



## **An Assessment of Students' Satisfaction with Facilities Management Practice of Provided Services in Abubakar Tafawa Balewa University Bauchi**

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### ***Abstract***

*Facilities management are activities carried out with the key role of integrating people, process, place and technology to minimise costs and maximise value and competitive advantage. In Abubakar Tafawa Balewa University (A.T.B.U) Bauchi, provided services such as libraries, information technology centres, laboratories, hostels, green areas, shops, retail outlets, services, facilities, environment, are provided and are managed in ensuring that those provided services do not impede the activities and outcomes of students and staff of A.T.B.U. Bauchi. This academic work examined the level Students' Satisfaction with Facilities Management Practice of Provided Services in A.T.B.U. Bauchi. Research survey was conducted using questionnaire with close-ended questions, open-ended questions and Likert-scaled questions. Data analysed with S.P.S.S © package version 25, revealed that students of A. T. B. U. Yelwa Campus in Bauchi were more satisfied with facilities management practices employed in managing Electricity supply, security services, Computer Business Centres, Food Canteens, Internet Services, which were ranked 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> respectively.*

## **Introduction**

The International Facility Management Association (IFMA, 2009) defines facilities management (FM) as “a profession that encompasses multiple of

disciplines to ensure functionality of the built environment by integrating people, process and technology”. Several studies have examined the benefits of strategic

facilities management. It has been confirmed that strategic FM offers an integrated approach to maintaining, improving and adapting the building and other infrastructure of an organization in order to create an environment that strongly supports the corporate objectives (SFMS, 2006; Barret & Baidry, 2003; Alexander, 2003) while constantly adding value to the stakeholders (Alexander, 2003). It is in this perspective that strategic facilities management contributes to the achievement of organisational strategic goals through effective and efficient management of facilities, involving cost and waste minimization, enhancement of business process, creation and maintenance of workplace and delivery of superior value (Kamarazaly & Mbachu, 2010).

Furthermore, FM adds value to organizations from a number of other perspectives: recognising and maximising facilities' values and gaining competitive advantage (Alexander, 2003 & Hamilton, 2004), generating persistent corporate values through dynamic facilities policy and efficient response to issues pertaining to space allocation and changing, environmental control and protection, as well as direct and contract employment (Amaratunga, Baldry & Sashar, 2000). FM creates best value in delivering best value in delivering to customer satisfaction (Atkin & Brooks, 2005) by contributing in integrated management of workplace (Tay & Ooi, 2001), which being a prime source for management of infrastructure resources and services to sustain and support the operational strategy of an organisation in both long-term and short-term (Nutt, 2004 & Chotipanich, 2004).

Abubakar Tafawa Balewa University (A.T.B.U) is a citadel of learning with two campuses in Yelwa and Gubi composed of people, facilities, system and buildings put in place to achieve specified objectives. These are not limited to offices, housing units, classrooms, workshops, libraries, information technology centres, laboratories, hostels, green areas, shops, retail outlets, services, facilities, environment, etc. for provided for both staff (teaching and non-teaching) and students, where they carry out their respective obliged responsibilities. They are expected not to impede the activities and outcomes of students and staff through their adequate management thereby, to providing qualitative services and to as well meet up with social responsibilities that add value to the lives of the employees, students, stakeholders and the public individuals in proximity to A.T.B.U campuses.

However, this paper assessment of students' satisfaction with facilities management practice in Abubakar Tafawa Balewa University Bauchi.

### **Statement of research problem**

Facilities are needed for the enhancement of operation processes and to create a safe and conducive workplace for improved productivity and competitiveness. Consequently, investment in the organizational facilities and infrastructure constitutes a significant part of any organizational expenditure (IFMA, 2009). Strategic facilities management contributes to the achievement of organizational strategic goals through effective and

efficient management of the facilities, involving cost and waste minimisation, enhancement of business processes, creation and maintenance of workplace and delivery of superior value.

Without a doubt, organizations can achieve high levels of competitiveness and success by leveraging the potentials of strategic facilities management (Kamarazaly & Mbachu, 2007). However, the full potentials of strategic facilities management role may not be optimally leveraged due to internal and external challenges that hinder the effectiveness and efficiency of strategic facilities management.

The management of university attracts a plethora challenges that cut across all spheres of FM. The unique nature of university facilities and the role of university facilities managers include catering for diverse and demanding customer groups who carry out a wide range of complex processes that require in diverse range of facilities, a significant number of which must be specialised in some ways. University facilities therefore, provide an ideal case study for gaining insights into the comprehensive range of issues faced by facilities managers in general.

Several other studies have investigated the challenges facing university facilities managers. However, there is a lack of clear indication of the risk levels associated with these challenges. In another words, these challenges unfortunately are not prioritised in terms of their relative levels of impact and frequencies of occurrence. Bajaj (2003) affirms this by stating that there is lack of research or little mention of risk ranking in the literature of managing risks in FM.

This paper investigated facilities provided in Yelwa Campus of Abubakar Tafawa Balewa University Bauchi for students and assesses the level of students' satisfaction with facilities management practice in Abubakar Tafawa Balewa University Bauchi.

## **Materials and Methods**

### **Design and setting**

The research design was survey research and the primary sources of data was employed. A set of questionnaire (with close-ended, open-ended and Likert-scale questions) was as the instrument for data collection. Two-stage sampling technique (i.e. the stratified sampling method and random sampling method) was employed to assess the students' satisfaction with facilities management practice in Abubakar Tafawa Balewa University Bauchi.

### **Sample/participants**

The target population included all students of Abubakar Tafawa Balewa University Bauchi in Yelwa Campus. As at the year 2021, has 3,269 Students (A. T. B. U Student Affairs Unit, 2021), which is this research's sample frame. The sample unit was three hundred and forty-two (342) students (Krejcie & Morgan, 1960) which is 10.50% of the

sample frame. They are students of A. T. B. U in Yelwa campus that were recruited the aforementioned (stratified and simple random) sampling methods.

The inclusion criteria included were undergraduate students from 100level through 500level (in the faculty of Science and Faculty of Environmental Technology) and students of School of Postgraduate Studies. They all students in departments of Applied geology, Biochemistry, Biological Science, Chemistry, Ecology, Mathematical Sciences, Microbiology, Physics, Architecture, Building, Environmental Management and Technology, Estate Management and Valuation, Industrial Design, Quantity Survey, Surveying and Geo-Informatics, Urban and Regional Planning and School of Postgraduate Studies. These students have lecture halls in Yelwa Campus.

### **Data collection**

Pilot survey was conducted to ensure data reliability and data validity. Data reliability was conducted using retest method of 10 questionnaires. In this retest method, five (5) questionnaires were first shared to five (5) students' class representatives and retrieved, while the same five (5) students' class representatives. The validity test was content validity. The researcher gave the four (4) proposed questionnaires to four (4) professionals in the field of Estate Management and Valuation to assess the worthiness of the questionnaire before pilot survey and research survey. All the observations were corrected before the questionnaire was administered for the pilot and field survey.

Data collection was performed using a two-section questionnaire. The first section collected the participants' demographic characteristics including which includes the gender, age of respondents, academic level of respondents, academic department of respondents and the respondent's faculty. The second section has the major services Provided in Yelwa Campus of A. T. B. U., Bauchi and the level of satisfaction of students with provided services in Yelwa Campus of A. T. B. U., Bauchi, Bauchi State.

Ethical concern was also given a priority by avoidance of ambiguous questions and none of the questionnaires has means of identity. The respondents remain confidential and anonymous throughout to avoid any problem that may be detrimental to these Abubakar Tafawa Balewa University Bauchi.

### **Statistical analysis**

Data were analysed via SPSS version 25 using descriptive statistics (frequency, percentage, mean and standard deviation).

## **Results and Discussion**

### **Results**

Table 1 shows that 342 questionnaires were administered to Students in Yelwa Campus of Abubakar Tafawa Balewa University in Bauchi while 299 questionnaires that is 87.43% were retrieved.

Table 1: Administered and retrieved questionnaires

Questionnaire	Frequency	Percentage (%)
Administered	342	100.00
Retrieved	299	87.43
Non-Retrieved	43	12.57

Table 2: Demography of the respondents

Variables	Options	Frequency	Percentages
<b>Gender</b>	Male	224	74.92
	Female	75	25.08
<b>Age of Respondents</b>	20years and below	88	29.43
	21 – 30 years	127	42.48
	31 – 40 years	37	12.37
	41 – 50 years	31	10.38
	51 – 60 years	12	4.01
	Above 60 years	4	1.34
<b>Academic Level</b>	100	32	10.70
	200	54	18.06
	300	88	29.43
	400	52	17.39
	500	43	14.38
	600	19	6.35
	700	7	2.34
	800	4	1.34
<b>Academic Department</b>	Applied Geology	13	4.35
	Biochemistry	22	7.36
	Biological Science	25	8.36
	Chemistry	15	5.02
	Ecology	10	4.34
	Mathematical Sciences	27	9.03
	Microbiology	12	4.01
	Physics	10	4.34
	Architecture	19	6.35
	Building	12	4.01
	Environmental Management and Technology	29	9.70
	Estate Management and Valuation	11	3.68
	Industrial Design	21	7.02
Quantity Survey	26	8.70	

	Surveying and Geo-Informatics	22	7.36
	Urban and Regional Planning	25	8.36
<b>Academic Faculty</b>	Environmental Technology	121	40.47
	Sciences	148	49.50
	Postgraduate Studies	30	10.03

**Source:** Field Survey (2021)

Table 2 shows the gender of the respondents in the study area. Male respondents are 224, which is 74.92% while 75 respondents, which is 25.08% are females. This shows that male respondents dominated the students Abubakar Tafawa Balewa University in Yelwa Campus, Bauchi. It was discovered that 88 of the respondents are of ages of below 20years which is 29.43%. Ages of 21 – 30years, 31-40years, 41-50years, 51-60years, 61 and above years have respondents 127, 37, 31, 12 and 4 respectively. This also signifies 42.48%, 12.37%, 10.38%, 4.01% and 1.34% respectively. The dominating age group among the respondents is 21-30years.

Also, it was discovered that 32 of the respondents are in 100level of studies, which is 10.70%. Students in 100level, 300levels, 400level, 500level, 600level, 700level and 800level have respondents 54, 88, 52, 43, 19, 7 and 4 respectively. This also signifies 18.06%, 29.43%, 17.39%, 14.38%, 6.35%, 2.34% and 1.34% respectively. The dominating students' level among the respondents is 300level. The academic department of respondents reveals that students in Applied Geology department are 13, which is 4.35% of the respondents. Biochemistry, Biological Science, Chemistry, Ecology, Mathematical Sciences, Microbiology and Physics have 22respondents, 25respondents, 15respondents, 10respondents, 27respondents, 12respondents and 10respondents, which 7.36%, 8.36%, 5.02%, 4.34%, 9.03%, 4.01%, and 4.34% respectively. Meanwhile, Departments of Architecture, Building, Environmental Management and Technology, Estate Management and Valuation, Industrial Design, Quantity Survey, Survey and Geo-Informatics, and Urban and Regional Planning Department has 19 respondents, 12 respondents, 29 respondents, 11 respondents, 21 respondents, 26 respondents, 22 respondents, and 25respondents. These signify 6.35%, 4.01%, 9.70%, 3.68%, 7.02%, 8.70%, 7.36%, and 8.36% respectively. This reveals that students of Environmental Management and Technology dominated the group.

Meanwhile, the Academic Faculty, which respondents belong to indicated that respondents from Faculty of Environmental Technology are 121 students, which is 40.47%, respondents from Faculty of Sciences are 148, which is 49.50% while respondents from Postgraduate Studies are 30 and it is 10.03% of the respondents. This reveals that students from the Faculty of Sciences dominated the group.

Table 3: Major Services Provided in Yelwa Campus of A. T. B. U., Bauchi

<b>Services</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Rank</b>
Electricity Supply	3.9049	0.98721	1
Security services	3.7772	1.15987	2
Computer Business Centres	3.7717	1.03459	3

Food canteen	3.6440	1.20214	4
Internet services	3.5571	1.17976	5
Electric Power supply generators	3.3478	1.48881	6
School bus	3.3397	1.30868	7
Trade/Retail outposts	3.2011	1.32993	8
Toilets and bathrooms	3.1033	1.40656	9
Audio-visual units	3.0163	1.44273	10
Portable Water supply	2.8859	1.34226	11
Banking services	2.8777	1.44612	12
Lighting systems	2.3940	1.19475	13
Fire Fighting Units and Appliances	2.3016	1.25227	14
Waste disposal units	2.1332	1.06527	15
Wheel chairs walk way for handicaps	1.7636	1.20899	16

**Source:** Field Survey 2021)

The above Table 3 shows those major facilities provided in A. T. B. U., Bauchi. Electricity Supply has a mean score of 3.9049 and a standard deviation of 0.98721, Security services has a mean score of 3.7772 and standard deviation of 1.15987. Computer Business Centres are of mean score 3.7717 and standard deviation of 1.03459, Food canteens are mean score of 3.6440 and standard deviation of 1.20214.

However, Internet service was of mean score of 3.5571 and standard deviation of 1.17976, Power supply generators were of mean score of 3.3478 and standard deviation 1.48881, School buses were of mean score of 3.3397 and standard deviation of 1.30868, Trade/Retail outposts were of mean score of 3.2011 and standard deviation of 1.32993.

Meanwhile, Toilets and bathrooms were of mean score of 3.1033 and standard deviation of 1.40656. Audio-visual units have mean score of 3.0163 and standard deviation of 1.44273. Portable Water supply have mean score of 2.8859 and 1.34226 as standard deviation. Banking services were of mean score of 2.8777 and standard deviation of 1.44612.

Also, Lighting systems have mean score of 2.3940 and 1.19475 as standard deviation. Fire Fighting Units and Appliances have mean score of 2.3940 and 1.25227 as standard deviation. Waste disposal units have mean score of 2.1332 and 1.06527 as standard deviation. Wheel chairs walk way for handicaps have mean score of 1.7636 and 1.20899 as standard deviation.

Table 4: Level of Satisfaction of Students with Provided Services in Yelwa Campus of A. T. B. U., Bauchi

<b>Services</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Rank</b>
Electricity Supply	3.3044	0.98721	1

Wheel chairs walk way for handicaps	3.3021	1.15987	2
Internet services	3.2717	1.03459	3
Computer Business Centres	3.2523	1.20214	4
Portable Water supply	3.2501	1.17976	5
Trade/Retail outposts	3.2478	1.48881	6
School bus	3.2397	1.30868	7
Toilets and bathrooms	3.2011	1.32993	8
Banking services	3.1033	1.40656	9
Lighting systems	3.0163	1.44273	10
Fire Fighting Units and Appliances	2.8723	1.34226	11
Power supply generators	2.7712	1.44612	12
Waste disposal units	2.3822	1.19475	13
Audio-visual units	2.2014	1.25227	14
Security services	2.1236	1.06527	15
Food canteens	1.0633	1.20899	16

**Source:** Field Survey 2021)

The above Table 4 illustrates level of satisfaction of students with provided services in Yelwa Campus of A. T. B. U., Bauchi. Electricity Supply has a mean score of 3.3.044 and a standard deviation of 0.98721, Wheel chairs walk way for handicaps has a mean score of 3.3021 and standard deviation of 1.15987. Internet Services are of mean score 3.2717 and standard deviation of 1.03459, Computer Business Centres have a mean score of 3.2523 and standard deviation of 1.20214. However, Portable water was of mean score of 3.2501 and standard deviation of 1.17976, Trade/Retail Outposts were of mean score of 3.2478 and standard deviation 1.48881, School buses were of mean score of 3.2397 and standard deviation of 1.30868, Toilets and Bathrooms have a of mean score of 3.2011 and standard deviation of 1.32993.

Meanwhile, Banking services were of mean score of 3.1033 and standard deviation of 1.40656. Lighting systems have mean score of 3.0163 and standard deviation of 1.44273, Fire Fighting Units and Appliances have mean score of 2.8723 and 1.34226 as standard deviation. Power supply generators were of mean score of 2.7712 and standard deviation of 1.44612.

Also, Waste Disposal Units have mean score of 2.3822 and 1.19475 as standard deviation, Audio-Visual Units have mean score of 2.2014 and 1.25227 as standard deviation. Security Services have mean score of 2.1236 and 1.06527 as standard deviation while Food canteens have mean score of 1.0633 and 1.20899 as standard deviation.

## Discussion

The survey research conducted revealed that the major services provided in Yelwa campus of Abubakar Tawa Balewa University Bauchi are Electricity supply, security services, Computer Business Centres, Food Canteens, Internet Services, Electric Power Supply

Generators and they were ranked the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> respectively. This is opposing the findings of Bagonza, Itaaga and Mugagga (2019) that the major facilities of Education in University in Uganda are Lecture room space, Library space and books, Laboratory Facilities and Computer and Internet Access, which were ranked the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> respectively. The findings also not the same with the findings of Ekpoh (2018) that the major services provided in universities are library services health service delivery, transportation services, ICT service and hostel service delivery. However, the findings of this research is sustained.

Meanwhile, the level of satisfaction of A. T. B. U Yelwa campus Bauchi on facilities' management of services provided indicated that Electricity Supply was rated 1<sup>st</sup>, Wheel chairs' walk way for handicaps was rated 2<sup>nd</sup>, Internet Services was rated 3<sup>rd</sup>, Computer business centres was rated 4<sup>th</sup> and Portable water supply was rated 5<sup>th</sup> in ranking.

## Conclusion

This academic research revealed from data collected and analysed the major services provided in Yelwa campus of Abubakar Tafawa Balewa University Bauchi and the level of students' satisfaction with the facilities management with the provided services.

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