Spydus Technology Outlook 2018

Rapid advancements in technology and changing customer needs have ensured that Civica's cutting-edge integrated library management system, Spydus, is on top of the latest technology trends to continuously improve service delivery outcomes.

Over the past 30 years, Spydus has evolved adopting the most current and best technologies that transformed the way libraries served their communities. Now, as we move into 2018, here are some top technology trends that the Spydus development team is looking at adopting to ensure that the software continues to meet the changing needs of modern library services.

Artificial Intelligence (AI)

Artificial Intelligence is changing the world we live and interact in, including libraries where it is being used to communicate and connect with users. AI in libraries has taken data about human interactions, such as personal preferences of individual users, which has been then used to improve the customer experience. Currently, Spydus personalises library member experiences by offering recommendations of library resources based on borrowing histories. However, there is a lot more scope for AI that the team is working on. For Spydus, things to come will include event recommendations based on reading interests, but also there are many things we are currently thinking about like AI Bots (chatbots) to provide additional communication channels between libraries and communities.

Linked data

Over 3.5 billion searches are performed each day on Google making it important for libraries to harness the power of external search engines, as those with discoverable and searchable collections will garner more visibility. At Civica, we have undertaken steps to ensure that library resources within our customers' catalogues are discoverable and searchable. We are adding structured data from open sources such as schema.org, which allow the OPAC to be successfully crawled and indexed by search engines. Additionally, we also adhere to new industry standards such as the BIBFRAME model, which see traditional bibliographic descriptions transform into a linked data model. These not only increase discoverability of the library but also increase discovery within the library catalogue.

APIs

Application Programming Interfaces, or APIs, allow various software applications to integrate in a seamless and standard way. This removes the need for duplication and provides richer services. Our APIs for Spydus are implemented using principles described in the Library Communication Framework (LCF). Our API functionality includes but is not limited to patron authentication, retrieving patron information, check-out and check-in of items, renewal, reservations, and charges. We've also just used our APIs to integrate with our Local Government Authority application.

Data privacy and ownership

The way that librarians think about capturing and presenting data is changing. For example, librarians are questioning the need to make personal data visible to colleagues and even questioning the capture of some personal data that has traditionally been collected by libraries. Using the latest technologies, our aim in developing Spydus is that libraries retain full ownership and control of their data and can control access internally within Spydus. Additionally, we believe that library users should have visibility and control over their own data within systems and our development progress is moving more in the direction of patron control of their own data.

The Internet of Things (IoT)

The IoT is essentially a network in which physical objects can exchange data internally or with other connected machines. In the context of libraries, this offers a way to increase access to resources and a way to facilitate learning. Spydus continues to participate in the IoT, currently with QR codes in the library catalogue linking to more information. However, there is more that can be done such as offering a way to enable smartphone transactions and manage events to name a few. It's a work in progress for us and our team is always looking at new ways to engage in the IoT.

Smart cities

Governments the world over are leveraging advancements in digital technologies to build smart cities and deliver better service outcomes to their residents. Large public-private partnerships supported by continued access to the internet, and ability to manage all things "online" have transformed the way of working for many of these cities. Spydus can help governments advance their smart city agendas by offering cutting-edge library services with inbuilt tools and features that help patrons and library officers access systems from anywhere at any time.

Spydus also contributes to the smart city agenda by hosting and distributing information about community assistance programmes and events, thereby ensuring learning and building community spirit. It converts libraries into thriving community hubs offering an access to resources such as Wi-Fi, physical spaces, printers, etc. promoting business and economic development and wellbeing.

Analytics

On top of all of the trends listed, the huge amounts of information being created by the IoT, by linked data, and by AI amongst other things, has the power to revolutionise the way that libraries make decisions. Accurate and intelligent insight allow libraries to work efficiently and profitably and improve services to communities. Over the coming year, the Spydus Business Intelligence Suite will continue to be developed. As more data is becoming available for libraries SpydusBI has the ability to take this information to provide actionable intelligence for libraries, such as staffing levels based on library transactions and doorcounts over a period of time, purchasing of relevant items based of community profiles, evaluating effective and popular events, creating effective marketing campaigns for new library services.

Summary

The technology horizon is ever expanding, which means the Spydus technology outlook is never static. Part of the challenge, and joy, for us is to deliver solutions that meet the changing needs of library communities. We do this by developing our existing platforms, but also with an eye into the future, making sure that we are leveraging the newest technologies which can help speed up the digital transformation journeys of our customers.