

## Assessing the Information System Efficiency of Academic Institution

Dr. Uma Shankar Singh\*, Dr. Osman Sahin

Faculty of Administrative Sciences and Economics Tishk International University, Erbil-Kurdistan

\*Corresponding author: Dr. Uma Shankar Singh | Received: 05.03.2019 | Accepted: 10.03.2019 | Published: 30.03.2019  
DOI: [0.21276/sjahss.2019.7.3.22](https://doi.org/10.21276/sjahss.2019.7.3.22)

### Abstract

### Review Article

The study presented here is assessing the information system efficiency for the academic institution that can contribute the institution for the success of academic activity and can enhance student's satisfaction. The study is extensively exploring the need of satisfaction by the usage of student page that can lead to success of academic institution performance. The study is having the most of concentration on the academic institution information system and research problem prepared as the assessing of efficiency of the student's information system in academic institution. Objectives set for this study set are to know the level of satisfaction with the student access page of academic institution, to assess the important components of information system leading to success of student page access for private universities, to find the acceptance of academic institution student page by users (students). The simple random sampling method of sampling is adopted to choose the qualified respondents for the study. The sample size taken is 150 students from academic institution. The condition decided if any item is falling in any two categories from gender, age and faculty of acceptance then accepted or falling in any two other category of rejection is rejected. Based on this analysis, it is observed that ten items are accepted and three items are rejected.

**Keywords:** Satisfaction, information system, efficiency, university, academic, institution.

**Copyright © 2019:** This is an open-access article distributed under the terms of the Creative Commons Attribution license which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use (NonCommercial, or CC-BY-NC) provided the original author and source are credited.

## INTRODUCTION

Fulfillment with Information System has for quite some time been the subject of much research in the field of academic development. It has generally been utilized as a surrogate measure for data frameworks achievement [1]. Client fulfillment inquires about picked up striking nature with crafted by Bailey and Pearson [2] and preceded through works of Ives *et al.* [3], Doll and Torkzadeh [4]. In their fundamental work, De Lone and McLean [5] gave an extensive model of factors that have been utilized to evaluate IS achievement and their associations with each other. They recommended that framework quality and data quality are key precursors of client fulfillment. This work was one of the most punctual to expound a model of client fulfillment that recognized key parts of an IS, and suggested that client observations about these perspectives (and related qualities) affect fulfillment. Be that as it may, in spite of the bits of knowledge gave by this work, just a couple of studies have inspected client discernments about framework and data parts of an IS as key determinants of client fulfillment [6-8].

With the expanding utilization of data frameworks in associations, its part divisions and data frameworks has changed from concentrating on item conveyance (i.e. IS as an item), to giving a support of

the association also. With this change its consideration offices and Data Frameworks has widened – in this way nature of IT bolster (i.e. benefit quality) has additionally been perceived as a key part of a Seems to be. Many authors were among the primary researchers to center around IS benefit quality as a surrogate for IS achievement and as a forerunner to client fulfillment with seems to be. They both obtained the thought of administration quality from the advertising writing and adjusted the SERVQUAL display created to the IS setting. Administration quality as a precursor of Data Frameworks fulfillment was later joined by their refreshed model of IS achievement. Out and out, they recommended that administration quality alongside framework quality and data quality are three noteworthy determinants of client fulfillment with Data Frameworks. Notwithstanding, ponders that explore every one of the three measurements of Data Frameworks in connection to client fulfillment, as proposed by DeLone and McLean are uncommon if not totally nonexistent.

As expressed before few examinations take a result situated perspective of fulfillment, which recommends that fulfillment with properties educates general fulfillment. This investigation receives a result arranged perspective of fulfillment toward the

investigation of client fulfillment with Data Frameworks. The examination demonstrate isn't worried about process-arranged forerunners of client fulfillment. Rather, the attention is on the fulfillment judgments that emerge from the evaluative procedures that go before fulfillment arrangement. The proposed demonstrate in this manner recommends that general fulfillment with a Data Framework is gotten from fulfillment with three noteworthy parts of an IS, to be specific data yield, (specialized) framework and bolster administrations. These thus get from fulfillment with their related traits, for instance, data exactness, framework dependability, and the responsiveness of help administrations. Every judgment of fulfillment whether general fulfillment, fulfillment with an IS angle (e.g. data fulfillment) or characteristic level fulfillment (e.g. fulfillment with the culmination of the data yields got) might be seen as a result of their particular evaluative procedures. This examination along these lines receives a result arranged perspective of fulfillment; it centers on property level fulfillment and proposes that general fulfillment is a total capacity of other fulfillment judgments, that is, characteristic level fulfillment [9].

## LITERATURE REVIEW

Generally the satisfaction is evaluated by the user on consumption so we call it user satisfaction too. It is considered as one dimension of study for the understanding and evaluation of quality. Further the satisfaction has been explained as the concept where the higher intensity of quality is the criterion for the higher level of satisfaction. In many studies the quality has been the center for satisfaction where the quality of product of product and services has been the main determinant of quality. The satisfaction is not only having the quality product of services but the quality of equipment getting used. The satisfaction is measured directly by the quality of product, service and equipment but indirectly measured by the care, sincerity and dedication felt by the user [10]. Different study on user satisfaction defines satisfaction as the combination of quantitative and qualitative Studies of user satisfaction generally comprise quantitative and qualitative adoption of different issues of satisfaction issues. Another issue has got much importance in many studies talk about the validation issue of satisfaction issues. Satisfaction studies developed by many researchers mostly talks about the application of different instrument applied in many different methodological traditions and signaling considered as gratitude bias. It is explained in much literature as the elevation and support to satisfaction. What is normal from an item may be unique in relation to what is wanted or esteemed in an item. For instance, it may be normal that an item separates after a specific time yet item disappointments are not attractive or esteemed, regardless of in the event that they are normal or not. Consequently, values are relied upon to influence shopper fulfillment increasingly when they are not quite

the same as assumptions about an item or administration [11].

Researcher trusted that procedure arranged meanings of fulfillment can't characterize the idea of fulfillment essentially, and recommended an underlying result assessment that prompts a condition of fulfillment or disappointment. As per process-arranged meanings of purchaser fulfillment are helpful in that they cover the entire utilization experience and spotlight on essential procedures that may prompt fulfillment. These conceptualizations of customer fulfillment should help us to make unmistakable measures to catch special parts of each stage associated with the fulfillment procedure. As such, impression of item execution and, hence, customer fulfillment is enhanced through positive disconfirmation and lessened through negative disconfirmation [1]. Disconfirmation is characterized as the contrast amongst execution and desires. Accordingly, positive disconfirmation happens when execution surpasses desire and negative disconfirmation when execution falls beneath desires made desires of high and low quality in subjects by exhibiting those indexes containing diverse quality ballpoint pens. Following that, the subjects were given the real pen. The individuals who had framed the desires as per the pens' genuine quality assessed the item execution higher than the individuals who shaped desires that were higher than the goal quality. Westbrook and Reilly [12] have tried the esteem percept divergence display against the desire affirmation model and found that none of the models were adequate all alone to clarify buyer fulfillment. They characterized esteem percept difference as the degree to which the item execution and attributes coordinate purchasers' needs and wants.

Study has widely looked into fulfillment and its precursors. As per his view, fulfillment is a sort of feeling. He trusts that feelings of joy, delight and joy relate nearly to fulfillment and disappointment is identified with negative effect and amazement. To put it plainly, fulfillment identifies with pleasurable feelings (unwinding, happiness, enchant, energy, and so on.) and disappointment identifies with repulsive feelings, for example, disillusionment, misery, uneasiness and irate sentiments. Fulfillment as a feeling is likewise supported by Echezona, Asogwa, and Asadu [13], which considered fulfillment as a total feeling about the principle parts of the utilization encounter. Buyer fulfillment (CS) definitions either center on the procedure of fulfillment or consider fulfillment because of the utilization procedure. CS as a procedure is characterized by researcher as "the shoppers' reaction to the assessment of the apparent error between earlier desires (or some other standard of execution) and the real execution of the item as saw after utilization. Process-arranged meanings of shopper fulfillment propose that an evaluative procedure is a basic factor in shaping fulfillment by Bailey and Pearson [2]. Researchers tried the proposed demonstrate and

affirmed that correlation principles depend on buyers' aggregate involvement with the central brand and its related brands and items. Study contends that distinctive intellectual congruities may influence purchaser fulfillment, for example, the congruity between (1) new item execution (after use) and expected item execution (before utilization); (2) new item execution and old (comparable) item execution; (3) expected item execution (after buy) and perfect item execution; and (4) expected item execution (after buy) and merited item execution. He found that all proposed intellectual congruities both alone and added substance would influence buyer fulfillment. These discoveries recommend that what customers trust an item execution "ought to be" greatly affected their fulfillment with the item DeLone and McLean [5]. Theories of information system development are always evolving for learning with the understanding of organizational practices which is having a high influence of other factors too. Variety of learning theories evolved for information system study addressing different scenarios correlating the usage of information system and information system development. Complex learning requires a well-developed and more structured knowledge of information system support [14]. System capability is the issue must get consideration in this rapidly changing environment of system development considering the capacity enhancement and decision makes capabilities. Information is increasing and bombarded with a heavy bulk all around, maintaining the system efficiency get challenging in such situation. Following Ives *et al.* [15], Doll and Torkzadeh [4] created and approved a review instrument to gauge end-client processing fulfillment. They clarified fulfillment through five key highlights of a framework: content, exactness, design, usability, and timeliness.

This evaluated observational articles distributed in the vicinity of 1981 and 1987 in the seven driving MIS diaries in scan for subordinate factors that are utilized to gauge MIS achievement. They gave a theoretical model that abridges these factors and their belongings. They expressed that framework quality and data quality specifically impact framework utilize and client fulfillment while framework utilize and fulfillment cooperate with each other Wixom and Todd 2005. The consequences of the connection between frameworks utilize and client fulfillment at that point prompts individual and authoritative effects of Information Systems. Information processing and storage is shifting from device level to virtually, so maintain the system capability shifting the requirement is a need for sustainability. These days a sustainable organization needs to keep investing in information system development considering the hardware performance as well. This is the age of tech savvy population and its increasing day by day, requirement of the population is increasing with the interface of system and web based services. Web based services are being prior for all kinds of user where the study is

mostly on the requirement of analytics and decision making services in the bulk flow [16]. Strategic decision making is done using a well-developed information system, which is a basic requirement for any organization in this era. With the acquaintance of Personal computers with associations, more clients are communicating with Personal computers and thus with the information technology office. These clients anticipate that information technology divisions will help them with various parts of their day by day employments that require personal computer connection, for example, introducing the right programming and preparing, picking the correct equipment, PC and system issue shooting, and whatever other action that identifies with data innovation [17].

To have a more reasonable measure of information system viability, proposed a marginally adjusted variant of service quality as a solid and legitimate instrument to quantify IS benefit quality. In any case, among the five measurements of the service quality, physical assets indicated inadmissible unwavering quality measures crosswise over dominant part of firms that they tried DeLone and McLean [5]. As wider range of business an organization has as well implemented wider range of services required that can support in operation activity and can improve the process efficiency at the different level of the organization. Among the key performance indicators of organization information system is placing itself at a higher level. When it comes on the tracking of the data inside the organization or all around the world, it gets more challenging when there is a lack of system, digital system available with organization makes it more efficient and capable for the execution of task on time [18]. When it comes to the adoption of dynamic environment the well capable Information System is the basic requirement to avail all needful resources that can get integrated to the execution with global world. All aspects of decision making now requiring the information technology push that can take the whole system to a far distance move with a rapid speed differentiating the existing system and resources with more capable system [9]. Furthermore the enterprise resource planning has brought the boom in the system development issues. Not only this but the supply chain management and the customer relationship management are other issues well depending on the capability of information system and vice versa increasing the capability of the information system. The development of strategic organizations is pushed by the integration and visibility on the platform of information technology services. Untapped information can get reached easily with the availability information system facilities [20].

### Research Problem

There have been numerous investigations in the advertising writing tending to different outcomes of customer fulfillment for people, for example, whining conduct and repurchase aims and for associations, for

example, expanded benefits and purchaser reliability. There are additionally numerous insightful works in the field of Data Frameworks that explore the outcomes of client fulfillment for associations and clients, for example, saw value and proceeded with utilize [1]. These discoveries point to the centrality of the client fulfillment ideas for IS utilized and IS achievement. There are additionally numerous investigations concentrating on the forerunners of fulfillment, specifically the procedures associated with shaping customer fulfillment in the showcasing and IS writing. While the quantity of college entryway benefits in Kurdistan is expanding, and more understudies are relocating to online administrations, the need to clarify the contrasts between these universities entrance administrations which give to their understudies, and the elements which may drive the understudies' and other clients' fulfillment winds up basic. Along these lines, the colleges and other instructive affiliations may need to know these components and the impact of every one on understudies' or other clients' fulfillment. This theory looks to address the key factors that drive understudies' fulfillment with colleges' entrances in Jordan and the impact of these variables on understudies' fulfillment. Here the study is having the most of concentration on the academic institution information system, so the research problem prepared as the assessing of efficiency of the student's information system in academic institution.

### Objective of the Study

Student's satisfaction is the uttermost priority for most of the educational institutions today. A well developed and efficient system can provide much better satisfaction to the university students. The objectives set for this study are as:

- To know the level of satisfaction with the student access page of academic institution.
- To assess the important components of information system leading to success of student page access for private universities.
- To find the acceptance of academic institution student page by users (students).

### RESEARCH METHODOLOGY

The scientific study conducted and compiled here as a research paper quantitative-qualitative study, which is called a mixed method design. The aim of the study is to expand theory and practice knowledge in relation to understand the existing theory and developing a new way for the study to make it practically applicable. The study is conducted for a specific group of students studying at academic institution. The qualitative study is conducted to build

up the literature base where the quantitative study has been used for having the data analysis to find the solution for the research questions. The first phase of the study is conducted to prepare the conceptual base with literature for the study and further followed by the second phase preparation of questionnaire for the survey and last phase analyzing the data and writing the interpretation is done. This is a descriptive and exploratory study that has employed mixed methods and have analyzed both quantitative and qualitative descriptions.

There are two types of data used here primary and secondary. The secondary data used for the understanding of concept and developing the idea to have this research. Again the primary data collected using survey instrument to measure variables and the validity of concept. Data collection is a systematic process that has been implemented here in a very systematic order to collect data using the survey questionnaire. It is important to keep in mind about the research questions formulated and how we will analyze the data collected through survey. The data gathering get decided after we decide on the methodology and the sources of data where the survey will be implemented. Here the survey is getting implemented at academic institution. As a researcher the question addressed here the different sources of data collected and the method applied for data collection. The population for the study here is academic institution students. It is quite a big population, out of this population a sample frame of students prepared and further it get broken in a suitable sample size. The sampling frame in this case is different from the population. It excludes members of the population, by its design, who may indeed be potential users of the proposed service. A simple random sample is one in which every individual or item from a frame has the same equal chance of selection as every other individual or item from that frame. The simple random sampling method of sampling is adopted to choose the qualified respondents for the study. The sample size taken is 150 students from academic institution.

### Data Analysis

The data collected through survey questionnaire must get processed using the statistical tools. Here for the analysis of data SPSS statistical package that can get used for the better explanation and interpretation of questionnaire as per desired way. This survey is further get used for conclusion of analysis done using SPSS. The final outcome is based on the analysis outcome of SPSS.

**Table-1: Descriptive Statistics**

Parameters		Frequency	Percentage
Gender	Male	79	52.7
	Female	71	47.3
Faculty	Business	37	24.7
	Engineering	25	16.7
	Dentistry	19	12.7
	Education	21	14.0
	Science	18	12
	Law	16	10.7
	Pharmacy	14	9.3
Stage	1 <sup>st</sup> Year	22	14.7
	2 <sup>nd</sup> Year	37	24.7
	3 <sup>rd</sup> Year	60	40.0
	4 <sup>th</sup> Year	29	19.3
	5 <sup>th</sup> Year	02	1.3
Age	16 Years – 19 Years	14	9.3
	20 Years – 25 Years	130	86.7
	26 Years – 35 Years	04	2.7
	36 Years and Above	02	1.3
Information I get from the my university system is clear	Strongly Agree	28	18.7
	Agree	84	56.0
	Neutral	31	20.7
	Disagree	3	2.0
	Strongly Disagree	4	2.7
My university system is accurate	Strongly Agree	16	10.7
	Agree	40	26.7
	Neutral	74	49.3
	Disagree	16	10.7
	Strongly Disagree	4	2.7
My university system provides me with sufficient information	Strongly Agree	10	6.7
	Agree	56	37.3
	Neutral	54	36.0
	Disagree	28	18.7
	Strongly Disagree	2	1.3
My university system provides me with up-to-date information	Strongly Agree	10	6.7
	Agree	43	28.7
	Neutral	67	44.7
	Disagree	24	16.0
	Strongly Disagree	6	4.0
My university system provides reports that seem to be just about exactly what I need	Strongly Agree	12	8.0
	Agree	40	26.7
	Neutral	75	50.0
	Disagree	13	8.7
	Strongly Disagree	10	6.7
Using my university system increases productivity	Strongly Agree	8	5.3
	Agree	46	30.7
	Neutral	58	38.7
	Disagree	36	24.0
	Strongly Disagree	2	1.3
Using my university system saves time	Strongly Agree	23	15.3
	Agree	60	40.0
	Neutral	31	20.7
	Disagree	32	21.3
	Strongly Disagree	4	2.7
Using my university system improves job performance	Strongly Agree	14	9.3
	Agree	51	34.0
	Neutral	54	36.0

	Disagree	29	19.3
	Strongly Disagree	2	1.3
My university system is easy to use	Strongly Agree	23	15.3
	Agree	39	26.0
	Neutral	59	39.3
	Disagree	21	14.0
	Strongly Disagree	8	5.3
My university system is easy to learn	Strongly Agree	19	12.7
	Agree	42	28.0
	Neutral	55	36.7
	Disagree	32	21.3
	Strongly Disagree	2	1.3
It is easy to get my university system to do what I want it to do	Strongly Agree	5	3.3
	Agree	67	44.7
	Neutral	50	33.3
	Disagree	26	17.3
	Strongly Disagree	2	1.3
Do you feel my university system of this restaurant meets the information processing needs of the business?	Never	7	4.7
	Seldom	58	38.7
	Not Sure	49	32.7
	Often	26	17.3
	Always	10	6.7
Overall, how often are you satisfied with university system?	Never	14	9.3
	Seldom	46	30.7
	Not Sure	50	33.3
	Often	31	20.7
	Always	9	6.0
Total		150	100.0

The above shown Table 1 has four demographical items and thirteen items related to concept to assess the respondent's opinion on the demographical distribution. The first demographical variable is the gender where it has two options male and female where the frequency for the male is 79 as a female is 72 which is contributing 52.7% and 47.3% consecutively. The gender distribution is almost equal in frequency. Faculty has 7 options Business, Engineering, Dentistry, Education, Law and Pharmacy where the frequencies are 37, 25, 19, 21, 18, 16 and 14 out of total 150 respondents, which is contributing 24.7%, 16.7% 12.7%, 14%, 12%, 10.7% and 9.3% consecutively. Data has collected from almost all departments with rationality. Students are chosen for

study is from all five different stages of study and it has been prioritized to collect data from all students' samples. The age has got four categories where the most respondents fall in second category which is the youth population. Further the thirteen items used to assess respondents opinion where eleven items are related to acceptance of thought where the last two are about the usage. The first eleven items are well used and established the data for concept where almost more than sixty percent of respondents are having agree and strongly agree together with the highest favoring condition. The same is the condition with last two items where it is more concentrated to first two options and contributing more than sixty percent of the responses.

**Table-2: One way ANOVA by Gender**

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Information I get from the my university system is clear	Between Groups	5.197	1	5.197	7.780	.006
	Within Groups	98.863	148	.668		
	Total	104.060	149			
My university system is accurate	Between Groups	6.244	1	6.244	8.078	.005
	Within Groups	114.396	148	.773		
	Total	120.640	149			
My university system provides me with sufficient inform	Between Groups	1.638	1	1.638	2.064	.153
	Within Groups	117.455	148	.794		
	Total	119.093	149			
My university system provides me with up-to-date information	Between Groups	.001	1	.001	.002	.969
	Within Groups	126.139	148	.852		
	Total	126.140	149			
My university system provides reports that seem to be just about exactly what I need	Between Groups	4.750	1	4.750	5.414	.021
	Within Groups	129.844	148	.877		
	Total	134.593	149			
Using my university system increases productivity	Between Groups	13.643	1	13.643	19.206	.000
	Within Groups	105.130	148	.710		
	Total	118.773	149			
Using my university system saves time	Between Groups	2.547	1	2.547	2.239	.137
	Within Groups	168.413	148	1.138		
	Total	170.960	149			
Using my university system improves job performance	Between Groups	.084	1	.084	.096	.757
	Within Groups	129.809	148	.877		
	Total	129.893	149			
My university system is easy to use	Between Groups	.206	1	.206	.169	.681
	Within Groups	179.688	148	1.214		
	Total	179.893	149			
My university system is easy to learn	Between Groups	2.582	1	2.582	2.682	.104
	Within Groups	142.511	148	.963		
	Total	145.093	149			
It is easy to get my university system to do what I want it to do	Between Groups	4.350	1	4.350	6.316	.013
	Within Groups	101.924	148	.689		
	Total	106.273	149			
Do you feel my university system of this restaurant meets the information processing needs of the business?	Between Groups	2.021	1	2.021	2.056	.154
	Within Groups	145.472	148	.983		
	Total	147.493	149			
Overall, how often are you satisfied with university system?	Between Groups	.910	1	.910	.822	.366
	Within Groups	163.923	148	1.108		
	Total	164.833	149			

**Table-3: One way ANOVA by Age**

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Information I get from the my university system is clear	Between Groups	.855	3	.285	.403	.751
	Within Groups	103.205	146	.707		
	Total	104.060	149			
My university system is accurate	Between Groups	7.726	3	2.575	3.330	.021
	Within Groups	112.914	146	.773		
	Total	120.640	149			
My university system provides me with sufficient inform	Between Groups	5.687	3	1.896	2.440	.067
	Within Groups	113.407	146	.777		
	Total	119.093	149			
My university system provides me with up-to-date information	Between Groups	5.660	3	1.887	2.286	.081
	Within Groups	120.480	146	.825		
	Total	126.140	149			
My university system provides reports that seem to be just about exactly what I need	Between Groups	2.234	3	.745	.821	.484
	Within Groups	132.359	146	.907		
	Total	134.593	149			
Using my university system increases productivity	Between Groups	11.147	3	3.716	5.040	.002
	Within Groups	107.626	146	.737		
	Total	118.773	149			
Using my university system saves time	Between Groups	4.969	3	1.656	1.457	.229
	Within Groups	165.991	146	1.137		
	Total	170.960	149			
Using my university system improves job performance	Between Groups	11.959	3	3.986	4.935	.003
	Within Groups	117.934	146	.808		
	Total	129.893	149			
My university system is easy to use	Between Groups	20.034	3	6.678	6.099	.001
	Within Groups	159.859	146	1.095		
	Total	179.893	149			
My university system is easy to learn	Between Groups	5.959	3	1.986	2.084	.105
	Within Groups	139.134	146	.953		
	Total	145.093	149			
It is easy to get my university system to do what I want it to do	Between Groups	8.782	3	2.927	4.384	.005
	Within Groups	97.491	146	.668		
	Total	106.273	149			
Do you feel my university system of this restaurant meets the information processing needs of the business?	Between Groups	19.656	3	6.552	7.483	.000
	Within Groups	127.837	146	.876		
	Total	147.493	149			
Overall, how often are you satisfied with university system?	Between Groups	13.303	3	4.434	4.272	.006
	Within Groups	151.531	146	1.038		
	Total	164.833	149			



**Table-4: One way ANOVA by Faculty**

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Information I get from the my university system is clear	Between Groups	23.803	7	3.400	6.016	.000
	Within Groups	80.257	142	.565		
	Total	104.060	149			
My university system is accurate	Between Groups	34.409	7	4.916	8.095	.000
	Within Groups	86.231	142	.607		
	Total	120.640	149			
My university system provides me with sufficient inform	Between Groups	13.246	7	1.892	2.539	.017
	Within Groups	105.848	142	.745		
	Total	119.093	149			
My university system provides me with up-to-date information	Between Groups	4.841	7	.692	.810	.581
	Within Groups	121.299	142	.854		
	Total	126.140	149			
My university system provides reports that seem to be just about exactly what I need	Between Groups	30.251	7	4.322	5.881	.000
	Within Groups	104.343	142	.735		
	Total	134.593	149			
Using my university system increases productivity	Between Groups	26.766	7	3.824	5.901	.000
	Within Groups	92.007	142	.648		
	Total	118.773	149			
Using my university system saves time	Between Groups	39.726	7	5.675	6.141	.000
	Within Groups	131.234	142	.924		
	Total	170.960	149			
Using my university system improves job performance	Between Groups	16.045	7	2.292	2.859	.008
	Within Groups	113.848	142	.802		
	Total	129.893	149			
My university system is easy to use	Between Groups	16.507	7	2.358	2.049	.053
	Within Groups	163.386	142	1.151		
	Total	179.893	149			
My university system is easy to learn	Between Groups	11.325	7	1.618	1.717	.109
	Within Groups	133.768	142	.942		
	Total	145.093	149			
It is easy to get my university system to do what I want it to do	Between Groups	17.019	7	2.431	3.868	.001
	Within Groups	89.254	142	.629		
	Total	106.273	149			
Do you feel my university system of this restaurant meets the information processing needs of the business?	Between Groups	11.796	7	1.685	1.763	.099
	Within Groups	135.698	142	.956		
	Total	147.493	149			
Overall, how often are you satisfied with university system?	Between Groups	25.363	7	3.623	3.689	.001
	Within Groups	139.470	142	.982		
	Total	164.833	149			

**Table-4: One way ANOVA by Gender, Age and Faculty**

Items	Gender Sig.	Age Sig.	Faculty Sig.	Accepted/Rejected
Information I get from the my university system is clear	.006	.751	.000	Accepted
My university system is accurate	.005	.021	.000	Accepted
My university system provides me with sufficient inform	.153	.067	.017	Accepted
My university system provides me with up-to-date information	.969	.081	.581	Rejected
My university system provides reports that seem to be just about exactly what I need	.021	.484	.000	Accepted
Using my university system increases productivity	.000	.002	.000	Accepted
Using my university system saves time	.137	.229	.000	Rejected
Using my university system improves job performance	.757	.003	.008	Accepted
My university system is easy to use	.681	.001	.053	Accepted
My university system is easy to learn	.104	.105	.109	Rejected
It is easy to get my university system to do what I want it to do	.013	.005	.001	Accepted
Do you feel my university system of this restaurant meets the information processing needs of the business?	.154	.000	.099	Accepted
Overall, how often are you satisfied with university system?	.366	.006	.001	Accepted

The Table 2 shown above is the outcome of one way ANOVA by Gender, where five items are accepted with the 0.05 level of significance though eight items are rejected on this. So it is considered those eight rejected items are not supporting the concept. For the further understanding the research conducted with one way ANOVA by Age as shown in the above Table 3. Here other eight items are accepted and other five items are rejected at the 0.05 level of significance. This could not get satisfied, so the study further get tested using one way ANOVA by Faculty where eleven items are accepted though two are rejected with the same level of 0.05 of significance. Further to make the analysis more justifiable a consolidated table developed where all three criteria get compared for the level of significance as shown in above Table 4. The condition decided if any item is falling in any two categories from gender, age and faculty of acceptance then accepted or falling in any two other category of rejection is rejected. Based on this analysis, it is observed that ten items are accepted and three items are rejected.

## FINDINGS AND CONCLUSION

Finding of the study reveals that “Information I get from the my university system is clear”, “My university system is accurate”, “My university system provides me with sufficient inform”, “My university system provides reports that seem to be just about exactly what I need”, “Using my university system increases productivity”, “Using my university system improves job performance”, “My university system is easy to use”, “It is easy to get my university system to do what I want it to do”, “Do you feel my university

system of this restaurant meets the information processing needs of the business?”, “Overall, how often are you satisfied with university system?” are ten items highly significant in most cases and students show their high acceptance for these items. The study concludes here finding the solution for the research problem, as the assessment of efficiency of student page. The academic institution student page is efficient to support student’s need but still can get developed more for the betterment of the page and a good development of student page.

The first research objective to know the level of satisfaction with the student access page of academic institution get full filled by the answers of most of the respondents answered positively towards the satisfaction on university page. Most of the respondents are not using my university page so except the neutral option mostly the responses are towards positive side of the thought. Further the second objective to assess the important components of information system leading to success of student page access for academic institution also get answered rationally with all questions asked in thirteen questions. The third objective was to find the acceptance of academic institution student page by users (students) got satisfactory responses where on some issues it is good and on some issues system needs to get developed to be more efficient. The fourth question is in the case of My Private page of Academic institution, does the information system contribute to overall satisfaction of the user, has got answered by the last two questions where it is not completely in favor but seldom so system needs to get more improvements. Another question prepared to find answer was is the

private page of academic institution delivering the satisfaction to students leading to future usage, having the response to build the system more efficient and accurate than can lead to the future satisfaction and development. The conclusion is matched with the objectives set for this specific study. Student's satisfaction is the uttermost priority for most of the educational institutions today. A well developed and efficient system can provide much better satisfaction to the university students. It can get recommended here that university student page still have much scope for development. The most important need is to make students use the university student page. When we see most of the questions of the questionnaire, mostly respondents are not using the university student page, if they are not using the system, they cannot make any decision. So to make the system successful and more usable the university should enforce all users to use the university page system that can lead to more satisfaction.

## REFERENCES

- Liu V, Khalifa M. Determinants of satisfaction at different adoption stages of Internet-based services. *Journal of the association for information systems*. 2003 Oct 1;4(1):12.
- Bailey JE, Pearson SW. Development of a tool for measuring and analyzing computer user satisfaction. *Management science*. 1983 May; 29(5):530-45.
- Ives B, Olson, MH & Baroudi JJ. The Measurement of User Information Satisfaction, *Communications of the ACM*. 1983; 26 (10), 785-793.
- Doll WJ, Torkzadeh G. The measurement of end-user computing satisfaction. *MIS quarterly*. 1988 Jun 1:259-74.
- DeLone WH, McLean ER. Information systems success: The quest for the dependent variable. *Information systems research*. 1992 Mar;3(1):60-95.
- McKinney ML. Urbanization, Biodiversity, and Conservation The impacts of urbanization on native species are poorly studied, but educating a highly urbanized human population about these impacts can greatly improve species conservation in all ecosystems. *Bioscience*. 2002 Oct 1;52(10):883-90.
- Nelson HE. Cognitive-behavioural therapy with delusions and hallucinations: A practice manual. Nelson Thornes; 2005.
- Wixom BH, Todd PA. A theoretical integration of user satisfaction and technology acceptance. *Information systems research*. 2005 Mar;16(1):85-102.
- Busacca B, Padula G. Understanding the relationship between attribute performance and overall satisfaction: Theory, measurement and implications. *Marketing Intelligence & Planning*. 2005 Oct 1;23(6):543-61.
- Ijiekhuamhen OP, Aghojare B, Ferdinand OA. Assess users' satisfaction on academic library performance: a study. *International journal of academic research and reflection*. 2015;3(5):67-77.
- Nnadozie CO. Knowledge management variables and user satisfaction with information delivery in university libraries in South-East Zone of Nigeria. Unpublished PhD Dissertation, Imo State University, Owerri, Nigeria. 362pp. 2016.
- Westbrook RA, Newman JW, Taylor JR. Satisfaction/Dissatisfaction in the Purchase Decision Process: Are consumers really as dissatisfied as many studies claim?. *Journal of Marketing*. 1978 Oct;42(4):54-60.
- Echezona RI, Asogwa BE & Asadu BU. Constraints to effective use of circulation Bulletin. 2010; 57(2), 122 – 128.
- Patel VL, Yoskowitz NA, Arocha JF, Shortliffe EH. Cognitive and learning sciences in biomedical and health instructional design: A review with lessons for biomedical informatics education. *Journal of biomedical informatics*. 2009 Feb 1;42(1):176-97.
- Velnampy T & Sivesan S. Factor analysis of service quality in university libraries in services in academic libraries in South East Nigeria. *Nigerian Libraries*. 2013; 44(1), 13 – 32.
- Schlegel K, Beyer MA, Hostmann B, Sallam RL, Gassman B, Rayner N, McMurchy N, Chandler N, Cain MW. Predicts 2009: Business intelligence and performance management will deliver greater business value. Stamford, CT: Gartner Group. 2008 Dec 18.
- Inthiran A, Alhashmi SM & Ahmad PK. A user study on information search behavior on medical students. *Malaysian Journal of Library and Information Science*. 2015; 20(1), 61-77.
- Elbashir MZ, Collier PA, Davern MJ. Measuring the effects of business intelligence systems: The relationship between business process and organizational performance. *International Journal of Accounting Information Systems*. 2008 Sep 1;9(3):135-53.
- Davenport TH, Harris & Jeanne G, *Competing on Analytics*. Boston: Harvard Business School Publishing Corporation. 2007.
- Ranjan J. Business justification with business intelligence. *Vine*. 2008 Oct 24;38(4):461-75.