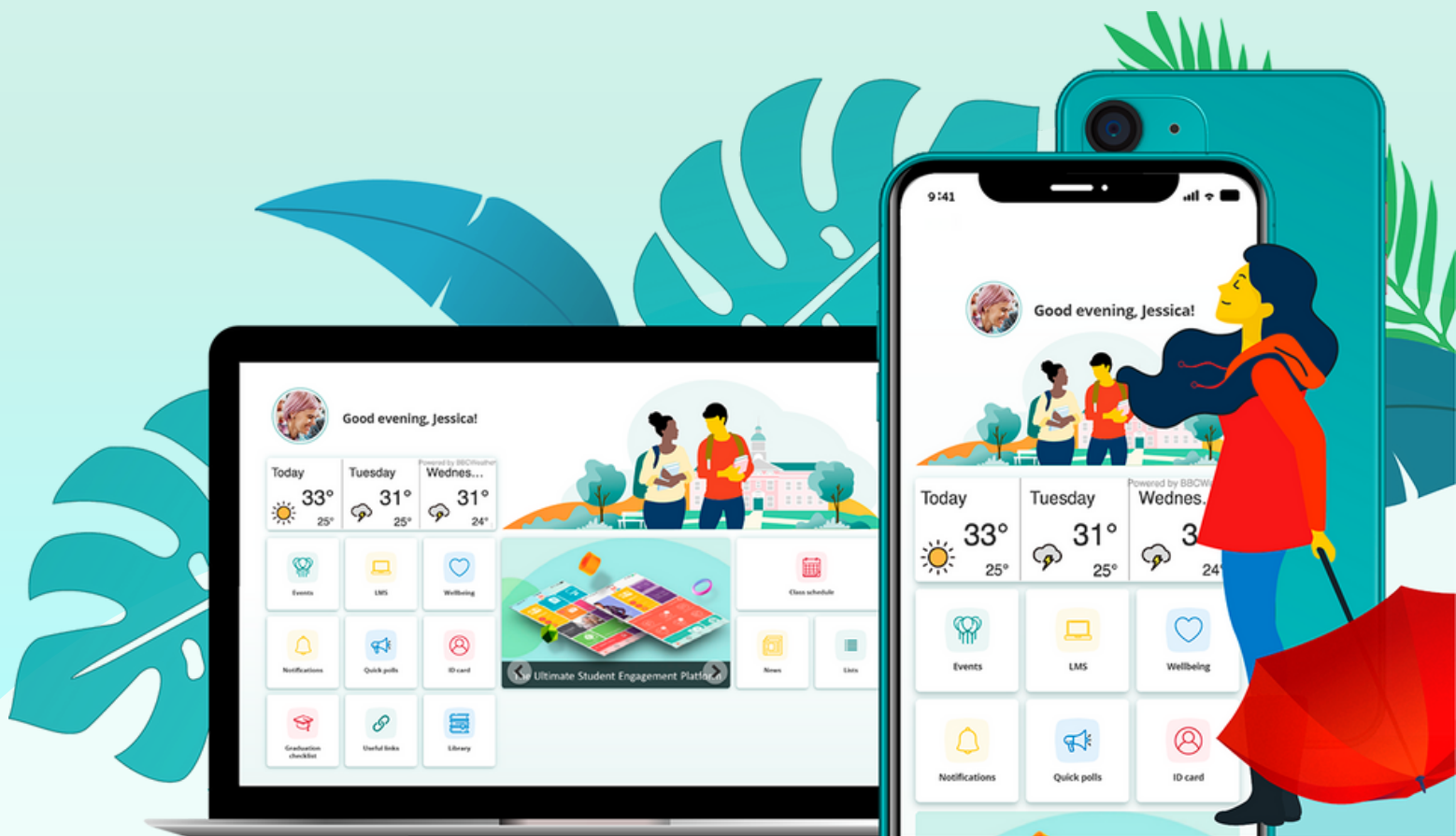


UX for the Digital Campus: How to Design for Meaningful Student Experiences



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Executive Summary

You have 8 seconds to impress Gen Z students or prospects – and chances are, you'll have to impress them on their smartphones.

Gen Z students are set to make up the bulk of incoming college juniors for the next 6 years, and their ubiquitous use of smartphones is forcing institutions to reexamine not only their technology stack but how they reach, teach, and empower this mobile-native group.

That smartphones are changing how Gen Z interacts with the world around them is fact: Over half of the Gen Z population in the United States report being on their smartphone for [five hours or more per day](#), while over a quarter use their smartphone for 10 hours or more every day.

In recent years, universities have been managing expectations for better digital services for all students at different paces and with varying levels of enthusiasm. However, at the start of the pandemic universities were forced to act within days to move classes and services online and onto mobile devices.

As mobile services and communication morphed from a nice-to-have to a necessity overnight, several things became clear:

- **There is no going back.** Mobile is here to stay as a primary channel of interaction between the institution and its students.
- **Students expect technology to play a more prominent role in learning.** About 40% of students want more technology in their in-person classes and want the practice of leveraging digital resources to continue after the return to campus.
- **The Student Experience is largely a product of institutional efforts.** Every virtual step that universities took to accommodate students during remote learning contributed to better student experiences and successes.
- **Students want more than credentials – they want demonstrable value.** Students are questioning the ROI of their tuition, with less than 20% of students believing that the online learning experience they received was worth the tuition paid.
- **Universities can leverage mobile and portal apps to shape extraordinary user experiences.** The relationship between higher education and the retail business model is under debate. However, universities can increase recruitment and retention rates by reviewing customer experience benchmarks and implementing customer experience best practices – both of which include robust digital strategies.

Smartphones will not be the deciding factor in the return to campus. However, as universities look to return to in-person teaching while retaining the lessons learned of remote teaching, mobile will continue to connect institutions with students throughout their academic journey.

In this e-book, we lay out the campusM outlook for a mobile-enhanced Student Experience:

- Identifying the touchpoints for mobile within the Student Experience.
- Designating UX principles for a mobile experience based on student needs.
- Showcasing the campusM approach to UX.
- Forecasting the next 5 years of the digital Student Experience.

We look forward to sharing our insights on the digital Higher Education experience with you.

Defining the Student Experience

The Higher Education Academy defines the Student Experience as the “totality of a student’s interaction with the institution.” These interactions can be divided into three categories:

- System-generated: Services and deliverables provided by the university.
- Context of Use: How students consume the university’s services/deliverables.
- User-generated: Individual attitudes and circumstances that influence how a student consumes university services.

The following framework is an example of how universities can segment the different aspects of the Student Experience.

	Experience Components
Academic Services	Ease of Use and Usability Variety of Classes Quality of Classes Credentials Competencies
Social Context	Social Aspects Physical Comforts Future Employability Learning Opportunities Cost
User Attributes	Emotional Disposition Financial Outlook Wellness Engagement

Understanding the building blocks of the Student Experience lets universities conduct qualitative and quantitative research about the prevailing Student Experience and about how changes made by the institution influence this experience.

The Correlation Between Student Experience, Student Engagement and Student Success

A review of recent literature about student attitudes following the Covid-19 pandemic demonstrates why breaking down the Student Experience could be beneficial for institutions and students alike.

A [Student Voice survey](#) published in March 2021 of US college and university students on their satisfaction with their institution during the 2020-2021 academic year found 80% struggled with motivation to complete coursework or attend classes. As one student quoted in the survey noted, “It’s kind of hard because you can see your bed. They don’t mandate video and don’t know if you’re listening.”

If we insert this student's story into the Student Experience Framework, we see that the academic issue didn't stem from the **academic services**. There was no problem with the quality of the class or ease of attendance. However, issues with the **social context of the services delivered** (the physical discomfort of learning in a bedroom) and **user attributes** challenges (a lack of engagement protocols) made it difficult for the student to concentrate on the material being taught.

In this case, the university may not have been able to alleviate the student's physical discomfort. However, the institution could have made changes to the variables impacting how students feel, such as camera requirements and instructor communication.

Students don't exist in a vacuum. There is a reason that the NSSE tracks [student engagement indicators](#); viewing the student as a whole enables universities to look beyond the quality of the content they're delivering and address other factors that influence student outcomes.

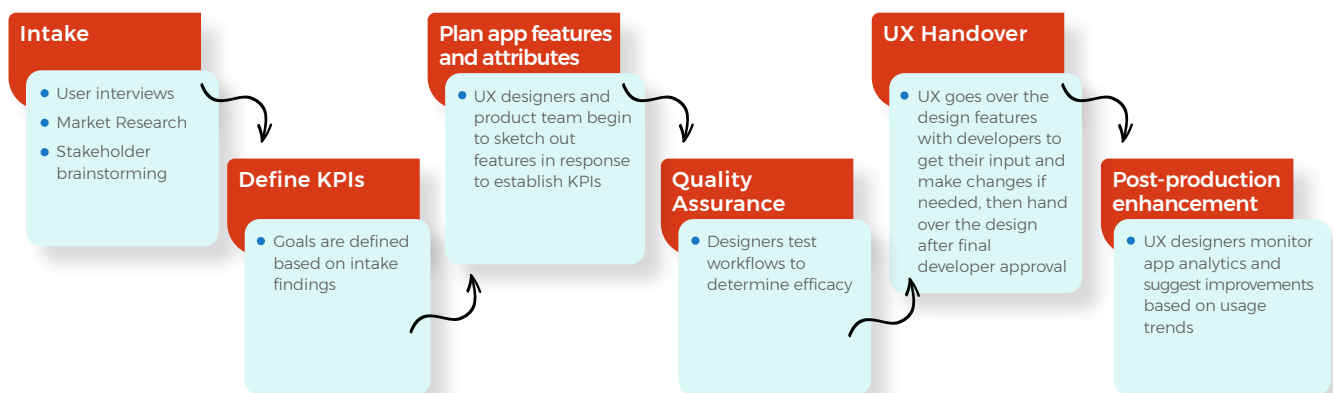
Mapping the Student Experience components can help universities make incremental changes that make a significant difference to student engagement, to academic success and ultimately to retention.

How Mobile Apps can Improve the Student Experience

Gen Z consumers expect premium digital experiences; one study found that 63% of Gen Zers have less patience post-pandemic [for slow or poor digital experiences](#) than they did before Covid-19. For many Gen Z students and prospects entering the hybrid campus, the mobile and desktop experience will be their first experience of the institution. This first impression needs to be on par with the digital experiences provided by other service providers that incoming students interact with, such as banks, social media platforms, or even coffee shops.

App UX – making the digital university accessible to students

User Experience (UX) design for mobile and desktop applications uses behavioral science and app design best practices to make apps more accessible, intuitive and valuable for their users. This design thinking has a direct impact on how many students use your app, how frequently they use the app, and how they rate your app.



What are the guiding design principles of campus app UX?

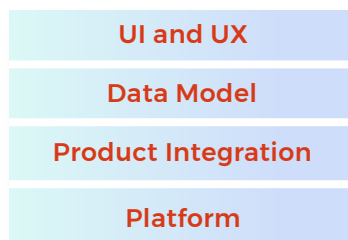
Unlike the general Student Experience cultivated by the university, which needs to accommodate the university's pedagogical, social and business goals as well as overarching student goals, campus app UX focuses specifically on improving the digital Student Experience to support university goals. In designing for optimal student UX on mobile and desktop, there are established principles for delivering extraordinary user experiences:

- **Accessibility** - The app is designed to meet the needs of differently-abled people.
- **Consistency** - Users can repeat the same action, behavior or component within the app and across devices.
- **Efficiency and Effortlessness** - The app is built to allow users to easily carry out actions in the shortest number of steps.
- **Personalization** - Interfaces are tailored to users' interests, needs and app preferences based on usage data.
- **Joyful** - Interactions with the app are enjoyable and delightful.
- **Predictability** - No surprises here. Users can expect specific app behaviors and sequences based on their activity within the app.
- **Transparency** - There are no hidden conditions or clauses. Users know exactly what to expect from the app in terms of data and privacy.



What systems and processes contribute to campus app usability?

While UX mitigates how users interact with the app, there are additional app components that contribute to the overall app experience and the value it provides.



- **The Platform:** - Digital SaaS platforms are comprised of software that retrieves, stores, transfers and manipulates data in the Cloud.
- **Product Integrations:** Enable the transfer of data between a system and the digital platform to facilitate on-the-go learning.
- **Data model:** How data is presented to users within the app interface. An app with siloed product integrations will display information within separate areas for each product integration. In contrast, an app with a hyper-connected data model extracts data from disparate systems to present it to the user within a single interface and in context (Matching events to student preferences, displaying upcoming assignments to promote student success).

The recurring motif here is data. Together, UX, Data Models, Product Integrations and SaaS Platforms use student data from integrated systems and from app usage to deliver powerful user experiences and next gen digital services.

How does app data improve the Student Experience?

In “[How to Measure Customer Emotions](#),” Gartner cites customer satisfaction surveys such as CSAT or NPS as important tools for understanding customers’ experience. Campus app data offers another way for universities to learn more about student journeys and how they can improve the student experience.

App data on its own isn’t particularly valuable – its what institutions choose to do with this data that can be impactful. Mobile and web portal campus app data consumption can become a map of student engagement. Every choice that students make within the app can give an indication of how engaged they are.

- Which tiles they move or tap
- Which surveys they fill out
- When they check in with the attendance function
- How often they access materials through the Learning Management System integration
- How often they check out library materials
- How often they sign up for events and which type of events they register
- What answers students choose on an in-app survey

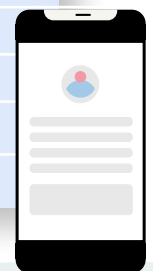
In some apps, these choices can automatically trigger changes to the User Interface or alert admins that an action is needed.

Using app data to achieve university goals: Spotlight on Attendance

Campus app data can help universities solve for bigger challenges and goals. Classroom attendance check-in data, for example, is valuable not only for logistical issues such as classroom size management, international student visa extensions or supporting FAFSA submission. Universities can also use this data to supplement wellness dashboards for students. Together with other data collected from the app, such as last log-in, number of resources accessed and events registered for through the app, universities can build engagement profiles for students at scale and set automatic workflows in place for Student Affairs admins to reach out to the student after a preprogrammed threshold is breached.

The Digital Student Experience Checklist

App capabilities	Your Campus App
Is compliant with accessibility standards for differently-abled students	Yes/No
Helps students succeed academically and socially	Yes/No
Offers an intuitive, delightful user experience and user interface	Yes/No
Automatically shows students new resources based on actions conducted within the app	Yes/No
Allows students to connect easily with faculty and peers	Yes/No
Helps students feel like they belong	Yes/No
Enables students to complete tasks and access resources easily and quickly	Yes/No
Helps students discover clubs and register for events	Yes/No
Provides relevant resources that are curated for each student	Yes/No



Spotlight on campusM UX

campusM has been pioneering innovative campus apps since 2008. The Student Experience has always been central to our design thinking, and from our own experience working with customers around the world, offering an intuitive campus app can improve the overall university experience for students.

“The ability to quickly and easily access set readings for my course from anywhere, almost any time, has allowed my work schedule to be as flexible as I need it to be.”

“The app shows my timetable and updates to the timetable as well as bus times, ensuring I can be in the right place at the right time.”

Anonymous student input on how the campusM mobile app and web portal impacts their real-life university experience. Source: [“Understanding the Digital Lives of Students”](#) survey by campusM and Alterline, 2020.

At campusM, our number one principle is inclusion. When you design an app to enable all students to access digital university services and resources and to do so in a way that is intuitive, easy, and fun, all app users benefit.

campusM UX at a Glance: Events

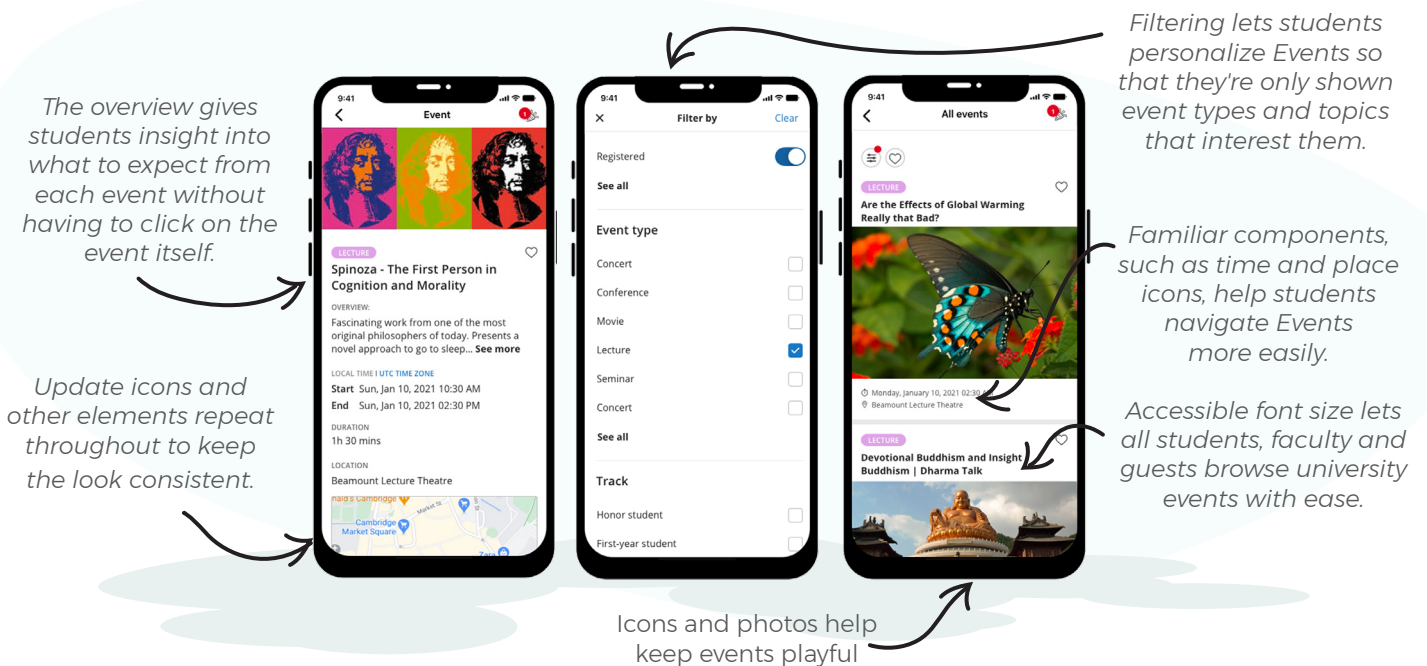
Universities use events to promote formal and informal content to prospects, students, alumni, faculty, guests and the general public. These events enrich the Student Experience and offer value beyond classroom curricula and competencies, helping to improve student satisfaction and prospect or returning student interest. In designing a new look and feel for the campusM event feature, we focused on several UX design principles:

- 1. Joyfulness** – Events give students the chance to learn something or experience something in a new, less formal setting. As such, we wanted the events feature to convey a sense of playfulness that would encourage students to discover and register for new events.
- 2. Effortlessness** – As events aren’t typically mandatory, the events feature needs to help motivate students to attend events. To that end, we designed an events feature that simplified choice-making within the app: Including a meta-description, time and location within the event preview allows students to browse events without having to click on each one for details.
- 3. Predictability** – We used familiar components Students know what to expect in the events discovery and registration process.
- 4. Consistency** – We leveraged the same components throughout Events so that there were no jarring visual surprises in the shift from screen to screen.
- 5. Personalization** – In addition to showing Events based on a student’s profile (e.g. undergraduate) and roles (e.g. nursing student, drama club), students will be able to select categories of event types and topics they’re interested in, favorite events and filter according to topics.
- 6. Accessibility** – We adhered to font size guidelines to make Events as accessible as possible.

What does campusM accessibility look like?

campusM is continually designed and developed to meet Level AA of the W3C Web Content Accessibility Guidelines (WCAG 2.1) and Section 508 of the US Rehabilitation Act for features and functions. At present, campusM users are able to

- navigate most of the web application using a keyboard only
- listen to most of the web and native application using a screen reader
- navigate most of the web and native application using speech recognition software
- zoom in up to 200% using browser and native devices tools without losing any text control the density of the display across the system



campusM's 5-year Higher Ed Digital Forecast

The past 18-months have accelerated organizational change across higher education, with many institutions enacting long-term digital transformation plans almost overnight. While we don't know what the next Black Swan event will be, we do know that the hybrid future of the Student Experience will require university IT departments to become more agile and take on greater leadership roles. Below is the campusM forecast for the digital evolution of the campus app between 2021-2026.

New hyper-connected innovations

- **Internet of Things (IoT) hyperconnectivity** - The Internet of Things is already helping university students, faculty and visitors navigate campus with interactive apps. Over the next five years, universities will leverage other IoT instances to ease processes on campus through features like facial recognition, embedded contactless payment, and digital ID cards for opening doors.
- **AI and Machine Learning** - Artificial Intelligence and Machine Learning will facilitate hyper-personalized experiences by recommending and providing content based on student actions in the app and within other linked university systems.

- **Augmented Reality and Virtual Reality** - AR and VR will begin to be used more widely for teaching as well as for hybrid open days and one-time workshops; app integrations to AR and VR will enable university users to connect and learn within a cybersafe environment.
- **More seamless integrations** - Data will become more fluid and interoperable as more systems move to the cloud. Modern data architecture will create more seamless experiences, replacing link-outs.

New approaches to data

- **Wellness** - While student data privacy will continue drive national and university policy changes, some data can and should be used to understand each student's journey and offer students better support as needed. In-app surveys and attendance app check-in data will increasingly be used to create individual engagement dashboards and flag at-risk students for proactive wellness check-ups.
- **Micro-credentialing** - Some universities are already using blockchain as verifiable way to validate employability credentials from university courses and/or third-party vendors. We expect to see an increase in the integration of university apps and blockchains in the years to come as universities digitalize student records and shift towards micro-credentials.
- **Delivering just-in-time-training to a modern workforce** - As new technologies and scenarios emerge, university employees will need immediate access to resources and training to adapt on-the-go. Campus apps will begin to serve faculty more broadly to prepare them for organizational changes.

New sustainability initiatives

- **Reducing the university's carbon footprint** - Universities already contribute the UN's sustainable development goals through research. Millennials and Gen Z's overwhelming preference for sustainable retail, intensified by the pandemic, will likely drive better implementation of sustainable practices on campus. Through a campus app's digital ID cards, universities can commit to reducing the production and use of plastic while enabling students to open doors and check out library books.
- Universities will also be moving away from paper forms and brochures. Campus app features like Attendance and resource tiles will enable universities to cut back on paper use through digital services and distribution. At the same time, apps could help transform habits by telling users about their energy usage, use gamification to reduce energy waste, and use real-time bus time-tables to encourage students to take public transformations.

New P2P opportunities

- **Social platforms and features** - The pandemic demonstrated how important friends and the social aspect of the university experience as well as meaningful connections with instructors are important for student motivation and outcomes. We will be seeing more app features that facilitate respectful, safe connection with peers and faculty, helping students connect with others that share their interests, build communities, and get faster access to academic help.

Improved employee experience

- Recent research is confirming what most employees intuitively know: namely, that the Employee Experience (EX) is tied to important KPIs like employee retention and customer satisfaction. With budget and staffing remaining key challenges for many universities in the upcoming years, there will be an increased focus on improving the Employee Experience, including through the adoption of technologies that simplify admin tasks and make their lives easier.

Summary

First impressions matter. Providing a campus app with exceptional UX signals to students that you want to help them succeed and that you understand how to create a meaningful Student Experience, all within the first few seconds of their browsing the app. As the student journey goes hybrid, universities that identify the touchpoints for digital learning, growth, productivity and joy will have a competitive edge over institutions that struggle to adapt to a digitally enhanced university experience.

We believe that the campus app has the potential to be much more than a student data repository. Campus apps that align with UX best practices, surface data from siloed systems into a single interface and make it much easier for students to connect, explore, and complete tasks can create a better Student Experience. Using a campus app to improve the overall Student Experience helps universities achieve retention and recruitment KPIs as well as educational KPIs: accelerating care, increasing wellbeing initiatives, promoting student success.

You don't need special equipment to augment your students' reality - you just need thoughtful campus app UX.



About Ex Libris campusM

Ex Libris is a leading global provider of cloud-based solutions for the management, discovery, and delivery of the full spectrum of library materials, as well as mobile campus solutions for driving student engagement and success. Ex Libris solutions are in use by over 5,600 institutions in 90 countries, including 43 of the top 50 universities worldwide and more than 40 national libraries.

