

Students Perception of Digital Services in Moroccan Universities – Case of Tuition Services



Sara AREZKI, Najoua FELLAH, Soukaina MIHI, Taoufiq GADI

Abstract: *The digitalization of Moroccan universities is an emergent subject that interest several researchers and professionals in information technologies. The digital challenge is becoming more and more crucial with the use of new technologies of information and communication. Universities put students at the center of their concerns and strive to offer them a high quality services. Several international initiatives have been taken in this direction [1] [2]. The Moroccan university, too, is part of this perspective and has many digital transformation plans in its projects portfolio [3]. However, we have never evaluated these initiatives from student's perception and have never reported their progress. In this paper, we try to evaluate on a sample of students across different Moroccans institutions, their perceptions and opinions about the maturity of these deployed services.*

Keywords: *Digitalization, universities, digital transformation, Moroccan universities, students.*

I. INTRODUCTION

Everyone talks about digital transformation without really understanding what is at stake, often reducing it to the act of equipping itself with “servers” and “computer equipment”[4]; for others, it is a trend with projects carried out solely by marketing departments[5]. In addition, we live in increasingly digital societies influenced by the cult of digital or the benefits brought by digitalization and innovative services to the community. In this sense, digitalization makes it possible to optimize time and money by automating increasingly complex tasks. However, it is still difficult to carry out a digital transformation within a company or establishment [6].

Universities are also trying to benefit from this digital transformation to offer quality services to their students. Several international initiatives have been taken. In Morocco, too, universities are trying to set up several digitalization projects. However, we do not have a concrete evaluation of these projects from a student perspective.

In this paper, we try to discuss Moroccan initiatives in universities, assess, based on a survey of students samples in different study levels and diplomas, the existence of digitized services, and study, if any, their maturity, analyze the obtained results and propose levers for action that will accelerate the digitization of tuition services in universities.

II. LITERATURE REVIEW

Improving the quality of teaching and research is becoming an increasing concern for all stakeholders. Since 2003, the Moroccan higher education system has been engaged in a new reform, following the orientations of the National Charter of Education and Training and the promulgation of Law 01–00 on the organization of the higher education sector [7]. Information technology is a crucial body of knowledge for the development of artifacts. The use of its tools is essential; the Moroccan university is therefore encouraged to modernize its management tools, strengthen its governance and decision-making system [8]. To this end, the establishment of an information system “being an organized set of resources that makes it possible to collect, store, process and distribute information” [9]. This proves that IT is a reliable solution that will support the Moroccan university in its strategy of governance in general and governance of scientific research in a more specific way.

III. EVALUATION OF THE DIGITALIZATION OF ADMINISTRATIVE SERVICES WITHIN UNIVERSITIES

A. Method

In order to study the impact of digitalization on university services and especially tuition, we conducted a quantitative study to measure satisfaction and attendance. With regard to the structure of the questionnaire, the basic rules we applied are as follows [10]: (1) after an introductory phase, we place a filter of membership in the target population that is the Massar code. We use the “funnel” technique starting with general and simple questions to gradually addressing specific questions. We constitute logical blocks of questions that are (a) the digital devices (b) the digital tools available to the institution (c) the digital services offered by the institution. We add at the end a question of satisfaction with the digital offered services. To ensure wide distribution, we use social networks as a distribution channel, both the Facebook and LinkedIn pages of institutions and student groups, as well as sharing through email addresses.

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We try to have a representivity that reflects the true diversity of the studied population.

B. Data

It should be noted that the questionnaire was launched on 01/07/2018 with a collection period of one year. In terms of gender, 50% of respondents are women and 50% are men.

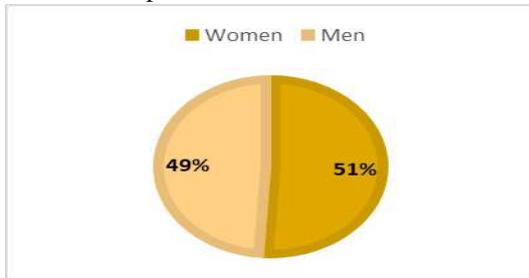


Fig. 1. Distribution of respondents by gender

33.9% of respondents come from open access universities (without entrance exams) while 66.1% of students have regulated access

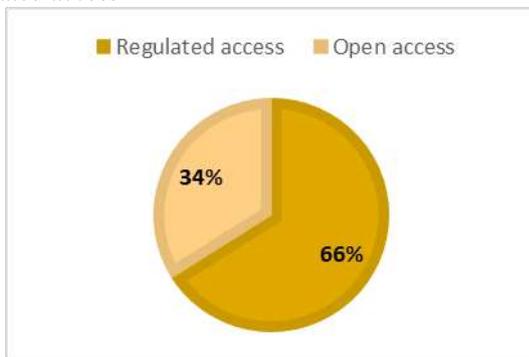


Fig. 2. Distribution of respondents by type of access to institutions

In our sample, we insisted on having a representivity of all university levels (Bachelor, Master, Engineer and Doctorate) and the different years of study (first year, last year, during the course of study).

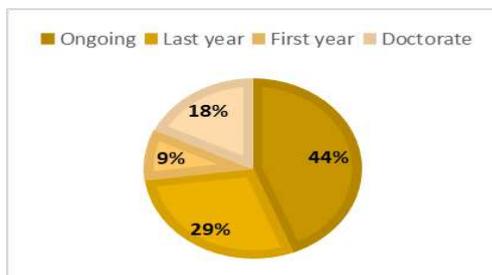


Fig. 3. Distribution of respondents by year of study

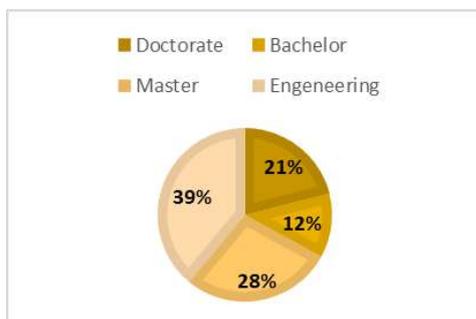


Fig. 4. Distribution of respondents by diploma type

C. Results

We organize the asked questions according to the (1) Internet connectivity (2) hardware used (3) digital channels offered by the institutions (4) services offered by the institution.

Internet connectivity

100% of the interviewed students have an Internet connection, 94.7% of the interviewees connect daily and several times a day. Internet access is popular in Morocco, especially as 4G coverage extends to the entire kingdom.

Computer equipment used

97% of students use several connection devices, whether it is a laptop, a smartphone or a tablet. On the other hand, only 3% of the interviewees use computers. This may be related to various government initiatives to equip students with computer equipment.

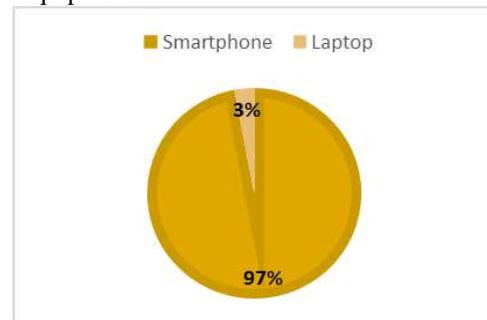


Fig. 5. The pourcentage of the use of digital devices

We asked a question about the email addresses used by the different students. 88,4% of the interviewees have a private account (Gmail, yahoo, etc.); only 11.6% of the students have an email address from their institution.

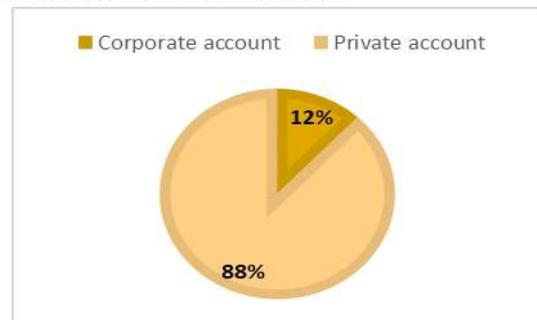


Fig. 6. The use of corporate or private account

The digital channels offered by the institutions

Concerning the use of the digital channels: the website, the mobile application and the DWS space, only 44.7% of respondents connect to their institution's website to have up-to-date information, while 96.5% of respondents admit to connecting to social networks to keep up with their institution's news. 27.2% of the respondents are still interested in posters stuck in institutions. Results show that 94.6% of the respondents do not have any applications related to their establishment. Similarly, for the digital workspace, 57.7% of respondents say they do not have a digital workspace. For those who have claimed to have a DWS, the information consulted is student files, internship offers, notes, news and time schedules.

Digital services

Concerning the digital services offered by universities, we studied one of those offered by tuition service. Namely, registration, certificates, scholarships, claims. These services are the most used by students.

The student's first contact with his or her institution is through registration in courses. 93% of the interviewed students still submit paper files during this process, while just 7% say they have submitted a digital file.

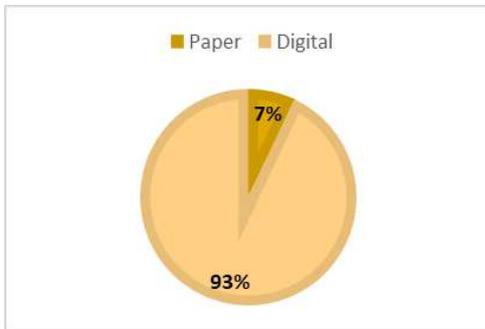


Fig. 7. percentage of registration files by type

Students, throughout their academic studies, request the tuition service to obtain certificates. 93.8% of the interviewees said they went to the dedicated department within the institution to request this certificate. Only 6.2% of the interviewees made their request via DWS or by sending an email to the concerned department.

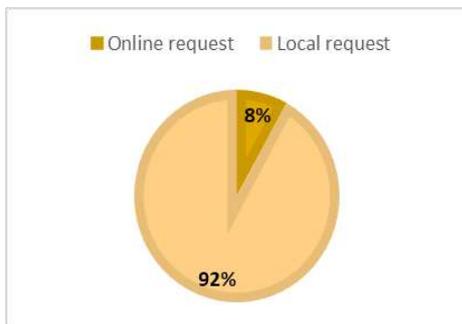


Fig. 8. Percentage of requests received online and in paper format

The response time to his requests is not defined for 48.2% of the interviewees and it is only 19.3 for the same day.

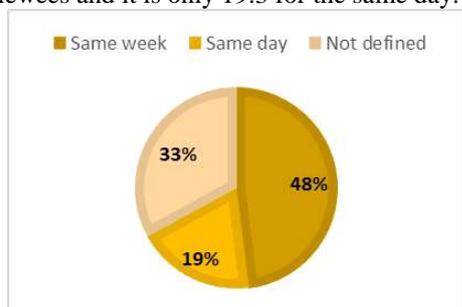


Fig. 9. Deadline for responding to student requests

Another point relates to students is the scholarship. 41.6% of the respondents say they consult the results on the institution's website, while 40.6% consult the institution's posting to know the outcome. Only 6.9% access to their DWS to view the result.

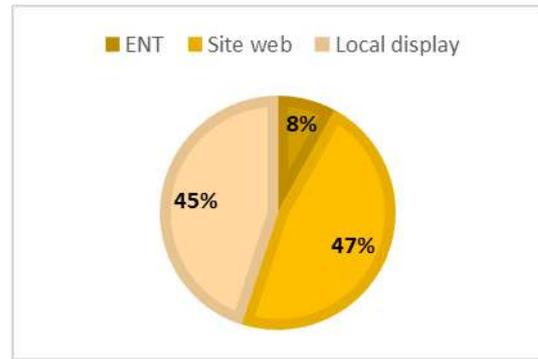


Fig. 10. Channels for displaying scholarship results

D. Discussion

We note through this study that even in the era of digitalization, the manual remains the most widely used in our institutions. According to the administrative studied processes, on-site presence and manual demand still more commonly used than digital services.

Although, students through several personal and government initiatives are equipped with the necessary devices to access public services, institutions do not even have basic digital services, namely mobile applications or a digital workspace. The website is the students' preferred tool for learning about the latest developments in their institutions

IV. CONCLUSION

This paper addresses the subject of the digitalization of administrative services within Moroccan universities from the students' point of view. We would like to point out that we have put this questionnaire online for one year without having a high representativeness of the sample. However, since the students' responses, we have concluded that universities must make more effort to digitize its services. The website is still student's preferred channel for information. To carry out digital transformation projects, universities must develop strategies that put students at the heart of its concern with effective change management.

V. ABBREVIATIONS

Abbreviations	Definitions
DWS	Digital workspace
IT	Information Technology

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