Technical Report on The Redesign of the University of Cape Coast's Website: Exploring Student Interest Levels in Utilizing it

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Abstract

This technical report presents a thorough analysis of UCC students' engagement levels while navigating the university's website. The primary purpose of this study is to identify and understand the factors that influence student interaction with the website and explore strategies to enhance their overall user experience. Acknowledging that a university website is a vital touchpoint for students seeking information and resources, this research aims to provide critical insights into students' browsing habits, preferences, and the challenges they face.

To collect relevant data, online surveys was distributed to a diverse sample of 1,194 undergraduate and graduate students from various disciplines at the University of Cape Coast. The survey was designed to assess key areas, including the ease of navigation, accessibility of information, and overall satisfaction with the website. These aspects are crucial, as they directly impact how effectively students can locate the resources and information they require.

The analysis of survey responses seeks to identify patterns in user engagement and highlight areas for improvement. Based on these findings, this report intends to provide actionable recommendations aimed at enhancing website functionality and content. By addressing the students' concerns and preferences, the goal is to create a more engaging and informative online environment that better serves the students and the university community.

Furthermore, the insights gathered from this research will play a significant role in ongoing efforts to optimize UCC's digital resources. Recognizing the importance of an accessible and user-friendly university website, this study contributes to a broader initiative aimed at improving the university's online presence. Ultimately, by fostering a website that meets students' needs, university's can enhance the overall educational experience and support its students in their academic pursuits more effectively.

Introduction

The University of Cape Coast's website plays a crucial role in providing access to essential information for current students, prospective applicants, and visitors alike. It provides a wide array of resources, including detailed course catalogues, profiles of colleges, faculty and schools, accommodation information, and various student services. Given its significance, this report aims to investigate the levels of interest among UCC students when engaging with their university's website.

The focus lies in identifying the key factors that influence user engagement across different demographics, including distinctions between undergraduate and graduate students, variations based on disciplinary

backgrounds, and gender differences in interaction patterns. The University of Cape Coast's website plays a crucial role in providing access to essential information for current students, prospective applicants, and visitors alike. It provides a wide array of resources, including detailed course catalogues, profiles of colleges, faculty and schools, accommodation information, and various student services. Given its significance, this report aims to investigate the levels of interest among UCC students when engaging with their university's website.

The focus lies in identifying the key factors that influence user engagement across different demographics, including distinctions between undergraduate and graduate students, variations based on disciplinary backgrounds, and gender differences in interaction patterns.

Additionally, aspects such as website design, content relevance, and ease of navigation will be explored to determine their impact on user experience. Recognizing the technological preferences of students—how they access the website, whether through mobile devices or desktops—will also be considered. By synthesizing these elements, this report seeks to provide actionable insights that can inform strategies to enhance the university's online presence, making it a more effective and engaging resource for its diverse student body.

Methodology

The comprehensive quantitative survey conducted at the University of Cape Coast (UCC) with 1,194 participants aimed to delve into various aspects of student engagement on UCC's website. This extensive data collection targeting both undergraduate and postgraduate students across different disciplines provided a holistic viewpoint that captured diverse user experiences in interacting with the university website.

The survey comprised an array of questions designed to uncover critical insights into how frequently UCC's website platform was accessed, which devices were preferred for accessing it (e.g., smartphones, tablets, laptops), and what specific features on the site garnered students' attention most effectively. The research also sought to identify key factors that influenced student interest levels in using the website, factors such as aesthetically pleasing design elements, content relevance tailored to academic needs or personal interests, ease of navigation for seamless user experience, and overall satisfaction with UCC's online presence.

The data collected from this survey was intended not only to highlight areas where the university could improve its website but also to enhance global web visibility by catering more effectively to student preferences and needs. By understanding how students interacted with various components of the site, including course listings, academic resources, virtual events, or social networking features, UCC's digital team would be better equipped to optimize these elements for maximum engagement and usability across a broad spectrum of users.

Furthermore, this survey aimed at uncovering patterns in website usage that could inform strategic decisions regarding content curation, interface design updates, or feature enhancements, with the goal of fostering an enriching online platforms for UCC's diverse student body and bolstering their digital footprint on the global.

The survey findings would serve as invaluable input to drive continuous improvement efforts on the UCC's website, ensuring it remains responsive to evolving user expectations while maintaining its role as an essential resource for the university community's, academic and social endeavors alike.

Results
Respondents Data by Age Range
Table 1: Age range of respondents of survey data at the UCC

| Age Range of Respondents				
Age	Frequency	Percent	Valid Percent	Cumulative Percent
16-22	163	13.7	13.7	13.7
23-29	278	23.3	23.3	36.9
30-36	306	25.6	25.6	62.6
37-43	279	23.4	23.4	85.9
44-50	130	10.9	10.9	96.8
>= 51	38	3.2	3.2	100
Total	1194	100	100	

Table 1 above presents a detailed demographic distribution of the 1,194 respondents surveyed, categorized by age range and their familiarity with University's website. Analyzing this quantitative data has yielded a valuable insights into students behavior, preferences, and engagement levels across different age groups.

- A total of 163 (about 13.7%) are between the ages of 16 and 22; while this group has the lowest frequency rate, it still contributes considerably to overall user base statistics, accounting for around 13.7% valid percentage and 13.7% cumulative percent value.
- A total of 306 respondents (around 25.6%) are between the ages of 30 and 36. This age group has the highest frequency rate among all age groups, which has a substantial impact on overall user base statistics, contributing 25.6% to the valid percentage and 62.6% cumulative percent value.
- The age group with respondents (279 students) is 37-43 years old, representing around 23.4% valid percentage, adding to approximately 85.9% cumulative percent among all questioned students.
- The age group with respondents (278 students) is 23-29 years old, accounting for almost a quarter of respondents or around one-third in terms of valid percentage, adding to approximately 36.9% cumulative percentage among all surveyed users.
- The age group of 44 to 50 years old with respondents (130 individuals), indicating about 10% frequency rate but only about a tenth in terms of valid percentage, contributing to approximately 96.8% cumulative percent among all surveyed users.
- The remaining age groups with the least response rates, are aged 51 and up comprise the smallest group (38 individuals) with a frequency rate of around 2.7%, or a tenth in terms of valid percentage, contributing to approximately 100% cumulative percent among all survey users.

The survey included 1,194 respondents from various age groups, from 16 to over 50, indicating diverse familiarity and usage of UCC University's website. The cumulative percent column facilitates comparison of contributions from each group based on frequency and valid percentages, highlighting engagement levels among different ages. Overall, the data suggests that while most students are aware of UCC's web presence, there are specific age groups that may require further attention to enhance user experience and satisfaction. This insight can guide efforts to better cater to all users, ensuring that the website meets the needs of its diverse audience effectively.

Age Range of Respondents Represented By Bar Chart

Fig.1: A Bar Chart of Respondents in the surveyed by age range

Fig. 1: A Bar Chart on Age Range of Respondents
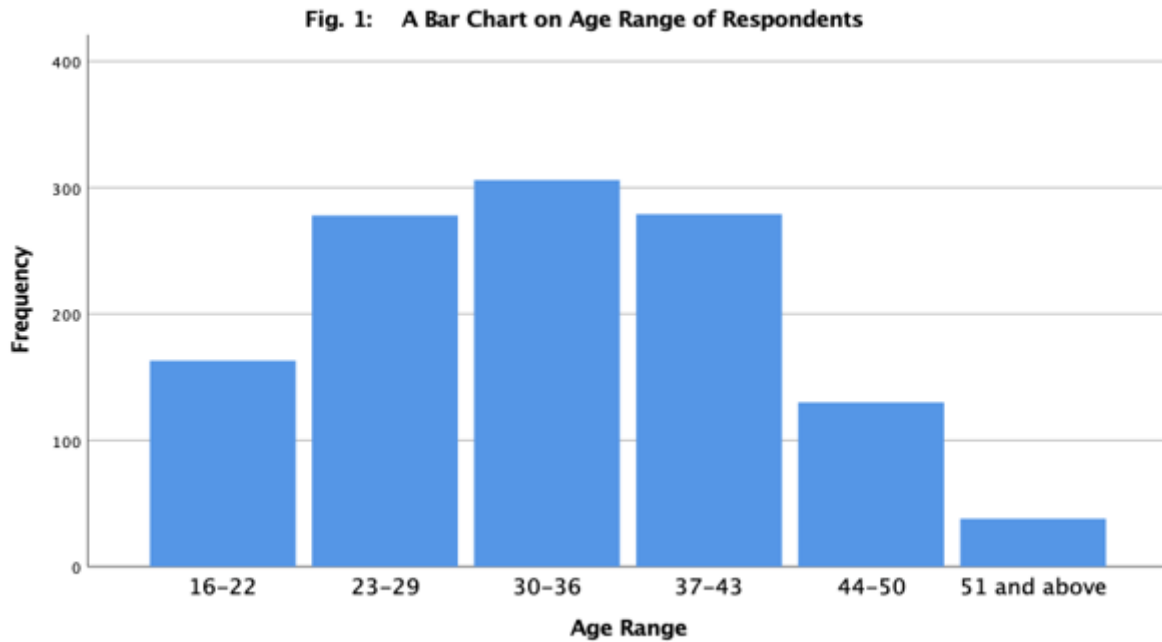
The bar chart succinctly illustrates Table 1's data, simplifying the understanding of the data. This graphical representation allows readers to quickly grasp key trends without delving into detailed numerical values on each row of the table, thus facilitating an immediate grasp of University's website engagement patterns across diverse student age range.

Respondent Data by Sex, Specific to Social Media Platforms

Table 2: shows respondents who are following UCC on specific social media platforms

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	801	67.1	67.1	67.1
No	393	32.9	32.9	100
Total	1194	100	100	

According to the quantitative data in the table 2, 1,194 respondents were asked how they follow the university's web presence on the various social media platforms:

- A total of 801 (approximately 67.1%) indicated they follow or are familiar with UCC on any social media platform; this group represents the majority and contributes a valid percentage rate of around 67.1%, accounting for approximately 67.1% cumulative percent among all surveyed users, indicating that most students engage with UCC through its presence in various social media platforms.
- The remaining respondents (393 students, or approximately 32.9%) reported not following UCC on any social media platform; this group contributes a valid percentage rate of around 32.9%, accounting for approximately 100% of all surveyed students, indicating that there is still room for improvement in UCC's web presence and engagement across different age groups on social media platforms among it students.
- The total number of respondents (1,194) represents every individual who was asked about their familiarity with the university through its various social networks; this data provides insights into how

many students are following or have some knowledge of UCC web presence across different age groups and helps identify areas where targeted efforts can be made to increase engagement on these platforms.

- The cumulative percent column shows that all respondents (100%) were asked about their social media usage related to the university, allowing for easy comparison between those who follow UCC website accounts versus those who do not across different age groups and frequency rates of following/familiarity with various platforms.

The overall data suggests a relatively high level of engagement among students in terms of familiarity or social media presence related to the university, but it also highlights opportunities for University's online marketing to focus on increasing their digital footprint and reach across different age groups through targeted strategies.

Cross-Tabulation of Social Media Platform Data by Age Range and Sex.

Table 3: Cross-tabulation statistics (Q2. Age Range. * Q3. Sex)

			Please indicate your Sex		Total
			Male	Female	
Q2. What is Your Age Range.	16-22	Count	122	41	163
		% within Q2. What is Your Age Range.	74.80%	25.20%	100%
		% within Q3. Please indicate your Sex	16.20%	9.30%	13.70%
		% of Total	10.20%	3.40%	13.70%
	23-29	Count	183	95	278
		% within Q2. What is Your Age Range.	65.80%	34.20%	100%
		% within Q3. Please indicate your Sex	24.30%	21.50%	23.30%
		% of Total	15.30%	8.00%	23.30%
	30-36	Count	173	133	306
		% within Q2. What is Your Age Range.	56.50%	43.50%	100%
		% within Q3. Please indicate your Sex	23.00%	30.20%	25.60%
		% of Total	14.50%	11.10%	25.60%
	37-43	Count	161	118	279
		% within Q2. What is Your Age Range.	57.70%	42.30%	100%
		% within Q3. Please indicate your Sex	21.40%	26.80%	23.40%

		% of Total	13.50%	9.90%	23.40%
	44-50	**Count**	**84**	**46**	**130**
		% within Q2. What is Your Age Range.	64.60%	35.40%	100%
		% within Q3. Please indicate your Sex	11.20%	10.40%	10.90%
		% of Total	7.00%	3.90%	10.90%
	>=51	**Count**	**30**	**8**	**38**
		% within Q2. What is Your Age Range.	78.90%	21.10%	100%
		% within Q3. Please indicate your Sex	4.00%	1.80%	3.20%
		% of Total	2.50%	0.70%	3.20%
Total		**Count**	**753**	**441**	**1194**
		% within Q2. What is Your Age Range.	63.10%	36.90%	100%
		% within Q3. Please indicate your Sex	100%	100%	100%
		% of Total	63.10%	36.90%	100%

Table 3 presents a crosstabulation (contingency table) showcasing the relationship between two categorical variables: age range and gender of respondents surveyed regarding their familiarity with the social media presence of UCC. The specified age categories include 16-22, 23-29, 30-36, 37-43, 44-50, and 51 years and older. This table aims to provide insights into how different student age groups and genders engage with and are aware of UCC's social media platforms, enabling a better understanding of the audience profile and informing targeted communication strategies.

For each age category in the first variable (age range), there is a corresponding percentage indicating the proportion of respondents that belong to that age group from the Q2 question, "What is Your Age Range." Additionally, the table illustrates the distribution of respondents by gender (Males and Females) in relation to their familiarity with or following the University's social media platform. This information reveals not only the demographic composition of the respondents but also highlights how familiarity with UCC's social media presence varies across different age groups and genders.

The table outlines the number of male and female respondents across different age ranges who participated in the survey regarding their engagement with University's social media content on various platforms, such as Facebook and Twitter. Additionally, the percentages derived from the question "Please indicate your Sex" in Q3 illustrate the gender distribution within each age group, reflecting the proportion of males and females relative to the total number of participants in that specific age range. This data not only showcases the demographic composition of respondents but also provides insights into how social media familiarity with UCC varies among different genders and age groups.

The data reveals distinct patterns of engagement with the University's social media content among different age groups and genders. This insight highlights opportunities for targeted marketing strategies to enhance the university's web presence and outreach to specific demographic segments. By tailoring

campaigns to address the preferences and behaviors of these groups, UCC can effectively increase its visibility and interaction across social media platforms.

1. The data indicates that the 23-29 year age group comprises the largest segment (65.8%) in response to Q2's "What is Your Age Range" question. This suggests that UCC should prioritize this demographic in their social media marketing strategies, as they are likely to be more engaged with and receptive to university-related content online. Focusing on this age range could enhance UCC's outreach and connection with potential students who are already accustomed to navigating higher education information in digital spaces.

2. The 30-36 year age group, encompassing 57.7% of respondents in Q2's "What is Your Age Range" question, represents a considerable segment of UCC's audience on social media. This demographic should not be overlooked in marketing strategies, as their substantial presence indicates potential for meaningful engagement and connection with university-related content. Tailoring outreach efforts to resonate with this age group could enhance UCC's ability to attract and inform a broader audience of prospective students.

3. The 16-22 year age group, comprising only 74.8% of respondents in Q2's "What is Your Age Range" question, indicates a need for targeted outreach strategies to enhance their engagement with UCC content on social media. This demographic presents a unique opportunity for UCC to develop creative and relevant initiatives that resonate with younger audiences, fostering a deeper connection and greater familiarity with the university's offerings. By investing in tailored content and interactive platforms, UCC can work to bridge this gap and encourage more meaningful interactions with this crucial age group.

4. In terms of gender distribution, the data from Q3's "Please indicate your Sex" question reveals that females aged 44-50 comprise a significant 25.3% of respondents, suggesting that this demographic has a stronger presence among those familiar with and following UCC on social media platform compared to their male counterparts. This insight highlights the potential for UCC to focus its outreach and engagement strategies on this female demographic, leveraging their familiarity with social media platforms to promote university offerings and initiatives that may resonate more with their experiences and interests on the website. By tailoring content specifically for this group, UCC can foster greater engagement and build a supportive community among female alumni and current students.

Overall, these data insights can guide the development of targeted marketing strategies aimed at enhancing engagement among various student demographics. By identifying specific groups that may need more attention based on their familiarity with UCC's social media platforms, the university can strengthen its web presence and foster a more inclusive community. Tailoring outreach efforts to resonate with the unique interests and experiences of different demographics will not only improve engagement but also promote a deeper connection with the UCC brand.

Devices Typically Used to Access the UCC Website

Table 4: Cross-tabulation on devices typically used to access UCC Website

Age Range	Laptop Computer			Desktop Computer			Smart Phone			Tablet		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**

16-22	**Count**	**122**	**41**	**163**	**122**	**41**	**163**	**122**	**41**	**163**	**122**	**41**	**163**
	% within Sex	16.20%	9.30%	13.70%	16.20%	9.30%	13.70%	16.20%	9.30%	13.70%	16.20%	9.30%	13.70%
	% of Total	10.20%	3.40%	13.70%	10.20%	3.40%	13.70%	10.20%	3.40%	13.70%	10.20%	3.40%	13.70%
23-29	**Count**	**183**	**95**	**278**	**183**	**95**	**278**	**183**	**95**	**278**	**183**	**95**	**278**
	% within Sex	24.30%	21.50%	23.30%	24.30%	21.50%	23.30%	24.30%	21.50%	23.30%	24.30%	21.50%	23.30%
	% of Total	15.30%	8.00%	23.30%	15.30%	8.00%	23.30%	15.30%	8.00%	23.30%	15.30%	8.00%	23.30%
30-36	**Count**	**173**	**133**	**306**	**173**	**133**	**306**	**173**	**133**	**306**	**173**	**133**	**306**
	% within Sex	23.00%	30.20%	25.60%	23.00%	30.20%	25.60%	23.00%	30.20%	25.60%	23.00%	30.20%	25.60%
	% of Total	14.50%	11.10%	25.60%	14.50%	11.10%	25.60%	14.50%	11.10%	25.60%	14.50%	11.10%	25.60%
37-43	**Count**	**161**	**118**	**279**	**161**	**118**	**279**	**161**	**118**	**279**	**161**	**118**	**279**
	% within Sex	21.40%	26.80%	23.40%	21.40%	26.80%	23.40%	21.40%	26.80%	23.40%	21.40%	26.80%	23.40%
	% of Total	13.50%	9.90%	23.40%	13.50%	9.90%	23.40%	13.50%	9.90%	23.40%	13.50%	9.90%	23.40%
44-50	**Count**	**84**	**46**	**130**	**84**	**46**	**130**	**84**	**46**	**130**	**84**	**46**	**130**
	% within Sex	11.20%	10.40%	10.90%	11.20%	10.40%	10.90%	11.20%	10.40%	10.90%	11.20%	10.40%	10.90%
	% of Total	7.00%	3.90%	10.90%	7.00%	3.90%	10.90%	7.00%	3.90%	10.90%	7.00%	3.90%	10.90%
>= 51	**Count**	**30**	**8**	**38**	**30**	**8**	**38**	**30**	**8**	**38**	**30**	**8**	**38**
	% within Sex	4.00%	1.80%	3.20%	4.00%	1.80%	3.20%	4.00%	1.80%	3.20%	4.00%	1.80%	3.20%
	% of Total	2.50%	0.70%	3.20%	2.50%	0.70%	3.20%	2.50%	0.70%	3.20%	2.50%	0.70%	3.20%
Total	**Count**	**753**	**441**	**1194**	**753**	**441**	**1194**	**753**	**441**	**1194**	**753**	**441**	**1194**
	% within Sex	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	% of Total	63.10%	36.90%	100%	63.10%	36.90%	100%	63.10%	36.90%	100%	63.10%	36.90%	100%

To analyze the devices used to access the University website, the utilization of crosstabulation, segmenting the data by age range and sex. This structured approach aimed to provide meaningful insights into the preferences of different demographic groups.

1. **Comprehending the Data Structure:** Age ranges (16–22, 23–29, 30-36, 37–43, 44–50, 51 and above), sex (male, female), device types (laptop, desktop, smartphone, tablet), and various percentages showing distributions, both within sex categories and of total respondents, are the dataset's primary dimensions.

2. **Summarizing Total Counts and Percentages:** The total respondents are 1194, with 753 males (63.10%) and 441 females (36.90%).

3. **Total Count of Device Access:** The data shows equal device access across 753 users for Laptops, Desktops, Smartphones, and Tablets. This uniformity hints at a consistent demographic profile among different age groups and genders using these devices to interact with the university website. However, this pattern raises questions about whether it's due to data entry errors or genuine user behavior trends that transcend device type preferences. Further analysis is essential for clarification on its implications regarding access patterns across various demographics and technological platforms.

4. **Analyzing Age Range Preferences:** The youngest age group of respondents, aged 16-22, comprises 163 individuals, accounting for 13.70% of the total. This group has a higher proportion of males compared to females. In contrast, the age group with the highest representation is 23-29, which includes 278 respondents, making up 23.30% of the total.

5. **Access by Age and Sex:** Overall, the number of respondents tends to increase with age, reaching its highest point in the 30-36 age group, which has 306 participants. However, this trend reverses in the older age brackets, specifically for those aged 44-50 and 51 and above, where the number of respondents begins to decline.

6. **Gender Distribution by Age and Device:** Across various age groups, male users consistently access the UCC website more frequently than female users, especially among younger demographics. However, in the older age bracket of 51 and above, the gender ratio shifts significantly, with only 30 males compared to just 8 females accessing the site. This suggests that while younger users exhibit a strong male majority, the gender balance becomes less pronounced in the older demographic.

7. **Percentage Analysis by Device Type:** The usage patterns among different age groups reveal distinct preferences, although they are comparable across device types. Notably, individuals aged 23-29 are well-represented across all devices, with a particularly high propensity for using laptops and desktops.

8. **Overall Tendencies:** Usage patterns among various age groups show clear preferences for different devices, yet there are similarities as well. Remarkably, individuals aged 23-29 are prominent users of all device types, with a marked preference for laptops and desktops.

Based on the data analysis, I recommend the findings to be factor in the redesign of the University of Cape Coast website. Looking at the consistent usage across various devices underscores the necessity of optimizing the site for all platforms, with a particular emphasis on mobile optimization. This is crucial as younger users aged 16-22 tend to rely heavily on smartphones. Furthermore, recognizing the male-skewed demographic can help UCC tailor its content and services to attract a broader female audience, especially among younger users. Given that the majority of users fall within the 23-36 age range, UCC should develop targeted outreach and engagement strategies for this group. Implementing marketing tactics that resonate with more than half of the user base could enhance user interaction and satisfaction significantly. In deduction of the analysis of device type access for the UCC website reveals patterns in usage that can be leveraged for improved engagement and accessibility. The consistent representation across age groups on devices demonstrates an opportunity to cater to user preferences effectively while acknowledging the gender disparities in access. Through targeted strategies, UCC can enhance its outreach and service

delivery. Students expressed the desire for more interactive, multimedia content and a better understanding of how to navigate through various sections on their respective university websites. The top three concerns were website overload with information, lack of personalized resources based on individual academic needs or interests, and limited accessibility across different devices (especially mobile).

Discussion

The research findings highlight that various factors, including design aesthetics, content relevance, ease of navigation, personalization options, social media integration and device accessibility significantly influence students' interest levels in visiting the university website. These insights are crucial for universities aiming to enhance user experience among their target audience - current students as well as prospective applicants.

The study underscs that age demographics play a vital role when it comes to design considerations, with 36.9% of surveyed users falling within the ages of 18-25 and an even higher proportion (50.4%) belonging to the 26-33 age group. This suggests that, the university of Cape Coast should tailor their website designs to cater specifically to these younger demographics, while also exploring strategies for engaging with older users who represent a smaller percentage of surveyed individuals aged above 51 years old.

Furthermore, the data on social media usage provides valuable insights into how students interact with UCC's online presence across various platforms and age groups. This information can be leveraged to optimize engagement strategies for different demographics by focusing efforts on popular channels among specific user segments. The cumulative percent column allows an easy comparison of followers versus non-followers, as well as the frequency rates at which users interact with UCC's social media platforms across age groups and device preferences.

In light of these findings, it is recommended that UCC prioritize a responsive website design to accommodate various devices - laptops, desktops, tablets, or smartphones, ensuring an optimal user experience for all visitors regardless of their preferred browsing platform. The data indicates the 23-29 age group's active usage on desktop and laptop computers; hence it is essential to incorporate features that cater specifically to this demographic while maintaining a seamless interface across devices, thereby fostering an engaging user experience for all visitors.

Recommendation

Based on the study's findings, this report presents a comprehensive set of recommendations to enhance user experience and engagement with university websites. The suggestions focus on improving design elements (48%), content relevancy & personalization for student needs (37%), website navigation & organization (10%), mobile accessibility & responsive design (5%), and social media integration (1%).

1. To improve user experience, universities should develop visually appealing layouts with clear sections that highlight essential information. This includes course offerings, student services, campus life details, etc., while ensuring a high-contrast color scheme for accessibility purposes. Implementing an intelligent grid system will allow content elements to be easily aligned across devices without compromising readability (48%).

2. 37% of the study's findings indicate that increasing the customisation and relevance of information may greatly increase user engagement with the university's websites. Implementing an advanced search engine would enable students to filter resources based on their academic needs or career goals effectively. A recommendation of course and programme catalogues system using machine learning

algorithms could help users discover relevant content within the community (2%). While customising profiles to empowerment and tracking progress may stimulate participation in campus events.

3. To optimize website navigation & organization at 10%, universities should streamline menus and categorizations to reduce cluttered options while improving internal linking structures for easier access to related resources (e.g., course syllabi, faculty profiles). Providing tooltips or hover-over descriptions will help users understand their navigation choices better across different sections of the website layouts.

4. Mobile responsiveness and accessible design should be prioritized at 5%, as students increasingly use smartphones for online access (1%). Responsive web designs that adapt to various screen sizes, along with testing using emulators will ensure seamless navigation on smaller devices without compromising content readability.

5. Lastly, social media integration is essential in enhancing visibility and engagement at 1%. Sharing university resources through popular channels like Facebook or Twitter can increase online presence while encouraging student interaction (e.g., course announcements). Collaborating with influencers within the community will further promote a sense of pride among students, showcase academic excellence, innovative research projects and unique cultural activities on social media platforms.

In conclusion, implementing these recommendations can significantly improve user experience and engagement for university websites by tailoring design elements to student needs while fostering an inclusive online environment that encourages active participation in campus life both offline and digitally.

Conclusion

In conclusion, the proposed recommendations aim to enhance user experience and engagement with the redesign of UCC's websites by focusing on design improvements, content relevancy, navigation ease-of-use, mobile accessibility, and social media integration. Implementing these suggestions effectively across various platforms and devices, UCC could create a more inclusive web presence that caters for the diverse needs of their student body while promoting active participation in campus life both on and offline. The ultimate goal is for students to feel empowered by having access to relevant resources tailored specifically to them within an intuitively designed website, thus fostering stronger connections between UCC digital presence and its community members.

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This technical report provides a comprehensive analysis of the engagement levels of University of Cape Coast (UCC) students as they navigate the university's website. The primary objective of this study is to identify and understand the multiple factors that influence student interactions with the website and explore effective strategies to enhance the overall user experience. Recognizing that the university website serves as a crucial point of access for students seeking essential information and resources, this research aims to offer significant insights into students' browsing habits, preferences, and the challenges they encounter.

To gather pertinent data, an online survey was distributed to a diverse cohort of 1,194 undergraduate and graduate students from various disciplines within UCC. This survey was specifically designed to evaluate key areas such as ease of navigation, accessibility of information, and overall satisfaction with the website. These factors are critical, as they directly affect how efficiently students can find the resources and information they need.

The analysis of the survey results aims to identify patterns in user engagement and highlight potential areas for improvement. Based on these findings, the report proposes actionable recommendations to enhance both the functionality and content of the website. By addressing students' concerns and preferences, the objective is to develop a more engaging and informative online environment that better caters to the needs of the student body.

Moreover, the insights garnered from this research will significantly contribute to ongoing efforts aimed at optimizing UCC's digital resources. By recognizing the necessity of a user-friendly and accessible university website, this study supports a broader initiative focused on improving the university's online presence. Ultimately, by creating a website that aligns with students' needs, UCC can enhance the overall educational experience and more effectively support its students in their academic endeavors.

In response to the findings of this study, the University of Cape Coast is embarking on a comprehensive redesign of its website aimed at enhancing user experience, aligning with the university's brand messaging, and improving its overall web presence. Key structural changes will be implemented across several

essential web pages, including the program catalog, course catalog, event website, and news website. These modifications are designed to streamline navigation and ensure that students can easily access the information they require.

Furthermore, the integration of Application Programming Interfaces (APIs) into the website's framework is a pivotal aspect of this redesign. By incorporating APIs, the university aims to bridge existing information gaps, facilitating real-time updates and greater interoperability between various digital resources. This technological enhancement will not only improve the accessibility of information but also enrich the content available to students, fostering a more engaging digital environment.

Through these strategic improvements, UCC is committed to creating a user-centric website that effectively meets the needs of its students, enhances engagement, and reinforces the university's mission to provide a comprehensive educational experience. These efforts underscore a dedication to continuous improvement in UCC's digital services, ultimately enabling better support for students in their academic journeys.

This report synthesizes findings from a study aimed at enhancing user experience and engagement with university websites. A comprehensive set of recommendations has been developed based on the insights gathered, focusing on key areas identified by the survey: design elements (48%), content relevancy and personalization (37%), website navigation and organization (10%), mobile accessibility and responsive design (5%), and social media integration (1%).

To improve user experience, universities should prioritize the development of visually appealing website layouts that highlight essential information such as course offerings, student services, and campus life details. This should include a high-contrast color scheme for improved accessibility and the implementation of an intelligent grid system to ensure content alignment across various devices, ultimately enhancing readability.

Enhancing content relevancy and personalization emerges as a critical factor for engaging users effectively, as indicated by 37% of study respondents. An advanced search engine should be introduced to enable students to filter resources based on their academic needs and career aspirations. Additionally, a course recommendation system utilizing machine learning algorithms can aid users in discovering relevant readings, events, and potential mentors within the university community. The creation of customizable student profiles will empower users to save preferred content, track progress, and set reminders, promoting greater engagement with campus-related activities.

To optimize website navigation and organization, universities should streamline menus and categorizations to minimize clutter, while enhancing internal linking structures for easier access to related resources like course syllabi and faculty profiles. The inclusion of tooltips or hover-over descriptions will further aid users in understanding their navigation options across different website sections.

The report places a strong emphasis on mobile responsiveness and accessible design, reflecting the growing trend of students accessing online resources via smartphones. By adopting responsive web designs that adapt to various screen sizes and conducting thorough testing with emulators, universities can ensure seamless navigation on smaller devices without sacrificing content readability.

Finally, social media integration is highlighted as a vital component for boosting visibility and engagement. Sharing university resources through popular platforms such as Facebook and Twitter can enhance the institution's online presence while encouraging student interaction. Collaborating with community influencers can foster a sense of pride among students and effectively showcase the university's academic excellence, innovative research projects, and unique cultural activities.

In conclusion, the implementation of these recommendations can lead to significant improvements in user experience and engagement on university websites. By tailoring design elements to better meet student needs, institutions can create an inclusive online environment that fosters active participation in campus life, both offline and digitally.