# Saudi Universities Electronic Portals: A Case Study of Northern Border University

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**Summary**

The study aimed to analyze the current situation of the electronic portal of the Northern Border University, in terms of content and components, the extent of quality of use, service assurance and integrity, linguistic coverage of objective content, in addition to assessing the efficiency of the Blackboard e-learning platform and measuring the degree of safety of the portal, in addition to measuring the extent of satisfaction, through a sample that included 135 faculty members, as the researcher was keen to apply the case study methodology with the use of the questionnaire as the main tool for measurement, and the study found that there is an average trend among faculty members in the degree of content for the components of the portal and electronic security While it rose to good use, and very good at using the Blackboard platform.

## 1. Introduction

The presence on the Internet has become a necessity by the needs of the beneficiaries, the developments that have occurred in various sectors in the whole world [2]; Therefore, the failure of any organization or body to this development means that it is not sufficiently fit to meet the needs of its beneficiaries, and it relinquishes its role to other bodies [4]. And then there became millions of online portals on the Internet for many universities, organizations, companies, unions, and professional associations. And through which it aims to provide a set of services to its beneficiaries, and these portals were not intended to establish a specific service at a specific time, but rather the continuity of providing their services, and therefore attention must be paid to the services offered on the web [6]; The same is the case for the services provided by these bodies on the ground, otherwise why would there be a lot of expense and effort in establishing these gates? Hence, the work on the portals does not end once it is published on the Internet; Rather, this means the beginning of serious work to maintain the continuity of the quality of the portal, which means the continuity of the hesitation of current and future beneficiaries [11]. Because creating and designing the portal costs a lot of time and human capabilities which are based on preparing and creating the portal, financial resources, software, and physical hardware.
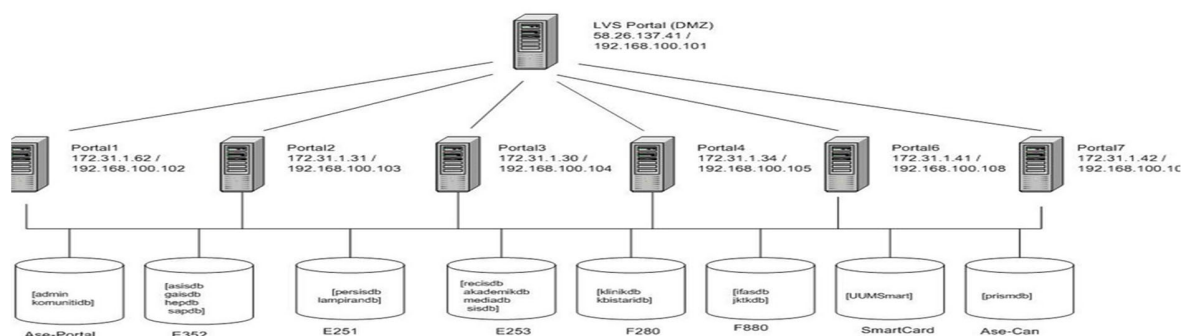


**Fig. 1:** The portal design

Whether required to create the portal or required to make the portal available on the web [1]; Therefore, the follow-up and maintenance of the portal are one of the criteria for a good site, which appears clearly when evaluating the site, and which does not end without the disappearance of the portal, or the end of the purpose of the existence of the site on the Internet [3].



**Fig. 2:** The portal instruction relationship

Universities are not isolated from this development. Rather, it is heading towards the digital age through its presence on the Internet [5]; This has become an important necessity to meet the needs of the beneficiaries; Especially in light of the education process, and the frequent use of university portals from a distance, it is expected that the universities' interface on the Internet will subsequently become the only opportunity to provide their services to faculty members, students [9], and the outside community. Hence, university portals should assist users in finding, selecting, and accessing appropriate information [9]. Through an easy, clear, and uncomplicated interface that suits their needs, and among the reasons that lead those responsible for university portals to evaluate the following:

1- To ensure that the portal reflects the university's goals and gives a good and accurate picture of its services and employees.

2- To ensure the quality of the information provided by the portal; In terms of accuracy, timeliness, and reliability.

3- To ensure the extent of the ability to use the portal, and its suitability to the needs and capabilities of the beneficiaries.

The study Problem

The Internet and its technologies lack the existence of an internationally agreed reference or evaluation standards that regulate the planning, design, and development of websites in general and university sites in particular, and this may be due to the great diversity and deep disparity between peoples' cultures and people's interests, in addition to the tremendous development in web technologies, and the emergence of Many performing entities participate in the development of web technologies.

Despite the existence of many international university rankings that are based on ranking universities according to certain criteria related to the production of scientific research, the level of graduates, the activities and contributions provided by universities, the online presence of universities on the Internet and others, one of these classifications is the "Webometrics Ranking" which is a classification The online portals of universities, not a classification of the universities themselves, and the ranking of universities is based on the richness of the content and design of their electronic portals.

Therefore, this study attempts to evaluate the portal of the Northern Border University in the Kingdom of Saudi Arabia to reach a standard that can be measured in the future, while setting standard specifications for the university's portal, in light of the list of standards prepared by the researcher.

the importance of studying.

In light of the great development and rapid spread of information and communication technologies, the Internet has become more mature and has become one of the most powerful sources of information.

Given that universities play a vital role in the advancement of nations and the dissemination of science and knowledge, recent years have witnessed a remarkable development in university websites, and the emergence of huge university portals that provide their services to society in general, and students, researchers and faculty members in particular, and sometimes from outside the narrow educational community. The importance of the study is in the following elements:

1- Developing a list of criteria that can be used to evaluate university portals.
2- Those responsible for the portals of Saudi universities can benefit from the evaluation results in this study.

3- This study serves those in charge of the Northern Border University portal; Where it clarifies to them the opinion of the beneficiaries of the university's portal regarding the services provided.

The researcher cited a set of justifications to address the issue of evaluating a sample of portals in light of some criteria and evaluation elements and a comparison between them. To reach a standard on which to choose a comparison.

**Among these justifications:**

1- The a continuous increase in the number of universities year after year, and each university has its electronic portal on the Internet, and the quality and strength of these portals vary from one university to another. This requires setting specific foundations and principles for planning and developing university portals. To provide equal and fair opportunities among university students, and to serve the educational process; And to reach the required level.

2- The increasing growth in the number of students and students enrolled in universities and the accompanying growth in the numbers of faculty members, researchers and workers, necessitates developing university portals to the highest level, integrating modern technology in the educational process.

**Objectives of the study**

The study aims to identify the standard tool for evaluating university portals and their application to universities in the Kingdom of Saudi Arabia while studying the case of Northern Border University.

The general goal is divided into a group of sub-goals, which are:

1- Learn about the mechanisms of ranking university portals globally.

2- Learn about the different criteria for evaluating portals and websites.

3-Establishing a standard list for evaluating university portals on the Internet.

4- Study the development of the electronic portal of the Northern Border University, and its suitability to the needs of the beneficiaries.

**The Study questions**

The current study attempts to answer the following questions:

1- What are the mechanisms for ranking university portals globally?

2- What are the different criteria for evaluating portals and websites?

3- Can a standard list be developed based on which university portals on the Internet are evaluated?

4- Is there a relationship between the ranking of universities according to the Webometrics classification and the extent to which their electronic portals meet the criteria for evaluating the electronic portals of universities?

5- How beneficial are the beneficiaries of the Northern Border University portal?

6- What are the standard specifications that must be met at the Northern Border University portal?

**Electronic portals**

The electronic portal is a website that forms the starting point for contacting other websites, and the name of the portal came from its function as an open door from which one looks at the world of information and other events provided by the Internet [13], and the portal is distinguished from websites by a very high degree of organization, as its integrated services allow easy access and quick to the most important elements of interest to the beneficiaries [14].

In our digital world, the need has become urgent for ease of access to information and the speed of providing services [12], which calls on governments, universities, banks, and various institutions in the financial services and business sector to go to provide services, not just information via the Internet [9], and the services provided must be safe for use in addition to interaction with users or employees. Smart electronic portals should also be distinguished by providing

services by working with the world's leading middleware providers [11].

Professionals and process providers that support the underlying technology of portals must explain why they need them, how to use them, or help them change their internal procedures to support their needs [10].

There is no doubt that most of us think that it is good and fruitful for us to use electronic portals and make it a daily routine in our life because of their many advantages that those who go deep into using these portals can perceive [4,8]. But we stress here that they must inform people and convince them of the importance of what they offer them, listen to them, take their opinions [7], and open channels of communication and support between them, otherwise, it will be difficult to practice good knowledge management without adopting the cornerstone of "cooperation" and "participant" [6].

### Electronic portals in the educational institutions

All current businesses need deep use of the Internet, but with the necessity of having a stable website for each educational institution, this matter facilitates the institutions' ability to communicate and inform about their contents, and the ability for all of their affiliates to contact a specific site and a unified portal for use through the tremendous ability to use Current technology [12, 14], and accordingly, electronic portals provide, through their work, many dynamic functions in order to connect all of its members from students, faculty members, and workers in a coherent manner, and for widely-used and dynamic work tools [7]. By using the current available technologies, which enables the educational institution to create a web portal and a content management system for all relationships in less time and less effort [9].

Today's websites are valuable tools, not only to attract beneficiaries, but to serve them better and more broadly, in addition to that interaction through all their questions [2, 6]. With the existence of the electronic portal, the beneficiaries in the educational institution can obtain valuable information and help in Upload or upload files and use the e-learning platform [9], Web portals and content management systems also help improve customer satisfaction and loyalty to the educational institution [11] and increase growth opportunities through an integrated technology environment today [8].

### Types of gates:

There are a large number of portals that appear today on the web, which achieve the outlines that were detailed in the previous paragraphs, but it can be classified into:

- Vertical gates are portals that address a specific segment of people, as the information contained therein focuses on a specific goal, for example, some of them are directed to those interested in gardens [3, 7], and another is directed to investors, and a sub-type emerged from the concept of vertical gates: business information portals called institutional gates [4].

Sector portals, also called business portals that serve businesses, are similar to business information portals [6], but the difference between them is that they remove many of the obstacles that hinder the meeting of vendors and customers around the world to conclude deals via the web.

Horizontal portals offer a wide variety of materials and topics of a general nature, and many portals fall under this category, such as Yahoo, Lycos, Alta Vista [9].

### Study Approach

The study relied on the descriptive and analytical approach to monitor and analyze the components of the university's electronic portal by collecting, analyzing, and interpreting data. And then conclude.

### Data collection tools

The researcher relied upon collecting data on the following tools:

A checklist of evaluation criteria for the electronic portal, which is considered a tool for collecting information, which are tables containing analytical units that are filled in with the answer by observing the reality of these portals; "As it consists of many steps or activities that the academic observer uses to record his observations and carefully build checklists, as it helps to: restrict the observer's attention to the characteristics on the list, compare the sample members to each other concerning a set of characteristics or characteristics, provide a simple tool for recording Notes, in addition to the researcher's review of all data and information

to ensure that the data and information required to conduct the research are collected.

Designing a questionnaire consisting of eight main axes, where the first axis consists of basic data for the data of the study sample, the second axis is from construction and design, the third axis is from the content, the fourth is from use and difficulties, the fifth is from services, the sixth is from the electronic security of the electronic portal, and the seventh is about the extent of satisfaction Beneficiaries for the portal, and eighth from the proposals submitted by researchers.

**Review and test the questionnaire:**

The questionnaire was evaluated before it was distributed by specialists in the library and information sciences, and the researcher made the required adjustments by the referees. The questionnaire was also tested on 30 faculty and administrative members of the university from the two categories, and the questionnaire was distributed on a random stratified sample of university faculty members that included 135 faculty members.

**Analysis of the results**

The researcher reviewed the questionnaire and made sure of its completeness. The data were unpacked and statistically processed using the SPSS program.

The Study sample:

**Table 1:** The study sample

| Type | Frequencies | Percent |
|---|---|---|
| Male | 97 | 71.9% |
| Female | 38 | 28.1% |

Distribution of the research sample according to the academic degree

**Table 2:** The distribution according to the academic degree

| Academic Degree | **Frequencies** | Percent |
|---|---|---|
| Professor | 11 | %8.1 |
| Associate Professor | 18 | %13.3 |
| Assistant Professor | 88 | %65.2 |
| Lecturer | 18 | %13.3 |
|  | 135 | %100 |

Questionnaire analysis:

**Table 3:** The Questionnaire analysis

| # | Standard | Average | Deviation | Level |
|---|---|---|---|---|
| 1 | construction and design | 56.7 | 2.25567 | Good |
| 2 | Content | 55.8 | 2.09908 | Good |
| 3 | use and difficulties | 51.1 | 2.12918 | Very Good |
| 4 | Services | 55.8 | 2.22556 | Poor |
| 5 | electronic security | 45.9 | 1.67964 | Good |
| 6 | satisfaction Beneficiaries | 59.3 | 2.13467 | Good |
|  |  | 324.6 | 7.889994 | Good |

## Conclusion

The questionnaire results showed that there are different trends about each element of it, as from the design and construction side of the portal, the results showed good acceptance by faculty members of the university about the degree of mastery of this construction and the general design of the portal site of the Northern Border University, and on the content side, the answers came in a medium to Good and did not rise to a higher degree, and this makes it important to reconsider the substantive aspects of the scientific and objective content of the contents of the components of the university's portal pages, and from the use side, the responses of the faculty members indicate a very good use of the site, due to the heavy use of faculty members when teaching online with the Blackboard platform, and that the difficulties they face when using are due to the technical aspects and the intensity of use at times, and with regard to services, the results indicate that the faculty members are not satisfied with the services provided, as the results indicated that the general trend around the quality of services is weak, and with regard to cybersecurity. For the portal, the results indicate the quality of this service, and in general, the results indicate the general satisfaction of the members of the management committee Race towards using the portal towards a good score, although it is important to go up to a higher level.

## Recommendations

1. Through the findings of the study of the researcher's observations, a set of recommendations can be presented that are expected to contribute to improving and developing the current situation of the Northern Border University portal and raising its level.
2. The necessity to develop the objective content and related internal details with the continuous updating of these contents.
3. The construction and design of the portal include both the Arabic and English languages, to the level.
4. Full attention to the portal's electronic safety standard to ensure that no individual other than outside the portal has access to the portal.
5. Increasing electronic links that refer to quick use or effectively supporting sites.
6. Continuously developing the Blackboard platform to ensure continuous operation and intensity of use,

especially in light of the current circumstances when e-learning in light of the Covid-19 crisis.
7. The necessity of self-evaluation, continuous development, and updating of the electronic portal based on continuous objective analysis.
8. Applying systems for building electronic portals used in international universities and making use of it when using it.
9. The necessity to build a unified and fixed standard that will be a reference for the university to achieve its general objectives for building the electronic portal.

## Acknowledgment

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