necessity, I need to write a term paper on this subject from the criminal law</td>
<td>Please tell me where to find the law books in our library</td>
<td>Can you tell me when the next meeting of the readers club is?</td>
</tr>
<tr>
<td>Dear Tamara, I need a number of pages of papers from the Proceedings of Jadranka Kaludjerovic Milocer forum 2007th</td>
<td>My topic is: Poverty and the environment, money and pleasure and social norms; What to do with it? regards,</td>
<td>Can you send me instructions for the use cobiss-opac on line catalogue?</td>
<td>Can you send me list of the new books, last week was on the board</td>
</tr>
<tr>
<td>Do you have a book &quot;You simply do not understand&quot;, I do not know the writer</td>
<td>Can you give me information have we in our library a book about metal, you are probably familiar with groups of third year FMEFB, one of them is METAL.</td>
<td>Can you reserve me a book of Kotler Marketing for tomorrow</td>
<td>Can you send me the book from which the quotations that you sent e-mail last week</td>
</tr>
<tr>
<td>Can you send me the book publisher, and year: - How does the law of the European Union works - Vesna Knezevic-Predic</td>
<td>Dear, Please let me know when you get a book from interlibrary loan.</td>
<td>Dear, I want to ask you may I keep math book? I need more time to be prepared for exam?</td>
<td></td>
</tr>
</tbody>
</table>
Administrative questions are all questions about policy and working time; the most frequent question is about receipt that patrons don’t own any book to library. Those kinds of questions are repeated in the end of study year when patrons need it for graduating or taking a master. I have to mention that all questions about working time is about my working time, as library and reading room is open whole day and night.

Example 1: Can you tell me until what time you are at the faculty, as I need a receipt to not own any book from the library.

Example 2: Can you please tell me when you will be at the library as I need a book for my exam?

Example 3: As procedure is I am sending e-mail to ask you to leave me a receipt needed for my master.

After content analysis, quantitative analysis of the content analysis findings provided quantitative data for the calculations of number e-mails send to reference service for certain period.

5.4.2 Quantitative analysis

Quantitative analyses are “techniques by which researchers convert data to a numerical form for statistical analyze” (Babbie, 2007, p. 405). Quantitative analysis provide quantitative measures to address the number of how many students use e-mail communication, in total and by type, of total question transcripts, and the number of students from one year and one faculty use this type of reference service.

Quantitative analysis

1. Count e-mails from every studying year (from September to July when is finished second semester of one year)

2. Count every e-mail sent in certain month

3. Count number of administrative and bibliographic question

4. Count the number of students of one year in total

5. Count the number of students from one faculty in total

6. Count months and days of sending e-mails in total.
6 FINDINGS

The purpose of this evaluation was to find out does e-mail reference service becomes increasing and does e-mail reference service become more efficient way of reference service in UDG library. This research addressed the need for additional understanding and implementing of digital reference service in UDG library.

Research question 1

First research question was does the number of e-mails increase as the University grove, does the number of students who use e-mail reference service increase? All e-mails were read and clean of irrelevant e-mails for research. All e-mails relevant for research were count. The e-mailing list of the University addresses 1965 members. Even all our students and staff have e-mail address not all e-mails were included in research.

Research has taken the number of undergraduate and postgraduate students and colleagues.

Tab. 1 Number of UDG students using e-mail reference service

<table>
<thead>
<tr>
<th></th>
<th>No. students</th>
<th>No. students who use e-mail</th>
<th>No. e-mails In total</th>
<th>Percentage students who use e-mail RS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/2009</td>
<td>862</td>
<td>95</td>
<td>129</td>
<td>11,02%</td>
</tr>
<tr>
<td>2009/2010</td>
<td>1473</td>
<td>248</td>
<td>436</td>
<td>16,84%</td>
</tr>
<tr>
<td>2010/2011</td>
<td>1965</td>
<td>393</td>
<td>833</td>
<td>20,00%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4300</td>
<td>736</td>
<td>1398</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows the number of students who studied at UDG for every research year to be investigated and the number of students who use e-mail reference service. It shows a number of received e-mails for every year. In 2008/2009 were 862 students and 95 used e-mails what is 11, 02% students. It was received 129 e-mails. In 2009/2010 were 1473 students and 248 used e-mails as a type of reference service, what is 16, 84%. It was received 436 e-mails. In 2010/2011 were 1965 students and 393 used e-mail what
is 20, 00%. It was received 833 e-mails. This is the only part where is used percentage to show the movement in using e-mails.

As University growing it was natural to expect that number of mails increase but the point was, does the number of students who use this kind of communication increase?

**Research question 2**

Second research question was which month is more active than others.

Tab. 2 Received e-mails by month for 2008-2011

<table>
<thead>
<tr>
<th></th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/2009</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>88</td>
<td>19</td>
<td>129</td>
</tr>
<tr>
<td>2009/2010</td>
<td>25</td>
<td>38</td>
<td>52</td>
<td>80</td>
<td>40</td>
<td>24</td>
<td>26</td>
<td>18</td>
<td>17</td>
<td>95</td>
<td>21</td>
<td>436</td>
</tr>
<tr>
<td>2010/2011</td>
<td>46</td>
<td>63</td>
<td>38</td>
<td>96</td>
<td>51</td>
<td>89</td>
<td>118</td>
<td>58</td>
<td>87</td>
<td>150</td>
<td>37</td>
<td>833</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>101</td>
<td>90</td>
<td>177</td>
<td>92</td>
<td>114</td>
<td>147</td>
<td>84</td>
<td>112</td>
<td>333</td>
<td>77</td>
<td>1398</td>
</tr>
</tbody>
</table>

Tab. 2 shows which month is more active in using e-mail reference service for every research year. In first research year 2008/2009 most active month was June with 88 received e-mails. July follow with 19 e-mails received on library address. Results for first year of research especially first semester which begin at September are not complete but are taken for research as a part of a whole year. In December, January and February were sent 1 e-mail. In March are sent 3 and April and May 8 e-mails.

In 2009/2010 most active month in receiving e-mails was June too, with 95 received e-mails and third research year 2010/2011 show the same results with most received e-mails in June 150. Second year of research showed start of continuity. We can see in that most active months are June and December. In Jun were sent 95 e-mails and in December 80. Tab. 2 shows that most active month at e-mail reference desk third research year 2010/2011 show the same results with most received e-mails in June 150 e-mails and March 118 e-mails. Third year of research present establishing digital reference service as a significant kind of reference service.
Research question 3

Third research question was about types of e-mails has get. All e-mails are divide on administrative and reference.

Tab. 3 E-mails selected by type

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<tbody>
<tr>
<td>Admin</td>
<td>26</td>
<td>98</td>
<td>164</td>
<td>288</td>
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<tr>
<td>Refer</td>
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<td>1110</td>
</tr>
<tr>
<td>TOTAL</td>
<td>129</td>
<td>436</td>
<td>833</td>
<td>1398</td>
</tr>
</tbody>
</table>

Tab. 3 show that in 2008/2009 e-mail reference service received 129 e-mails and 26 were administrative and 103 reference. In 2009/2010 were 436 e-mails, 98 administrative and 338 reference, but in 2010/2011 from 833 received e-mails were 164 administrative and 669 reference. For the first three years there were received 282 administrative and 1110 reference e-mails. In 2008/2009 there were 26 administrative and 103 reference questions. In 2009/2010 there were 98 administrative and 338 reference question and most e-mails is received. In third research year 2010/2011, reference services UDG library received 164 administrative and 669 reference questions in e-mails.

Tab. 3a Recived e-mails selected by type for 2008/2009

<table>
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<tr>
<th></th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
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<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>Maj</th>
<th>Jun</th>
<th>Jul</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Adm</td>
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<td>/</td>
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<tr>
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<td>1</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>88</td>
<td>19</td>
<td>129</td>
</tr>
</tbody>
</table>

Tab. 3a shows that more e-mails are reference, and we have in June 68 reference e-mails from 88 received and only 20 administrative. Even in December, January and February where we have only 1 e-mail that one was reference.
Tab. 3b Received e-mails selected by type for 2009/2010

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</thead>
<tbody>
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<td>19</td>
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<td>80</td>
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<td>18</td>
<td>17</td>
<td>95</td>
<td>21</td>
<td>436</td>
</tr>
</tbody>
</table>

Tab. 3b shows big difference in numbers of administrative and reference e-mails where most e-mails are reference except in June where there is 76 administrative and just 19 reference questions. Most months don’t even have any administrative e-mail.

Tab. 3c Received e-mails selected by type for 2010/2011

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<td>Ref</td>
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<td>96</td>
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<td>89</td>
<td>118</td>
<td>58</td>
<td>86</td>
<td>38</td>
<td>24</td>
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<tr>
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<td>38</td>
<td>96</td>
<td>51</td>
<td>89</td>
<td>118</td>
<td>58</td>
<td>87</td>
<td>150</td>
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</tbody>
</table>

Table 3c shows number of e-mails in 2010/2011 study year and it is shown that there is still a huge number of reference e-mails except in Jun when there is more administrative. During research it was evident need for dividing reference questions on more parts.

Tab. 3d Reference questions in e-mails by type

<table>
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<tbody>
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<tr>
<td>publications</td>
<td>of</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Instruction</td>
<td>92</td>
<td>144</td>
<td>173</td>
<td>409</td>
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<tr>
<td>TOTAL</td>
<td>103</td>
<td>338</td>
<td>669</td>
<td>1110</td>
</tr>
</tbody>
</table>
In tab 3d it is divided reference questions on bibliographic, content of publication and instructional. For first research year 2008/2009 there was 92 instructional e-mails and only 6 or 5 content or bibliographic. In 2009/2010 there were 338 reference e-mails: 144 instructional but 151 content of publication and 43 bibliographic data. Third research year 2010/2011 shows that from 669 received e-mails 173 was instructional but 261 content of publication and 235 bibliographic questions

Tab. 3e Reference question by type 2008/2009

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</tr>
</thead>
<tbody>
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<tr>
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<td>/</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
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<td>6</td>
<td>6</td>
<td>68</td>
<td>17</td>
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</tr>
</tbody>
</table>

From 103 reference questions received in 2008/2009 year in June were 66 instructional, and one what is a big differentials from next year what is seen in tab 3e where in 2009/2010 were a lot of oscillation from month to month. The same trend is seen in tab 3f for research year 2010/2011 where every month has different number of e-mails and different kind of e-mails.

Tab. 3f Reference questions in e-mails by type 2009/2010

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</tr>
</thead>
<tbody>
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<td>5</td>
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<td>50</td>
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<td>17</td>
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<td>8</td>
<td>17</td>
<td>3</td>
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<tr>
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<td>30</td>
<td>22</td>
<td>47</td>
<td>20</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>4</td>
<td>1</td>
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<td>181</td>
</tr>
<tr>
<td>Tot.</td>
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<td>80</td>
<td>39</td>
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<td>23</td>
<td>18</td>
<td>17</td>
<td>19</td>
<td>16</td>
<td>338</td>
</tr>
</tbody>
</table>

Tab.3f present that students during year 2009/2010 sent more instructional reference questions 181, content 107 and 50 bibliographic questions. Most instructional question
was sent in December, October, November and January has between 20 and 30 e-mails with instructional questions.

Only in December we had more than 10 bibliographic question, the rest of months are under 10. September, October, February and June has only 1 bibliographic question. Questions about content of publication are more in November, December and June, identical 17, but two more months January and February are over 10 and yhe rest of the year is under 10 questions about content of publication.

Tab. 3g Reference questions in e-mails by type 2010/2011

<table>
<thead>
<tr>
<th></th>
<th>Sep. 10</th>
<th>Okt. 10</th>
<th>Nov. 10</th>
<th>Dec. 10</th>
<th>Jan. 11</th>
<th>Feb. 11</th>
<th>Mar. 11</th>
<th>Apr. 11</th>
<th>Maj. 11</th>
<th>Jun. 11</th>
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</tr>
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<tbody>
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<td>118</td>
<td>58</td>
<td>86</td>
<td>38</td>
<td>24</td>
<td>669</td>
</tr>
</tbody>
</table>

Research year 2010/2011 shows as in other research questions some changes. In this year more e-mails are about content of publication 302. Month with highest number of these questions is March 64, May 52 followed with February, October and December between 20 and 40 e-mails. Instructional in December and July are over 20 and September, November, January and June are under 10 e-mails with this kind of questions.

Questions about bibliographic data are mostly sent in March 44, April 36, and December 31. With exemption of September and July other months are consistent from 11 in November and June, 14 in October to January, February and May more than 20.

Research question 4

Students from which faculty are more active is shown in tab 4. This question is very interesting for research to recognise target group on which we should influence to use this kind of service more.
Tab 4 E-mail reference service used by students from different faculties

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
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<td>120</td>
<td>401</td>
<td>707</td>
</tr>
<tr>
<td>FPN</td>
<td>9</td>
<td>9</td>
<td>74</td>
</tr>
<tr>
<td>FIST</td>
<td>/</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>HS</td>
<td>/</td>
<td>9</td>
<td>35</td>
</tr>
<tr>
<td>FU</td>
<td>/</td>
<td>/</td>
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</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>436</td>
<td>833</td>
</tr>
</tbody>
</table>

Tab 4 shows that in 2008/2009 from 129 e-mails received on address digital reference service 120 were from FMEFB, in 2009/2010 from 436 received e-mails 401 were from FMEFB and in 2010/2011 from 833 e-mails 707 were from FMEFB.

Tab. 4a Received e-mails for 2008/2009 selected by faculty

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</tr>
</thead>
<tbody>
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<td>8</td>
<td>8</td>
<td>88</td>
<td>19</td>
<td>129</td>
</tr>
</tbody>
</table>

In 2008/2009 Students from FMEFB sent from December to July every month from one to 88 e-mails, but other students didn’t sent any except from Law faculty in April 2 and in July 7.
Tab. 4b Received e-mails for 2009/2010 selected by faculty

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<td>18</td>
<td>17</td>
<td>95</td>
<td>21</td>
<td>436</td>
</tr>
</tbody>
</table>

In 2009/2010 students from FMEFB sent every month from September to July from 13-93 e-mails per month and students from other faculties sent 1 till mostly 8 e-mails by month.

Tab. 4c Received e-mails for 2010/2011 selected by faculty

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<td>58</td>
<td>87</td>
<td>150</td>
<td>37</td>
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</tbody>
</table>

Table 4c shows the amount of e-mails received in the 2010/2011 academic year. It is seen e-mails from students FMEFB from 24 in July till 125 in July. It is seen a slight shift from the other faculties, Law Faculty every month from 1-19 e-mails, FIST 1-3, HS every month sent 1-7 and FU 1-4 e-mails.

Research question 5

View by years of study is one of questions which can help to understand and influence on better and wider using e-mail reference service.
Tab. 5 Received e-mail by year of studying

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<td>TOTAL</td>
<td>129</td>
<td>436</td>
<td>833</td>
<td>1398</td>
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</tbody>
</table>

Tab 5 shows number of students for every year of studying, and colleagues.

In year 2008/2009 from 129 received e-mails 79 was from first year of studying, 53 second, no third year. 10 e-mails sent postgraduate students and 5 colleagues. In 2009/2010 86 e-mails sent students from first year, 95 from second, 198 from third year. Postgraduate sent 49 e-mails and 8 e-mails was sent by colleagues. In 2010/2011 year 167 e-mails sent students from first year, 256 from second and 352 from third. Postgraduate students sent 47 and colleagues 11 e-mails.

Tab. 5a Received e-mails by year of studying for 2008/2009

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<td>8</td>
<td>88</td>
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</table>

Most e-mails were sent in May 47 from first year students and 38 from second year. In Jun were sent 12 e-mails from first year and 3 from second year and postgraduate and one from colleagues. In July were 11 e-mails from first year students and 6 from second year. One e-mail was sent from postgraduates and colleagues.
Tab. 5b Received e-mails by year of studying for 2008/2009

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</table>

Year 2009/2010 is beginning of real digital reference service. In September were sent 12 from second year and 13 from third year of studying. Other months we received from 1 to 77 e-mails from all studying years except postgraduates and colleagues.

Tab. 5c Received e-mails by year of studying for 2010/2011

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</tbody>
</table>

In 2010/2011 reference service received from 1 e-mail in January, from first year student to 29 in October. There were no e-mails in September from first year students. Second year students sent every month e-mails from, and it was received from 10 in January to 37 in March. Third year students sent from 5 in April and July to 107 in Jun. Postgraduates sent 1 e-mail in September and 15 in January. Colleagues sent 1 in January, two in September and February and three in March and April.

Research question 6
Which day is more active in sending e-mails?
TOMIĆ, T. Evaluation of e-mail reference service in UDG library. Master thesis
Faculty of Arts, Department of Library and Information Science and Book Studies, 2012

Tab. 6 Received e-mails by day on sending

<table>
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</table>

In 2008/2009 year most e-mails were sent Monday 44, Tuesday 39 and Thursday 32. Wednesday it was received 14, Friday 6 and Saturday 1. On Sundays there were no e-mails. In 2009/2010 year in Monday were received 123 e-mails, Tuesday 116 Thursday 108. Wednesday was 60 and Friday and Saturday 10. On Sunday were 9 e-mails received. Year 2010/2011 has continuity. On Monday were received 183 e-mails, Thursday 178 and Wednesday 18. Thursday was received 211 e-mails, Friday 15, Saturday 23 and Sunday 36 e-mails.

Table 6a Received e-mail by day of sending 2008/2009

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</table>

For the first research year 2008/2009 the most active day in most active month is Monday with 29, Tuesday with 27 and Thursday 20. Table 6b shows that in Jun, most active month from 95 e-mails 73 was sent on Monday. In second most active month
December most e-mails 47 were sent on Tuesday. Saturday and Sunday were not active at all for any month. For the rest month most e-mails were sent on Thursday 16 in October, 25 in November, 17 in January and 9 in February and July.

Table 6b Received e-mail by day of sending 2009/2010

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Table 6c Received e-mail by day of sending 2010/2011

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Similar findings are in study year 2010/2011 where in most active month Jun 52 e-mails were sent on Monday, in March 46 and July 12. But on Thursday were sent most in September 15, November 18, December 37, January 23 and February 28. Weekend days are not active so much. Some days there were not e-mails at all, but some month were from 1 to 9 e-mails sent to reference service.
7 DISCUSSIONS

7.1 INTERPRETATION OF RESULTS

The purpose of this evaluation was to find out does e-mail reference service become increasing and does e-mail reference service become more efficient way of reference service in UDG library.

This research addressed the need for additional understanding and implementing digital reference service in UDG library and in other academic libraries in Montenegro.

A review of this study’s research questions

This study’s research questions addressed its objectives. Data collection and data analysis were developed to respond to the research questions reducing a lack of knowledge of e-mail reference service in UDG.

The first research question was “Does the number of e-mails increase as the University enlarges? Does the number of students who use e-mail reference service increase?

It was directly linked with first objective- to identify the e-mail reference service as a service. The research has taken the number of undergraduate, postgraduate students and colleagues. It was notices that a number of e-mails were increasing from year to year. The number of students increased as the University enlarged.

This study showed that the number of students who used e-mail as a kind of reference service increase and it was the only part where we used statistic to show it.

In the first year of research the University of Donja Gorica had just started with e-mail reference service as a necessity in one man library.

In the second research year 2009/2010 UDG realized that e-mail reference service was very good solution for one man library and activities were moved on in realization of this kind of service. The number of students who used e-mail to contact librarian increased.

The third research year 2010/2011 followed trends of years before and UDG has more students and much more used the e-mail reference service.

It was noticed that each student sent nearly two-mails. This numbers of turnaround e-mails may be interesting for some other research.
My hypothesis was that the number of students who used the e-mail reference service has grown from year to year and it was appeared as correct.

As it is seen in the first research year 2008/2009 there were 11 percentage students who used e-mail as reference service, the second research year 16, 08 percentage and third year 2010/2011 that number increased up to 20 percentages. It is evident that the e-mail reference service nearly increased 100% for just three years.

**Which month is more active** was next research question and my hypothesis was June. The hypothesis was correct. Close to next research question is hypothesis No 3 where it was explained that more of them in June were administrative e-mails.

From the start all students and employee had the similar e-mail address, name and @udg.edu.me.

The reference service was not activated at digital way until December 2008 when we have got the first reference e-mail about literature required for master’s thesis.

Until June 2009 when was sent one circular e-mail for the books to be returned there were not so many e-mails. Even then, most of e-mails were “I didn’t take any book from the library”, and “I will bring it back in the next few days”.

Even this was not truly bibliographic question it was about books and surprisingly it demonstrated good response, though not good enough as much as was thought.

In study year 2009/2010 two increasing periods appeared. One was in December when an e-mail was sent them again for the books to be returned and their answers on it. The second period was in Jun when we had mostly administrative e-mails for a certificate because student could not finish their exams until they received the certificate approving they didn’t owe books in the library. An average was nearly 30 e-mails per month if we exclude two the most active. December was also very active because the students have got their themes for bachelor graduation and I sent them another circular letter only for finished year that they could send me their themes in order to help them to find proper literature. It is not satisfied yet but it is much better than the last period.

In 2010/2011 we can see increasing number of e-mails, and we can see that Jun is the most active because of issuing the certificates but also we can see that even other months are very active especially March, February and May and we think it is mostly because of student works and essays.
In June 2010 we received more e-mails because of graduate students from three faculties. Faculty of International Economy, Finance and Business has got second bachelor generation, Faculty of Information Systems has got the first bachelor generation and Faculty of Law has had first generation of specialist studies.

The hypothesis was that most active month was end of second semester in June and it was correct mostly because of the certificates for owning the books.

The fact is that very active month was December and even March and these months are more active in reference questions. To define which month is more active is appeared to be necessary because of intensity of the work on which we have to be prepared for. To be prepared and to make planes for other activities, not only for reference service but other library functions. Depending on e-mail reference service activities we have planned interlibrary loan, selective dissemination of information (SDI), revision of founds, activity of readers club and similar.

**Type of received e-mails as** a research question was appeared to be necessary because of the activities which precede graduations and the end of the school year. As the students need the certificate for finishing their school, a reference librarian has to be there and prepare it in very specific period of year. Other reference questions could be answered from distance but this kind of administrative e-mails, where librarian goes through files, requires physical presents of him.

A hypothesis was that mostly of e-mails were references particularly for the first year, which was examined in research period 2008/2009.

This was reasonable because there was no bachelor generation yet, which we would met in the next year together with risen number of e-mails especially in June because of the certificate they needed to prove they did not own any book from library.

This number shows that in June the students had so many terms for exams similar for all other Universities in the world and they needed so many literature for their works or essays or just books for exams.

In year 2009/2010 we could notice increasing number of e-mails in December when the students were taking their theme for Bachelor degree.
An initiative was that all of them send their themes to reference desk as soon as they got it to make us ready with literature when they finished with exams. At the end of semester unfortunately all students didn’t pass each exam so only 72 from the Faculty of International Economy, Finance and Business achieved Bachelor degree in June. The Faculty of Law had fourth year instead of bachelor so they didn’t sent any e-mails for the Certificate. It can be noticed that there was one period when administrative part of library work had advantage to reference. That period is Jun when students finished their exams and they need some kind of certificate from the library. When we talk about administrative part it is interesting that we had in September few e-mails for the students wanted to leave studies and they needed the same paper. A part which the researcher was interested in was period when the students had more to study, or they had due date to submit their works or essays.

Research question about which kind of e-mails they mostly sent has to be divided at more groups. This question was place where we had to apply coding schema to and tried to make differences which part of reference questions were about. It has to be mention that just for this research it was used division not as many authors use on ready reference, research and similar but on bibliographic which includes bibliographic information, content of publication, similar to research question and instruction, which more show instruction and guidance questions.

First questions was about possessing a book, the second was when students sent theme for research and third was about books reservation, due date and information did we get book from the interlibrary loan. It has to said, that there were no other questions as geographic or similar. Bibliographic question was coded as information do we have some book, known by its Author or title. The second was did library has something on specific theme as we had a lot of research work for students and these kind of question were very connected with their seminars, essays, bachelor or master degrees. Third kind of bibliographic questions was about books reservation, about information about due date and similar.
It can be seen that most of the questions were about books reservation and helping them with some paper. The first year of research 2008/2009 is not significant as e-mail reference service was not established as reference service in UDG library. There were few e-mails of bibliographic content but most of them were instructions, such as the time for duly returning books.

Next year 2009/2010 had interesting map of questions. Most of them were still instructional, but content of books are at the second place. They followed a month with essays, research works and any other kind of students work. At least there were questions about some bibliographic data like about year of publishing or who the publisher was.

Real moved happened in 2010/2011 where it is noticed a shift from instructional questions to content, where was demonstrated a progress and usefulness of e-mail reference service. There were a lot of e-mails about bibliographic data, as students need a lot of references for their paper works.

**Which faculty has more active** students were followed with hypothesis that students from social science were more active?

This question is very interesting for research in order to recognise two target groups for the future library politics. The first one which use library in part to buy more literature for them and second to recognise group which is not active and made of it a target group to influence in next period of time. It has to be mentioned that for every book needed as ultimate literature: Sociology, Mathematic, EU Law, Accounting and so on, the library possess from 20 to 50 copies what is more than enough. For that books students don’t have to sent e-mails except if they come after working time so book need to be left in the table or there is no free sample so they want to reserved. They just come and we have reference service in the real time, they don’t need to use e-mail reference service. But if we know how many essays or term papers they have it is surprisingly law level of using e-mail reference service.

In first year of our research we could see that most e-mails came from the Faculty of International Economy, Finance and Business.
The very clear reason is that most students from the Faculty of Law didn’t accept this kind of communication with all our staff because their Assistants and Professors didn’t ask them to send any e-mails from our local address udg.edu.me.

The same is for students from Humanistic studies and the Faculty of Information Systems and Technology. Data we get from any study program in relation to the total number e-mails. Results are very clear and understandable.

The largest number of e-mails is sent from the Faculty of International Economics, Finance and Business and the number of e-mails received from other study groups completely unnoticeable.

Small number of e-mails sent from students of FIST can only justify the time that the students from this faculty almost don’t use reading room because they have their computer room, as a kind of teaching that is most practical, with small number of term papers for which they needed literature.

What was surprising is that the Faculty of Law and Humanistic studies used very rarely the library resort. They had a lot of term papers but they didn’t accept this mode of communication. They were regularly noticed about working police, which they primarily had to send an e-mail to reference desk if they wanted literature prepared for them especially, for they had classes usually after working time of librarian.

Humanistic studies had a small move in last year of research because one of Professors gave them every week one book for practice and they had it only in library. For them we had just two copies and they had to reserve book even for reading room. Anyway that movement was so small.

We could see that Faculty of Art (not philosophy) had 4 e-mails every month in the period from March to June 2011 and that was reasonable if we knew that that semester at Faculty of Art we have Library and research methods as a subject and we have 4 students.

My hypothesis was that students from Faculty of Law and Humanistic studies would use library resources because of nature of their studies. My hypothesis was not correct and for the next period it would be needed to do on implementing a digital reference service on this population.
Students from first year were active during semester except in September because they didn’t still know about it and January when they were at the holidays and had exams. The second year was active during all semester with no so much e-mail. Very active were the students from the third year because they needed for their graduate exams a lot of literature in December and in June when they needed certificate from the library. There is significant month for postgraduate students i.e. January. Our assumption was because they had a lot of holidays from work and they could work at the theses actively. In the final year of the research 2010/2011 we could see that September was still no active for the first year of studying, but very soon they discovered this kind of reference service and until the end of semester they use it permanently. The third years didn’t start so strong with using e-mail reference service until December when the students get their bachelor themes. This trend was continuing until June. April was no so active because they had their last exams and they didn’t need any more additional literature.

Surprising was that postgraduate students didn’t take this part of communication as good because they were mostly working people and it would be easier for them to organize their time not coming to faculty especially we are located few kilometres from downtown. My opinion is that old habits are hard to change even if it is better for them. My colleagues still use phones or just come to the library.

Day of sending e-mails to reference service is useful in part when we think about future and maybe to employ somebody during weekend who will answer on e-mails, or maybe to implement one real time digital reference service. From this research it is see that it is not necessary to employ anybody during weekend time because Saturday and Sunday are not so busy in e-mail communication.

For the year 2008/2009 there were no significant results because of a small number of e-mails and every day during semester except Sunday had even one e-mail. Monday at June was with the most e-mails and Thursday followed it.

In the second research year we could see two days with more received e-mails then others, which were Wednesday and Thursday. That was reasonable as it is middle of the week so those two days were more active for the students.
Monday was active only in June what is reasonable because of bachelor generation and their e-mails for the certificate for the graduate. Friday was not so much active and that was understandable, because a lot of our students are not from Podgorica so they went home for weekend. Saturday and Sunday were not so much busy and we still don’t have any need for employ somebody to receive and answer e-mails. As it was mentioned earlier if the e-mail was received during the working time it was answered in the next few hours, if it was not, in the next 24 hours it was required to answer on it.

For the third year of research we can see that Thursday was a day when it was sent the most e-mails, the second was Monday and then came Wednesday and Tuesday. We can see that Friday was still the last with receiving e-mails and we believed that it was the same reason, that most students were going home for weekend and didn’t think so much about lending books or seminars and exams. Talking about Sunday there was noticed a small progress when nearly every month from December 2010 until finishing semester in July 2011 we have got some e-mail from our patrons. From these results is shown that my hypothesis was not correct.

7.2 IMPROVEMENTS
The e-mail reference service is not implemented in any library in Montenegro. There are some kinds of sporadic cases where patron sends e-mails, but there are neither police in that libraries nor the reference librarian who is in charge of that kind of service.

One of the main problems in University’s libraries is literature for essays or seminar works. The students come to the library and wait until librarian find some sources for the specific theme, then they have to wait until tomorrow to get that literature from the depot or similar.

The e-mail reference service is very good tool for solving this kind of problem. Using e-mail reference service we can avoid a situation which is in chat reference service that you don’t know who is from the other side of the net. The questions arise, if we offer chat for certain time, patron has to ask question not when he wants but when reference librarian is there, what is different?

I am not talking about consortiums where somebody is always there.
This evaluation shows that e-mail reference service is much more in use in UDG library, but it can be better. One of improvements which we have already applied in library is that all students who want to use library or reading room has to send e-mail on new e-mail address library, biblioteka@udg.edu.me. This is some kind of member card and helps to make one base of students who use our resources. This base helps when we want to disseminate some information to users. If students get circular letter and they are not a member of the library usually they ignore it, but if they are involved in this kind of communication we assume they will answer or react on it. I have to mention that e-mail box for library is not at the University web site, but in the future we plan to do it.

This kind of communication started to expand because our students very often talk to their colleagues and friends and they ask, if they can sent their e-mails for some information. I have to mention that all other students or patrons of other faculties or libraries are very free to come.

A good idea is to create a single knowledge database as Bosancic (2010) suggest. This base will help reference librarian with future users. This research shows need for some cross road examination of the reference services in real time and virtual reference service.
8. CONCLUSION

The reference service is the first step for a user who wants to satisfy its need for information in the library. It was changed over the year. From the reference service face to face and reference desk between the user and a librarian until today when reference service is usually digital and reference desk is virtual. The same is user, the same is information need, and the same is librarian who is there for help. Everything else is tool which is changed like everything else in the modern world. The same is evaluation which can help us to see where we are now and what can we do in the future.

Purpose of this work is to examine e-mails containing reference questions at the library of the University of Donja Gorica (UDG), the only library in Montenegro which use digital reference service. The research design included planning and instrument development, data collection and data analysis and thesis preparation. All e-mails received by UDG library in the period 2008-2011 were collected and read in detail. Content and quantitative analysis of e-mails was used.

The aim of this research is to find out does the e-mail reference service increase in its function, is it good solution for one man library by investigation of how many e-mails library gets from period of 2008/2011, how many e-mails are sent in each month, from which year students sent more e-mails than others, which faculty use e-mail as a way of communication with librarian, what kind of question they send and what day is more active for sending e-mails.

From this research it can be concluded that number of e-mail arise every year and that this kind of virtual reference service is very good solution for one man library. It leaves time to librarian to approach every mail with enough time and professionalism. The most active month in sending e-mails is June and this data is in direct link with type of questions which are administrative in that period. Other two very active months are December and March and that months are more with reference questions. All other months are with some oscillations but the very good is that there is no month without any e-mail. Reference questions are nearly equal divided for on three groups. How time pass by there are more and more research questions directed to students paper work, essays and graduations.
The students from Faculty of International Economy, Finance and Business are the most active in sending mails, no matter which year of a study they are. Thursday as a middle of week is most active in receiving e-mails at digital reference desk. Weekend is not active at all. From all this data we get in this research we can conclude that e-mail reference service is very good solution for our library. There is no need for real time digital reference service, for now on. For the next period of time it should be done more on implementing e-mail reference services, through courses of information literacy.

UDG library became a very popular as a library, with a lot of innovation what can be very good in improvement library work in whole society. This research opened a lot of questions and needs for additional examination, some cross research in real time and digital reference service.

The purpose of this research was to examine does the number of e-mails increase and to understand usefulness of e-mail reference services in UDG University. The goal was to improve reference service in UDG University with possibility to expand this kind of reference service in other libraries in Podgorica and Montenegro. This research addressed the need for additional understanding and implementing digital reference service in UDG library and other academic libraries in Montenegro. This study’s research questions addressed its objectives. Data collection and data analysis developed to respond to the research questions reduced a lack of knowledge of e-mail reference service in UDG. E-mail reference service could be established in all kind of libraries with very clear policy and very understandably guidelines for patrons. There are a lot of variations which can be implement in special libraries, school libraries, public or University. For all them has to be common one goal to meet patrons need and satisfied it in period of time which is prescribed. There is a trend whatever libraries offer there is less and less patrons in the world. Even if there is sometimes very understandably research or literary need which has to be satisfied right now, I have to say that librarian have to make patrons think in advance and don’t come to library virtual or not, and reference service face to face or e-mail just
as attack. They have to think and plan before they come and in that case e-mail reference service will have a lot of queries and library a lot of patrons.
9 REFERENCES

Assessing quality in digital reference services: Preliminary findings
   Available at: http://polaris.gseis.ucla.edu/jrichardson/DIS245/personal.htm.


   Available at: http://rusa.metapress.com/content/jq13647061t808n3/fulltext.pdf.

   Available at: http://www.indiana.edu/~librcsd/reference/email/03.html


Crowley, T & Hill, T. & Madarash, H.C. (2003). Digital reference evaluation: Assessing the past to plan for the future. *Electronic Journal of Academic and Special Librarianship* 4, 2/3 (Fall 2003), [http://southernlibrarianship.icaap.org/content/v04n03/](http://southernlibrarianship.icaap.org/content/v04n03/)


Available at.: http://informationr.net/ir/9-2/paper171.html.


Available at.:http://arizona.openrepository.com/arizona/handle/10150/106346


Available at.: http://istl.org/01-fall/article2.html.


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