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REIMAGINING LIBRARY SERVICES IN ALIGNMENT WITH THE CHANGING INFORMATION SEEKING BEHAVIOUR OF GENERATION Z AND GENERATION ALPHA STUDENTS IN NIGERIAN UNIVERSITIES: A CONCEPTUAL REVIEW

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Abstract

University libraries are at a pivotal juncture, confronted with the challenges of serving Generations Z and Alpha students as digital natives, whose learning behaviours are shaped by technologies, visual content, and expectations of instant access to information. These cohorts increasingly prefer digital resources, interactive learning, and social collaboration, yet remain vulnerable to misinformation. Despite this, Nigerian university libraries continue to struggle with digital divides, outdated infrastructure, limited resources, and insufficient hi-tech savvy staff. This paper examines the library services in alignment with the changing information seeking behaviour of Generation Z and Alpha students in Nigerian universities. It aims at ascertaining the information seeking behaviours of Generations Z and Alpha students, as well as identifying the challenges Nigerian university libraries face in attending to the changing information seeking behaviour, and proposing strategies for digital transformations**.** The study adopts a conceptual research approach to explore existing literature in order to highlight some interventions such as digital literacy programmes, gamification, integration of social media tools, as well as collaboration with Faculty and IT experts as the measures of reimagining library services alignment with the changing information seeking behaviour of Generation Z and Generation Alpha students in Nigerian universities. The study emphasizes investment in reliable

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internet connectivity, technology-enabled spaces, electronic resources, and virtual services as some of the strategies for university libraries to adopt in repositioning themselves as vibrant knowledge and information hubs that support the information seeking behaviour of the Generations Z and Alpha students for enhanced academic success and lifelong learning in the digital age.

Keywords: Generation Z, Generation Alpha, Digital Transformations, Information Seeking Behaviour, Library Services.

Introduction

University libraries in Nigeria are at a critical crossroads, compelled to adapt to the evolving needs and preferences of Generation Z and Alpha students who now dominate campuses. These cohorts, born into the digital age, are characterized by their reliance on technologies, preference for visual and interactive learning, and expectation of instant access to information (Blandi et al., 2022; Okwu et al., 2025). Unlike previous generations, Gen Z and Gen Alpha students possess unusually high level of positive perception towards digital information resources. They have more appeal and inclination for the use of social media, e-learning platforms, and technology-driven library services than traditional library services. This attribute of the Gen Z and Alpha students indicates a strong paradigm shift towards digital technologies for accessing and utilizing library and information services. This unique characteristic of the Gen Z and Gen Alpha students calls for deliberate and restructured approaches by university libraries to fine-tuning library services in consonance with the changing preferences and information seeking behaviour of the students. As a matter of fact, university libraries and librarians must be more conscious that library services are the backbone for effective academic activities and successful academic performance in the universities. It must also be considered that effective library services are essential for capturing the inquisitive minds

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of the Gen Z and Gen Alpha students, building their interest and confident in the university libraries and helping them to develop better knowledge and responsible digital behaviours in the modern environment.

Generations Z and Alpha students value libraries as safe spaces for collaboration and digital engagement, but their actual patronage remains low, reflecting a mismatch between traditional service delivery and contemporary learning behaviours (Okwu et al., 2025). They are digital literates, making highly informed, more pragmatic, and analytical decisions, while relying on social networks for accessing visual content such as video, infographics and shortest formats of information than those of the previous generations (Grigoreva et al., 2021; Udoh & Okafor, 2022). Generations Z and Alpha students are more comfortable with immediate and easy access to information for assignments and other academic purposes rather than visit the library shelves to browse for traditional print resources. They equally desire independent studies, personalized learning opportunities, and crave for freedom from tedious traditional rules and regimented learning atmosphere, supported by emerging digital hubs and resources. Generation Z and Alpha students prioritize digital transformations, with technology-enabled spaces, and library staff equipped with digital literacy skills to support their ingenuities. They are unique in their attitude and approach toward the library services. Their disposition and preferences for interactive, summarized, and easy to access information requires the development of personalized information that attract their ingenious attention by the university libraries. In other words, to effectively implement satisfactory library services for the Gen Z and Gen Alpha students means that Nigerian university libraries should reposition themselves as

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vibrant knowledge and information hubs that foster innovation, collaboration, research, and lifelong learning in the digital era.

However, though recent studies highlight that Gen Z undergraduates in Nigeria strongly advocate for digital transformation, recommending social media integration, AI-driven assistance, and mobile-friendly library services (Adeyemi et al., 2025; Okwu et al., 2025; Rani & Suneja, 2025; Shofiyah et al., 2024), but infrastructural limitations and resource constraints remain particularly acute in the Nigerian context, hampering the capacity of the university libraries in meeting the Generations Zs and Alphas' information needs (Alabi et al., 2024; Akwang et al., 2024). Also, despite the transformational impacts of digital technologies, including Artificial Intelligence (AI), which have reshaped the curiosity and information accessibility of the Generations Z and Alphas, Nigerian university libraries continue to grapple with significant challenges such as poor internet connectivity, unreliable power supply, outdated infrastructure, and limited hi-tech savvy staff. These persistent challenges have hindered the ability of the Nigerian university libraries to deliver effective library services that resonate with digital natives like the Generations Z and Alpha students. Based on the above background, this conceptual study explores ways of reimagining library services in alignment with the changing information needs of Generation Z and Alphas' students, specifically focusing on identifying the information seeking behaviours of Generation Z and Alpha students in Nigerian universities. It identifies the challenges that Nigerian university libraries face in serving these cohorts and proposes strategies for reimagining library services.

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Generation Z: Traits and learning preferences

Generation Z is used to refer to those individuals born between the mid-1990s and early 2010s, they are widely recognized as the first true digital natives (Weaver, 2024). Their learning and information seeking behaviours are shaped by constant exposure to internet technologies, social media, and online gaming (Buzzetto-Hollywood & Quinn, 2025). Globally, Gen Zs are described as entrepreneurial, socially aware, and highly ambitious (McCrindle, as cited in Kato, 2023). In Nigeria, however, studies show that Gen Z undergraduates increasingly favour digital resources and e-learning platforms over traditional library services, leading to declining physical patronage (Okwu et al., 2025). Generation Zs' learning preferences, information-seeking behaviours, and engagement with library services are significantly shaped by digital revolutions (Cain et al., 2022). They have keener affiliation with digital technologies such as the Internet, email, multimedia, digital video cameras, virtual and augmented reality technologies, makerspaces, social media platforms like YouTube, Instagram, X, Facebook, TikTok, Snapchat, and other emerging digital devices for learning and information access than traditional library services (Blandi et al., 2022; Jiao et al., 2023; Mensa et al., 2023). Generation Z students apparently believe in speedy, easier, faster and more engaging learning experiences through quicker accessibility and utilization of digital information. They prefer visual resources, digital contents, AI-generated information and other eye-catchy images than bulky text-based information resources for their academic activities.

Generation Alpha: Emerging digital learners

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Generation Alpha refers to children or individuals born between early 2010s and 2024 onward, who have stronger affinity and dependency on smartphones, streaming platforms, and portable digital technologies. According to Kato (2024), the name "Generation Alpha," was coined by Mark McCrindle, who described Generation Alpha as children born from 2010, the year the iPad and Instagram were launched. Generation Alphas are also known as mini-millennials, who are commonly engaging in various online activities, such as playing interactive games, exchanging emails, utilizing social media, and marking the inaugural cohort to experience a wholly digitized environment (Routraya et al., 2026). Bandara et al. (2024) conceive Gen Alpha as a generation that came into the world bathed in constant connectivity and digital immersion, constituting individuals born between 2010 and 2025, as a generation that has never seen a world without digital technology. They are inherently comfortable with technologies, having grown up surrounded by digital devices and platforms (Collins & Halverson, 2018). Technology is an integral part of Gen Alpha's daily lives, which they use for entertainment, learning, communication, and problem-solving (Miller, 2023); and demonstrates remarkable adaptability to new technologies, due to their ease of grasping and utilizing new digital tools (Cheng & Yu, 2019). They glue to Internet-based resources and social media platforms with an unimaginable and incomparable extent than they do to other learning and information resources.

Generation Alpha students are obviously the majority of new entrants into our university campuses. They are characterized by strong multitasking skills due to exposure to multiple screens and devices, efficiently juggling various tasks (Abbas & Jeong, 2024). Like Generation Z,

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Gen Alpha students have high inclination towards visual learning, preferring multimedia content such as videos, animations, and interactive graphics to traditional learning approaches (Sadouni, 2023). They typically crave for interactive learning experiences that engage their senses and stimulate their curiosity, as well as perform better in working and learning together with peers on group projects and participating in discussions via collaborative platforms (Ahmad et al., 2019; Glazunova et al., 2023). Gen Alpha students demonstrate high critical thinking ability for evaluating the credibility and reliability of online resources, as well as unparalleled affinity for internet sources for research and learning activities (Miller, 2023; Susilawati et al., 2021). Particularly, they demonstrate shorter attention spans, stronger reliance on multimedia and declining interest in traditional learning settings than even Gen Z students (Ziatdinov & Cillias, 2022). This generation experience early learning compared to previous generations owing to the changes in the use of various technologies, including artificial intelligence (AI), and augmented reality (AR), virtual reality (VR) and other tools in the classrooms and other socio-cultural engagements. They have access to more information and connectivity at an earlier age than other generations. Therefore, they demand immersive and tech-enabled library services for enhanced learning and personal engagements.

Information seeking behaviours of Generation Z and Alpha students

Information seeking behaviour simply refers to the way or conscious activities undertaken by information seekers in an attempt to satisfy their information needs. According to Wilson, as cited in Muokebe et al. (2018), information seeking behaviour is the totality of

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human behaviour regarding the sources and channels of information, which could be active or passive in obtaining information to satisfy some goals. Nnadozie and Nnadozie (2016) opine that information seeking behaviour involves a set of actions which an individual takes to express information needs, seek information, evaluate and select information for the satisfaction of his or her information needs. Deducing from the above perspectives, information seeking behaviour of Generation Z and Alpha students involves the summation of attitude or disposition of the students in identifying, locating, and gathering information to meet their information needs. However, based on these researchers' observations across various university libraries, Generation Z and Alpha students differ significantly in their information seeking behaviour from those of other generations, principally due to their apparent reliance on digital technologies and quicker expectation for information access, without much considerations to some traditionally established information search and access tools.

Generation Z and Alpha students' information seeking behaviour is essentially shaped by the steady rise in mobile technologies, Internet and social media usage, which undermines existing lines between news, information, entertainment, social interaction, and research (Routraya et al., 2026). Generation Z and Alpha students' information seeking behaviour is heavily influenced by speed, convenience, and digital fluency (Mukhtar et al., 2026). Sarfraz et al. (2025), however drew a line between Gen Z and Gen Alpha students' information seeking behaviour by stating that Gen Z experienced technological adoption and adaptation as original digital natives, while Generation Alpha has never known a world without tablets, smart devices, AI-powered applications, and are growing up during the era of machine learning, virtual reality,

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augmented reality, and increasingly sophisticated human-computer interactions, which fundamentally alter how they access, process and utilize information. Generation Z and Alpha students have their unique patterns for seeking information. They use independent, and digital-first approach to find information, relying heavily on search engines, social media, and AI tools rather than traditional libraries (Abdulsalam, 2025; Roy et al., 2026). They are more conversant with the adoption of digital platforms, AI search and retrieval tools, visual contents, and peer influences.

However, the information seeking behaviours of Gen Z and Gen Alpha students may be influenced by a number of factors, such as:

- **Digital-first preference**: Generation Z and Alpha students are depending on digital-first approach in seeking and obtaining information unlike previous generations. Adeyemi et al. (2025) opine that Generation Z and Alpha are heavy-users of online resources and digital libraries. Other studies show that over 80% of Gen Z and Alpha students rely on search engines such as Google, social media platforms like TikTok, Instagram, and YouTube, as well as AI-driven tools like chatbots as primary tools for information seeking and gathering (Abdulsalam, 2025; Roy et al., 2026). Particularly, Generative AI tools provide students with rapid answers, summaries and explanations, which shape their information seeking behaviours. This is contrary to previous generations who were essentially conscious of the library catalogue and other traditional information search and access tools for information seeking and retrieval (Udoh et al., 2020; Rajaguru et al., 2025).

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- **Immersive and conversational devices:** Unlike previous generations, Gen Z and Alpha students are more comfortable with voice-activated devices, augmented reality (AR), and native AI virtual assistants in information seeking and usage (Acacia University, 2026). The availability of these emerging tools shapes Gen Z and Alpha students' interest and perception about the university library services. These devices influence Gen Z and Gen Alpha students' attitude toward the libraries and librarians, while shaping their overall approaches to information seeking behaviour.
- **Personalized experiences:** Gen Z and Alpha students enjoy personalized information seeking experiences. Personalized experience is a strategic and user-centric, enhancing students' satisfaction, continued usage, and effective information resource discovery in alignment with modern digital expectations and engagement through novel digital interfaces (Suleiman et al., 2026). Personalized experiences have influence on Gen Z and Gen Alpha students' information seeking behaviours in the sense that they expect highly individualized information seeking environments and technologies that reflect immediate satisfaction of personal information needs and preferences.
- **Information source preferences**: Gen Z and Alpha students prefer seeking information from digital sources to bulky print-based sources like books and journals. They prefer intuitive, easily accessible, and interactive information resources (Repanovici et al., 2024). They also favour using audiovisual content than traditional text-based information resources (Tella et al., 2020). Gen Z and Gen Alpha students' preference for visual and multimedia-rich information sources to satisfy information needs and answer

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questions on academic and socio-cultural issues reflect the usually observed scanty university library halls in recent times.

- **Visual and interactive approach**: Preference for visual and interactive technique is an apparent demonstration of Gen Z and Gen Alpha students' information seeking and learning behaviour. This approach involves talking with and talking through digital tools such as using podcasts or vodcasts to generate and share information. Interactive and visual technique is more appealing to Gen Z and Gen Alpha students, simplifying access and information seeking, and significantly contributing to higher level of engagement of Gen Z and Alpha students (Banu et al., 2024; Chardonnens, 2025). Generation Z and Alpha students are characteristically more comfortable with videos, infographics, and gamified platforms in searching and seeking information than browsing the traditional library catalogues and shelves for print-based information resources.
- **Privacy and cybersecurity concerns**: Generation Z and Alpha students tend to conduct substantial amount of information search via search engines, social media platforms, online learning environments, mobile applications and AI-driven tools. However, while these tools provide rapid and convenient access to information, Gen Z and Gen Alpha students lack adequate understanding of associated privacy and cybersecurity risks such as identity theft, cybercrime, phishing, and surveillance. This situation has strong implications on information seeking activities, especially regarding search histories, users' personal data, and other digital traces, which also affect the university libraries.

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- **Multi-tasking and impatience**: Generation Z and Alpha students often expect instant access to information and quick responses to enquiries (Sani et al., 2025). They tend to be involved in many activities at the same time, often combining learning and socio-economic engagements. This commonly shape the Gen Z and Alpha students' information seeking behaviours, making them usually glue to short videos, summaries, and conversational responses than lengthy scholarly academic information resources.
- **Social influence and collaboration**: According to Dikec et al. (2023), Gen Z and Gen Alpha students place greater value and importance to peer feedback and online communities. These cohorts comfortably obtain information from friends, classmates, influencers and online communities, making them less concerned with what constitute trustworthy and authenticity of information systems, as well as overall assessment of the university library services.
- **Vulnerability to misinformation and disinformation**: The rapid circulation of information creates significant impact on the information seeking behaviours of the Gen Z and Gen Alpha students. Dalal et al. (2025) opine that Gen Z and Gen Alpha students struggle with evaluating the credibility of the information due to constant exposure to unfiltered content. This indicates that the possibility of encountering false, misleading or deliberately manipulated information during academic and daily information seeking affect their behviours.

Global trends in library transformation

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Globally, libraries are shifting toward digital hubs, integrating cloud computing, mobile-friendly services, and AI-driven tools (Chardonnens, 2025). Studies in Europe and Asia highlight the adoption of immersive technologies such as Virtual Reality (VR) and Augmented Reality (AR) to engage digital natives. The American Library Association (ALA, 2023) reports that while Millennials still value print materials, Gen Z and Gen Alpha students are increasingly demanding hybrid services that combine digital access with collaborative spaces. Htay et al., as cited in Parvin and Hasan (2025) reported that 92 percent of Southeast Asian students used Google to complete schoolwork, while 88 percent of them used social media despite having access to university databases. In another study from India by Routraya et al. (2026), which cited Kaplan-Berkley (2022), it was reported that more than 80% of parents of Generation Z and Alpha complained that their children engage with videos or games on a mobile device every day, resulting in significant screen time expenditure. They stay glued to social media platforms such as YouTube, Facebook, Instagram, and TikTok, which function as arenas in which Gen Zs and Alphas meticulously construct their digital personas, and usually considering as their ideal representation of themselves (Piccerillo et al., 2025). Parvin and Hasan (2025) reported in a study from Dhaka, Bangladesh, that more than 90% of Gen Z students have become exceedingly digital native, using online search engines and social media to obtain information, while still attaching importance to physical libraries as a source of academic work and trustworthy sources of information. The study clarifies a phenomenon of a fused space where the students dynamically combining virtual and physical sources based on the task requirements, noting that

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digital and traditional channels have become complementary in information service provision in the university libraries.

Nigerian context: Challenges and opportunities

Generation Z and Alpha students form the majority of students in the Nigerian university system, especially at the undergraduate level. Similar to the situations in the developed countries such as Europe, Asia and the United States, studies in Nigeria indicate that Generation Z and Alpha students demonstrate unique information seeking behaviour and preference for digital tools in information searching. However, Nigerian university libraries are characteristically bedeviled by numerous systemic and institutional challenges that affect effective library services that correspond with the information seeking behaviour of the Gen Z and Gen Alpha students. For instance, a study conducted at the Bayero University, Kano, Nigeria, reported that while the Gen Z students demonstrated high digital proficiency, with majority of them initiating their search for information via search engines such as Google, issues of slow internet connectivity, difficulties in digital materials, and limited awareness of available e-resources, negatively affect their information seeking and usage in the university library (Mukhtar et al., 2026).

Another study by Okwu et al. (2025) reported that Gen Z students express strong interest and disposition toward digital resources, social media and e-learning platforms over traditional library services, but the actual library patronage remains low, underscoring the urgent need for reimagined library services delivery. Meanwhile, infrastructural limitations such as poor internet connectivity, unreliable power supply, and limited staff digital capacity continue to

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hinder digital transformations of Nigerian university library services (Adeyemi et al., 2025; Sahabi & Obodo, 2021). Consequently, recent studies emphasize the need for cloud-based services adoption (Alabi et al., 2024), smart library models (Daniel et al., 2025), and alternative funding strategies to bridge digital gaps by providing essential digital technologies, including AI-driven tools and services (Okiy, 2024). Therefore, deduced that priority should be given to improved digital infrastructure, including integrating social media into the university library services, redesigning and actively promoting digital services to better match the evolving information seeking behaviours of the Gen Z and Alpha students for enhanced access to information and promoting real-time conversations beyond the geographical boundaries of the university libraries.

Challenges to aligning with the information seeking behaviour of Generation Z and Alpha students in Nigerian university libraries

Basically, the information seeking behaviour of Generation Z and Alpha students is influenced by number factors such as technological, educational, social, economic, cultural and psychological factors. These variable factors affect the possibility of easily aligning library services with the information seeking behaviours of the students. However, specific factors that challenging the alignment of library services with the information seeking behaviour of Generation Z and Alpha Students in Nigerian university libraries include:

1. **Digital divide:** Limited access to digital devices, poor internet connectivity, and inadequate digital literacy skills remain the major barriers to effectively managing the information seeking behaviour of these cohorts. For instance, a study by Adeyemi et al.

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(2025) indicates that despite Generation Z and Alpha students' digital fluency and affinity with digital technologies, infrastructural gaps prevent equitable access to online resources, thereby affecting their information seeking behaviours.

2. **Infrastructure limitations:** Unstable power supply, outdated technologies, and limited bandwidth hinder effective digital service delivery in Nigerian university libraries. Research on smart libraries and digital literacy in Nigeria reported that without reliable infrastructure, digital transformation cannot be sustained (Daniel et al., 2025). This situation has a serious negative impact on the information seeking behaviours and their overall perception about the university library services.
3. **Changing learning styles:** Generation Z and Alpha students characteristically prefer interactive, multimedia, and self-directed learning and information seeking approaches. However, the negative disposition and attitude of the Gen Z and Alpha students toward the university library services, which lead to low library patronage among these generations of students (Okwu et al., 2025). Meanwhile, traditional library methods still struggle to adapt to these changing expectations, which transformed to changing information seeking behaviours among the Gen Z and Alpha students.
4. **Socio-economic status of students: D**ifferences in students' socio-economic backgrounds in the areas of inability to access digital devices, internet connectivity and digital learning tools can hinder students' information seeking opportunities.
5. **Financial constraints:** Budgetary limitations restrict acquisition of digital technologies, including electronic information resources and other emerging tools. To underpin the

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implications of financial constraints on the information seeking behaviours of the Gen Z and Alpha students, a study by Okiy (2024) suggests that Nigerian university libraries must diversify income sources to remain competitive. This is because poor financial resources hinder staff training, especially sponsorship to workshops, seminars and conferences, which are veritable opportunities for acquiring skills and competencies necessary for meeting the information needs and preferences of the Generation Z and Alpha students. It equally hampers infrastructure upgrades for enhanced digital library services in the university libraries.

6. **Lack of hi-tech savvy staff:** Many librarians in the Nigerian university libraries lack advanced digital literacy competencies and familiarity with emerging technologies to effectively harness the changing information seeking behviours of the Generation Z and Alpha students. This underscores the position of Horsfall (2023), who emphasized the need for librarians to act as change agents by continuously upskilling and reskilling to meet digital demands of the digital native library users.

Strategies for reimagining library services in line with information seeking behaviour of Generation Z and Alpha students in Nigerian universities

To effectively align library services with the information seeking behaviour of the Gen Z and Gen Alpha students, the following strategies must be considered:

i. **Digital literacy training:** Nigerian university libraries should take deliberate steps toward organizing workshops and seminars for the Gen Z and Gen Alpha students on effective, responsible and ethical use of online resources, data visualization, and

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critical evaluation of digital content. Effectively planned and implemented digital literacy training opportunities is essential to enhance critical, ethical and safe online behaviour (Akwang et al., 2024; Osiebe et al., 2023; Udoh et al., 2024). It also aligns with Dalal et al. (2025), who reported that Gen Z students are vulnerable to misinformation, a situation that must be dealt with through effective digital literacy training. Thus, digital literacy training will help Gen Z and Gen Alpha students to grow beyond merely using digital devices and social media platforms into competent and critical thinkers in evaluating the credibility and authenticity of digital information, while combating misinformation and disinformation.

ii. **Tech-enabled spaces:** It has become highly momentous for university libraries to think beyond just providing information into creating flexible, collaborative and user-friendly spaces that are adequately equipped with necessary tools such as charging stations, high-speed internet, and interactive software. Smart library models can demonstrate effective satisfaction of Gen Z and Gen Alpha students, fostering deeper engagement (Daniel et al., 2025). Tech-enabled spaces and users' collaborative zones equipped with free high-speed internet, Wi-Fi, computers, laptops, smart displays, collaborative platforms, multimedia facilities, interactive learning systems, and AI tools can effectively attract Gen Z and Alpha students back to the university libraries. This type of system will help in promoting easier, quicker and flexible discovery, accessibility, evaluation, sharing and use of information for academic and social purposes.

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iii. **Virtual library services:** University libraries should integrate virtual library services to enhance effective information seeking behaviour of Gen Z and Gen Alpha students in the Nigerian universities. This involves the development and adoption of mobile-friendly websites, apps, and social media presence such as Facebook, WhatsApp, Instagram, YouTube, TikTok, Instagram, among others. Studies show that integrating social media platforms have the potential of increasing students' engagement (Alabi et al., 2024; Routraya et al., 2026). Effective use of virtual library services can support the university libraries in creating digital contents about different services for researches, examinations, creative writings, and recreational readings. This can help in ensuring timely updates about library activities, as well as information services for specific academic programmes in order to promote better students' learning.

iv. **Gamification and interactive content:** University libraries should incorporate quizzes, virtual exhibitions, and gamified learning modules to stimulate interest in information seeking for better learning among Gen Z and Alpha students (Chardonnens, 2025). Gamification and interactive content are vital in making information seeking more engaging, participatory and responsive to the expectations of Gen Z and Gen Alpha students. University libraries can increase motivation for information seeking, improve search skills, curiosity, problem-solving and critical thinking skills, as well as reinforce learning through integration of gamified and interactive information contents.

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v. **Infrastructure and energy solutions:** Sustainable infrastructure and energy solutions form the strategic foundation for transforming library services into flexible, technology-driven, user-friendly, and sustainable service delivery that correspond with the changing information seeking attitudes and expectations of Gen Z and Gen Alpha students. Providing modern infrastructure and reliable energy solutions align with the position of Okeke and Okeke (2022), as well as Akwang et al. (2024), which advocated for cloud-based services, optimum internet bandwidth, and exploration of alternative energy sources for reliable power supply as the measures of enhancing effective information seeking among users of the modern university libraries. This requires that Nigerian university libraries should make deliberate efforts to invest in emerging technologies, mobile devices, visual content, and artificial intelligence to enhance instant access to information and interactive online learning environments.

vi. **Staff development and capacity building:** Staff development and capacity building are essential for reimagining library services for Gen Z and Gen Alpha students. Staff development and capacity building equip librarians with relevant knowledge, skills, attitudes, competencies and confidence, which are dispensable in the design and delivery of emerging library services for the changing information needs and seeking behaviour of Gen Z and Gen Alpha students. Thus, university libraries should encourage librarians to make conscious steps toward upskilling and reskilling themselves in order to provide needed assistance such as creating videos, podcasts, infographics, tutorials, and interactive learning materials using digital platforms to

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Gen Z and Gen Alpha students. This aligns with Horsfall (2023), who advocated for outsourcing specialized services to bridge skill gaps. It requires continuous training in artificial intelligence literacy, digital technologies and professional development, which are necessary in providing intelligent and responsible information services.

vii. **Improved funding:** The transformation of library services is a product of substantial financial resources. As a matter of fact, improved funding is a cardinal requirement and the life-wire for university libraries to acquire digital technologies, sponsor staff for training and capacity building, expand digital resources and create innovative services that correspond with the expectations of Gen Z and Gen Alpha students. This accentuates the position of Agbo et al. (2023), who advocate for fee-based premium services such as document delivery and specialized training services as the possible process of generating sustainable income for university libraries. Thus, university libraries should necessarily advocate and lobby for improved funding from governments and their parent institutions, while at the same time sourcing for funding from sponsors, including applying for grants from national agencies such as Tertiary Education Trust Fund (TeTFund), Nigerian National Commission for UNESCO (NATCOM-UNESCO), National Information Technology Development Agency (NITDA), etc., as well as internation donors organizations like International Federation of Library Associations and Institutions (IFLA), Ford Foundation, Bill & Melinda Gates Foundation, Carnegie Corporation of New York, United Nations Development Programme (UNDP), World Bank, among others. Sourcing and

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accumulating funds can support university libraries in meeting the changing information needs and seeking preferences of the Gen Z and Gen Alpha students.

viii. **Partnerships and collaboration:** Transforming library services in the digital era for the satisfaction of information seeking expectations of Gen Z and Alpha students is no longer an isolated role of the university libraries. It calls for a well-defined partnership and collaboration among all stakeholders such as Faculty, IT experts, and external collaborators. It also involves collaborating and partnering with friends of the libraries, Alumni of the universities, Library Associations, Internet service providers, and other critical stakeholders and members of the university library value chains. Effective collaboration and partnership in university libraries can support exchange of ideas and expertise, training kits, personnel, technologies and other resources, thereby supporting effective information seeking behaviours among Gen Z and Gen Alpha students.

Policy and practice implications of the study

The transformation of Nigerian university library services to meet the needs of Gen Z and Gen Alpha requires coordinated action at both institutional and national levels. Policy makers must recognize that libraries are no longer peripheral academic units but central hubs for digital learning and innovation. Adequate funding allocations are essential to support infrastructure upgrades, reliable internet connectivity, and alternative energy solutions that ensure uninterrupted access to digital services. Beyond government support, university libraries

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should actively pursue grants, corporate sponsorships, and fee-based premium services to enjoy diversified revenue streams.

At the institutional level, universities must incorporate digital literacy training into the curricula, position university libraries as partners in teaching, research and community services rather than passive repositories. Collaborative initiatives between librarians, Faculty, IT experts and other stakeholders can foster the development of tailored resources and training programmes that resonate with students' digital preferences and expectations. Staff development and capacity building policies should prioritize continuous training in emerging technologies, including artificial intelligence (AI), cloud computing, and immersive tools like Virtual Reality (VR), Augmented Reality (AR), thereby enabling librarians to act as facilitators of innovations and intelligent information seeking than custodians of print-based information resources.

In the final notes, this implies that Nigerian university libraries should adopt mobile-friendly platforms, integrate social media tools for enhance the Gen Z and Gen Alpha students' effective engagement in the emerging digital environments. Furthermore, university libraries must rethink and design tech-enabled spaces that support students' positive information seeking and collaborative learning attitude, thereby refining their perceptions toward the university libraries as active partners in their learning rather than isolated traditional, outdated and rule-oriented information environments. This study also has implications for university libraries in the areas of integrating gamification and interactive content as tools for capturing Gen Z and Gen Alpha students' attention and sustaining their

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interest in academic resources. These interventions, when implemented systematically, will not only shape the information seeking behaviours of the Gen Z and Gen Alpha students but will also increase library patronage, and strengthen the role of Nigerian university libraries as catalysts for academic success, lifelong learning, and national competitiveness in the digital era.

Recommendations

To effectively align library services with the information seeking behaviours of Generation Z and Generation Alpha students in Nigerian universities, the following measures are recommended:

i. Management of universities should improve total investment in infrastructure, especially provision of digital technologies, including Artificial intelligence tools, reliable internet connectivity and alternative energy solutions in order to ensure uninterrupted access to digital library services in the university libraries.

ii. Management of the university libraries should integrate and/or expand digital library services, mobile-friendly and social media platforms in order to correspond with the changing information seeking and learning behaviours of the students.

iii. Management of the university libraries should develop and implement workable digital literacy training programmes such as workshops and seminars in order to teach the students ethical and responsible online behaviours and combating misinformation and disinformation.

iv. Management of the university libraries should create tech-enabled and collaborative spaces with flexible study zones, collaborative software, charging stations, and

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multimedia tools in order to attract renewed interest and positive perceptions about library services among the students.

v. Management of the university libraries should integrate gamifications and interactive contents using quizzes, virtual exhibitions, and gamified learning modules to effectively engage the students in positive information seeking and learning attitudes.

vi. Management of the university libraries should diversify sources of funding through application for grants, corporate sponsorships, and fee-based premium services in order to supplement limited government allocations for enhanced digital library services delivery to the students.

vii. University libraries should strengthen partnerships and collaboration with Faculty, IT experts, and external stakeholders to co-create resources and training programmes tailored towards Gen Z and Gen Alpha students' information needs and seeking behaviours.

viii. Librarians should be intentional and deliberate in continuous personal training on emerging digital technologies such as artificial intelligence tools, cloud computing, and social media platforms in order to facilitate intelligent information seeking attitudes for the students, while providing innovative library services in the university libraries.

Conclusion

Nigerian university libraries have an urgent responsibility of adapting to the digital fluency of the Gen Z and screen-saturated habits of Gen Alpha students. This is in line with the heightened need to align the expectations of these digital-native students – Gen Z and Gen Alpha

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students through conscious and meticulous galvanization of ways of remodeling the present library services. The university libraries must demonstrate some deliberate efforts toward understanding the peculiarities of the Gen Z and Gen Alpha students, vis-à-vis their strong preferences for digital resources, interactive platforms, and collaborative spaces. This requires a holistic approach and strategic demands for intentional investment and policy support, prioritization of digital transformations and need-based training for librarians, diversification of funding sources, and embedding innovations into the library services delivery value chain. It will help in mitigate students' vulnerability to misinformation and disinformation, while tech-enabled spaces and mobile-friendly services will align the library environments with contemporary information seeking and learning behaviours of the students. It will fundamentally ensure that the Nigerian university libraries are not only repositioned as dynamic information and knowledge hubs but such that can effectively facilitate the reshaping the information seeking behaviours of the Gen Z and Gen Alpha students, while solidifying their supports as the cornerstones for academic success and lifelong learning in the emerging Nigeria's digital environment.

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