Learning the Admission Process at University of Belize: Its Effectiveness

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Abstract

The main purpose of this research is to study the existing admission process of the University of Belize and determine whether it is effective or not. The methodology included a sample size of 100, data was collected using a questionnaire designed using the DeLone and Mclean Model with a sample strategy 'Random Sampling'. Our main finding was that the majority of the respondents are not satisfied with the overall admission process as well as the majority disagreeing to a positive experience, concluding that the current admission process is not effective. Researchers recommendation to the University of Belize is to exploit its options and create change, moving from standardized applications to the "The Common Application".

Keywords: Learning admission process, information systems, information systems success model, amalgamation institution, developing countries, effectiveness.

Introduction

The purpose of this study is to research the existing admissions process at the University of Belize and determine whether it is effective or not. The main goal of this research is to gather information about students' perspective on the admissions process at the University of Belize and use the information to evaluate the effectiveness of the admissions process. By using the IS Success Model implemented by William H. DeLone and Emphraim R. McLean in 1992. Relationship between information systems on the five dimensions of the model focusing on information quality, system quality, service quality, usage intentions, user satisfaction resulting in its effectives (DeLone & McLean, 2003). In this study, though, the researchers have made changes to the traditional model given by adding two sections, demographic questions as well as the use of technology (laptops).

By practice, an admissions process is the process through which students enter tertiary education at universities and colleges. At the University of Belize, the admissions process initiates when applications are received along with required admission packages including: official transcripts, recommendation letters, proof of citizenship documents, and certified standardized test scores. Applicants' academic and biographic information, and scanned documents are uploaded into the Student Records Management System (Xenegrade) to create student profiles.

The Xenegrade system automatically categorizes students into the following categories: Tier 1, Tier 2, and Tier 3. Students grouped into Tier 1 are "unconditionally" accepted because they submitted all necessary requirements and excellently completed the application form. While students in Tier 2 are "conditionally" accepted because they submitted one or two requirements but not all, and properly completed the application form. Thus, students are asked to submit missing documents or information as soon as possible and in doing so they also become unconditionally accepted. Lastly, students belonging to Tier 3 are not accepted because they did not submit any of the required documents along with the application form.

The Admissions department further examines the eligibility of students being unconditionally accepted by looking at their academic and program specific standards. Based on academic standards all students are required to have a minimum of Grade C in the subjects of English and Mathematics. Program specific standard refers to the high school background students must have in the program they apply to enroll in.

This is the process of screening students, it is performed by the admissions department to ensure students are capable to perform at the university's level. As a result, students are either accepted or rejected, so the Xenegrade system is programmed to send letters of acceptance or rejection to all applicants. If system is told the applicant is unconditionally accepted the system picks up an acceptance letter and e-mails it to the applicant, but if the applicant is rejected the system sends a decline letter. In essence, this is the admissions process at the University of Belize.

Literature Review

University admission or college admission is the process through which students enter tertiary education at universities and colleges. Systems vary from country to country, and at times from institution to institution. At the University of Belize students apply for admission during their last year of high school. The process involves downloading the online application, obtaining all documents required and paying 30 BZD admissions fee when submitting the application. The application can be mailed or hand delivered personally. Personally, delivering the application can be time consuming, expensive for applicants who are out district. Not to mention, the process can very lengthy based on how much students are applying.

Comparing UB's current admission process with those of other Universities, we find various differences. For instance, the University of Pennsylvania process includes reading together in pairs, simultaneously reviewing each application on separate screens and discussing it as they go. They rate each applicant on specific criteria, recommend a decision (admit or deny), and type notes into the system. Based on its competitiveness, the application is grouped into one of three categories in route to a final review and verdict. Eric J. Furda, dean of admissions at Pennsylvania states their process is reviewed by two raters.

One assesses the applicant's academic credentials, looking at the transcript, test scores, and the other looks at recommendation, as well as the rigor of courses. The University of Chicago has namely come up with the admission process they consider an "uncommon application". They call it this for the reason that it includes eccentric questions such as "how you feel about Wednesday?" The Process is also shorter as the university has made notice that students prefer to fill out only one form. On the other hand, the admission reform in japan for Osaka University encompasses that applicants to Japanese universities opt into a holistic review process before they take the national exam. Their process involves students filling out a special application, and submitting additional materials as requested. While many offers of admission will still rely heavily on test scores, these applicants can show their readiness in additional ways.

It is evident that the University of Pennsylvania, the University of Chicago, and Osaka University all hold different admission processes ranging from a lengthier process, to shorter processes and more test score base-related processes. Despite their difference in admission process from the regional locations of these universities, to their different admission processes; they aim to better their current admission process. They seek to have shorter admission process resulting to quicker response to all applicants. The University of Pennsylvania has begun to enforce changes in their current process and predict they will gain positive results. In addition, they have engaged other universities to follow the new application review strategy that has led to positive reviews from other campuses, including The California Institute of Technology, Pomona College, and Emory University. Osaka University differs greatly from the other schools, as they have no admission officers, and no culture of centralized decision-making or collection of broader information from the student, universities in Japan have many steps to take to reform their current processes. Just as the various universities attempt to modify their existing process so does The University of Chicago, according to an article entitled the' More 'Common' Application Process', The University of Chicago is moving from the 'uncommon application' to a 'More 'Common Application Process'. The Common Application, founded by a non-profit consortium of colleges in 1975. The Common Application is simpler, more utilitarian, and increasingly popular.

The aforementioned universities are located in developed countries compared to the University of Belize being located in Belize, a Caribbean country. The University of Belize may actually be different in all different aspects of their current process as there have been no signs of improvement as yet. This has become a major issue amongst many students and is an issue the university should take into consideration. The aforementioned universities are different in some aspects as they are universities with larger student populations, differ in language, and predominantly could be considered to be more technological advanced. Whereas, the University of Belize accommodates approximately 4000 students, which can be considered very small compared to the other universities.

The proposed research aimed to study the current admission process and to determine whether or not it is effective. The study included using a different approach or process and having direct comparison to a Caribbean country. In addition, the said study was to focus on the University of Belize, an amalgamation institution. The first study that was done, tested the effectiveness of the admission process of the University of Belize.

Methodology

This research study investigated the overall admission process of the University of Belize and its effectiveness. The admission process was tested using the IS Successful Model implemented by DeLone and Mclean in 1992. The systems' effectiveness was determined by evaluating the information collected on five dimensions of the model focusing on information quality, system quality, service quality, usage intentions, and user satisfaction (DeLone & McLean, 2003).

Researchers decided to modify the traditional model, reason being that the current admission process is not entirely considered an information system (the entire process of applying is done manually). In this manner, this research studied five dimensions of this model along with the addition of testing the available complementary assets and its reliability (laptops), efficiency and overall effectiveness as well as demographic questions giving researchers an insight of who the individual is.

In combination with historical research, this study attempted to expand the Delone and McLean model regarding IS Success to the amalgamation institution namely The University of Belize. As mentioned

before, the research model presented in this study is an expansion to the traditional model including complementary technology as a measurable construct and demographic questions. These inclusions were key dimension in assessing overall admission system. This study focused mainly on the perspective of the students at the University of Belize, Belmopan Campus.

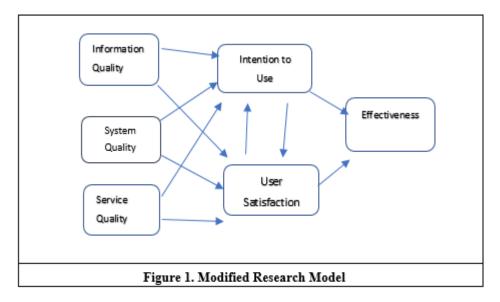


Figure 1. illustrates the modified DeLone and Mclean model.

Hypothesis

The overall system is not effective.

Sub-problems

Does the system quality negatively impact user satisfaction? Does the information quality negatively impact user satisfaction? Does the service quality negatively impact user satisfaction?

Description of Participants

The University of Belize has 4226 students actively enrolled in semester 2017-2. The study was carried out using a sample generated from students enrolled at the Belmopan campus; 2354.

Population & Sample Size

The population used for the research are students enrolled at the Belmopan Campus, semester 2017-2. The research was done through the use of a quantitative questionnaire. A total of one hundred (100) students were chosen randomly.

Instrument

Five of the dimensions of the DeLone and McLean Model were used in order to test the current admission systems success at the University of Belize. However, because the admission process is not entirely considered an information system, additional dimensions were included.

One (1) questionnaire (See Appendix) was used to collect data from the respondents. The questionnaire was structured and steered specifically towards the admission process. The questionnaire consisted of seven (7) question sections, which gathered participants' demographic information, service quality, system quality, information quality, usage intentions, user satisfaction and technology in school.

Construct Measurement

In efforts to ensure research validity and reliability, the measurement scales for the quantitative data collection of four (4) sections were measured by a seven-item scale from Bailey and Person. All the items were measured using a 7-point Likert Scale with anchors ranging from Strongly Disagree (1) to Strongly Agree (7), rated from Very poor (1) to Outstanding (7), and rated from Never (1) to Often (7).

Sampling and Data Collection

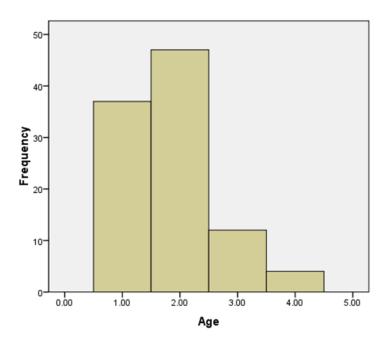
The data for this study were collected from a sample (100) of the students at the University of Belize, Belmopan Campus. The method of sampling is "random sampling".

At the beginning of the study students were asked for their participation in the research study, and the general overview and the purpose was stated. Out of the 100 questionnaires distributed to University of Belize's students, the issued amount was returned, yielding a response rate of 100 percent. Data collected was then entered in SPSS "Statistical Package for the Social Sciences", where different diagrams and frequencies and cross tabulations were done. The respondents' characteristics are presented in diagrams below.

Table 1. Characteristics of students' Respondents

			Age		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< OR=20	37	37.0	37.0	37.0
	21 to 25	47	47.0	47.0	84.0
	26 to 30	12	12.0	12.0	96.0
	31 and >	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

Histogram



The table 1. and Histogram above represents the percentage of students belonging to the four age ranges in the research. Thus, of the total students participating in the study 37 percent of them were either 20 years old or younger. It is further observed that 47 percent of the students were between the ages of 21 to 25. Another 12 percent of the participants were between the ages of 26 to 30. Lastly, 4 percent of the participants were 31 years old and older.

Table 2. Characteristics of students' Respondents

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	50	50.0	50.0	50.0
	Male	50	50.0	50.0	100.0
	Total	100	100.0	100.0	

According to the Gender table 2. there is an equal distribution of male and female participants in the research study. Therefore, of the total students participating 50 % were males and 50 % were females.

Table 3. Characteristics of students' Respondents

Years

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	semester 1	6	6.0	6.0	6.0
	1 yr.	30	30.0	30.0	36.0
	2 yr	24	24.0	24.0	60.0
	3 yr	23	23.0	23.0	83.0
	more than 3 yr	17	17.0	17.0	100.0
	Total	100	100.0	100.0	

In the years table 3, students are grouped into five categories based on the number of semesters or years they have been at the University of Belize. A minimum of 6 percent of the participants are in the first semester of their program. In contrast, the maximum of 30 percent of the participants are in their first academic year at UB. While 24 percent and 23 percent respectively, are in their second and third academic year at UB. Lastly, 17 percent of the participants have been more than 3 academic years at UB.

Table 4. Characteristics of students' Respondents

District * Degree Crosstabulation

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Count			Degree		
		Associates	Bachelors	Other	Total
District	Corozal	4	4	1	9
	Orange Walk	3	15	1	19
	Belize	10	5	0	15
	Cayo	13	28	0	41
	Stann Creek	0	5	0	5
	Toledo	1	9	1	11
Total		31	66	3	100

The table 4. A cross tabulation was generated to display respondents, district of residence and degree being pursued. Looking at the Corozal, it is observed that out of the total 100, 4 students are pursuing Associate degrees, 4 students are pursuing Bachelor Degrees, and 1 is pursuing other. Results for Orange Walk show that 3 students are pursuing Associate Degrees, 15 students are pursuing Bachelor Degrees, and 1student is pursuing other. For Belize City, a total of 10 students are pursuing Associate Degrees and 5 students are pursuing Bachelor degrees. Furthermore, 13 students from Cayo are pursuing Associate Degrees and 28 students are pursuing Bachelor Degrees. There are no students pursing Associates Degree form Stann Creek however, there are 5 students pursuing Bachelor Degrees. Lastly, 1 student from Toledo is pursuing an Associate degree, 9 students are pursuing Bachelor degrees, and 1 student is pursuing other.

Data Analysis and Results

(Generalization is limited only to the Belmopan Campus)

Does the system quality negatively impact user satisfaction?

Table 1. Results

	Easy		
	Strongly Disagree	Disagree	Total
Positive Strongly Disagree	6	7	13
Disagree	8	12	20
oisagree Somewhat Disagree	11	9	20
Nuetral	10	7	17
Somehwat Agree	15	1	16
Agree	9	2	11
Agree Strongly Agree	3	0	3
Total	62	38	100

Analyzing the information displayed in table 1. the entire sample population disagreed that the admission process was easy to use where 62 rated 'Strongly Disagree' and 38 rated 'Disagree' a total of 100 respondents. In the cross tabulation we also observed that 53 disagreed to a positive experience; out of the total of 53, 13 rated 'Strongly Disagree', 20 rated 'Disagree' and 20 rated 'Somewhat Disagree'. In addition, 17 were not certain of their experience and 30 agreeing to a positive experience where 16 rated 'Somewhat Agree', 11 rated 'Agree' and 3 rated 'Strongly Agree' a total of 30 respondents out of a 100. We can say that the system quality does impact user satisfaction. Moreover, in this case it can negatively impact user satisfaction.

Does the information quality negatively impact user satisfaction?

Table 2. Results

			Satisfied						
		Strongly Disagree	Disagree	Somewhat Disagree	Nuetral	Somewhat Agree	Agree	Strongly Agree	Total
Admin_realistic	Strongly Disagree	1	0	0	0	0	0	0	1
	Disagee	2	2	1	1	1	0	1	8
Disagree -	Somewhat Disagree	4	2	1	4	2	0	0	13
0,33	Nuetral	4	7	6	10	8	3	1	39
	Somewhat Agree	0	4	2	5	4	1	0	16
] . [Agree	0	1	0	2	5	1	0	9
Agree -	Strongly Agree	0	0	0	2	7	2	3	14
Total		11	16	10	24	27	7	5	100

A cross tabulation displayed in table 2. was generated to compare the admissions process and the satisfaction of the respondents. 22 disagreed that the admission process was realistic and within reach; 39 where neutral and 39 agreed it was realistic. 37 respondents disagree that they are satisfied 24 were neutral and 39 agreed that they were satisfied. In this case we can conclude and say that the information quality does not negatively impacted user satisfaction.

Does the Service Quality negatively impact user satisfaction?

Table 3. Results

			Satisfied						
		Strongly Disagree	Disagree	Somewhat Disagree	Nuetral	Somewhat Agree	Agree	Strongly Agree	Total
Support_Staff	Extremely Poor	0	1	1	3	1	0	0	6
l ſ	Very Poor	3	4	4	1	0	0	0	12
P001 -	Poor	4	6	1	7	2	0	0	20
,	Fair	6	7	2	9	6	0	0	30
	Good	2	0	1	3	10	1	2	19
] [Very good	1	0	1	1	4	2	0	9
Good -	Outstanding	0	0	0	0	0	1	3	4
Total L	8	16	18	10	24	23	4	5	100

A cross tabulation displayed in table 3. was generated to compare the support staffs' input as it relates to the admission process and the respondent's satisfaction. 38 rated the support staff in the category of poor, 30 rated fair and 32 rated under the category good. With these results we can conclude that Service Quality has negatively impacted user satisfaction.

The overall system is not effective.

Table 4. Results

Satisfied

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	16	16.0	16.0	16.0
	Disagree	18	18.0	18.0	34.0
	Somewhat Disagree	10	10.0	10.0	44.0
	Nuetral	24	24.0	24.0	68.0
	Somewhat Agree	23	23.0	23.0	91.0
	Agree	4	4.0	4.0	95.0
	Strongly Agree	5	5.0	5.0	100.0
	Total	100	100.0	100.0	

After analyzing the data from tables 4. as well as the three sub-questions, researchers can conclude that the admission system itself is not effective. Majority 44% of the respondents disagreed that they are satisfied as well as the majority 53% disagreeing to a positive experience. In this case we can accept the stated hypothesis and conclude that the overall system is not deemed effective.

Conclusion

Discussion

After carrying out this study researchers learnt that impressively the gender amongst respondents were equal, thus allowing us to have an even amount of opinions from both females and males. We can say that the majority of the respondents have been attending the University of Belize for a year now. However, they were 6 respondents currently enrolled in their first semester; allowing us to obtain opinions on the current admission process. Majority of the respondents were not satisfied with the current system and many have had negative experiences. Though many believe that the system is not up-to-date and ineffective, many believe that the system is quite accessible and realistic. However, the debate is substantial and the verdict remains that the current admission process is ineffective and can be modified for the better. Whilst carrying out this research; researches were able to grasp an observation of how quickly technology is evolving and how respondents seem to use a laptop in general technology more frequently.

Recommendation

Our recommendation to the University of Belize is to, transform entirely from a manual admission to an online based admission, moving for the current admission process to 'The Common Application'. Similar to what has been incorporated with hard copy text books versus eBooks. This will limit the amount of filing, resources, time, money and frustrated employees as well as students. Due to the fact that technology is rapidly growing one needs to adopt to information systems, as well as investing and maintaining information systems.

Limitations and Future Research

The researchers of this study faced several limitations in the attempt to achieve optimal success. Given the time constraints for data collection, the researchers limited the population to only students from the Belmopan Campus, using random sampling. It is recommended that for future studies, extended time frames be prearranged in order to facilitate study of a larger sample size. A large sample size would assist in sustaining results on a larger scale. As well as catering to all campuses and not just Belmopan.

Given the small sample size of this study, there cannot be a precise generalization of the findings to the University's population but rather limited to the Belmopan Campus only. If this study was replicated with a larger number of participants and selecting respondents from all campuses only then could the results be validated. As mentioned the sample strategy selected was 'random sampling', for future research it advised to use a 'stratified sampling' which will guarantee equal outcomes. For future researches we advise to incorporate different dimensions, as wells as incorporating both open ended (yes, no) questions, and open questions that would allow respondents to give a better insight as to why they prefer to be neutral.

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Appendix

Ouestionnaire I-"Effectiveness of current Admission Process" (All Students)

Purpose

This questionnaire asks for information about yourself and how often you use technology both online and offline. Many universities are moving from a manual admission process to a more advanced technology process, instilling the use of information systems. We would like to measure the effectiveness of the current admission process

Please answer the questions in relation to your views. Your individual responses to the questionnaire will be strictly confidential.

Instructions

This is a survey, not a test; there are no right or wrong answers. Please print in the spaces provided and tick the boxes to mark your answers. Your Survey ID number will be provided.

1. Background Information	Answers:
1. Please enter your age:	
2. Please indicate your gender:	Male 🗌 Female 🗌
3. Please state which district you reside	
4. Please state your enrolled program	
5. Indicate the number of years at UB	
6. Please indicate your pursuing degree:	Associates

Indicate your agreement with each statement by rating it from (1) strongly disagree to (7) strongly agree.

2. Information Quality	Disagree
7. I believe the admission system is realistic and within reach to all users from the various districts in Belize.	1 2 3 4 5 6 7
8. I believe the admission process is lengthy.	1 🗆 2 🗀 3 🗀 4 🗀 5 🗀 6 🗀 7 🗀
9. The admission systems provide sufficient information for the students.	1 2 3 4 5 6 7 7
10. The current admission system is up-to-date	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
3. System Quality	Disagree

11. SQ1: The current admission process is easy to use.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗀
12. SQ2: The admission process is user-friendly	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
13. SQ3: The current admission process is very interaction between the students and the support staff at the Admission office.	
4. Usage Intentions	Disagree
 If I heard about a new technology, I would look for wa to experiment with it. 	ys 1 2 3 4 5 6 7 7
15. Over-all, I am eager to try out new technology.	1 2 3 4 5 6 7
16. If the admission process promoted the use information systems, I would promote it.	of 1 2 3 4 5 6 7 5
Please answer the following questions using this scale 1 Never 2 Twice a year 3 Less than once a month 4 Once a me a day	
5. Laptops use in School	NeverOften
17. I use a computer [desktop, laptop, mobile device] to access the web	1
18. The computer that you normally use to access the school information systems [Moodle, Xenegrade] has a fast-reliable internet connection	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
19. I am pleased with the use of technology at UB [Moodle, Xenegrade]	1 🗆 2 🗀 3 🗀 4 🗀 5 🗀 6 🗀 7 🗀
20. Information Systems (Moodle, Xenegrade.) at UB are easy to use	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
6. Service Quality	Very PoorOutstanding
21. The support staff in the Admission office respond in a Prompt manner.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
22. Minimal time is wasted contacting the support staff at the Admission office.	1 🗆 2 🗎 3 🗆 4 🗆 5 🗆 6 🗀 7 🗀
23. The Admission support staff provides students with a reliable information.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
24. The support staff in the Admission office is always readily available to respond to queries as it relates to the status of your application.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆

7. User Satisfaction	DisagreeAgree
25. US1: Most of the students have a positive experience with the Admission process.	1
26. US4: You are satisfied with the Admission proces	1
27. NB2: The admission process is very cost effective to the students applying to UB.	1

Please return this survey to the person who gave you the form.

Thank you for your participation.