Exclusive! Enhancing Data Exploration with Interactive Charts and Personalised Insights

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Last August 2023, the Singapore Department of Statistics (DOS) launched the enhanced SingStat Mobile App, an ambitious initiative to enhance public access to statistical data. The app was developed to make a wide array of statistics, including Population, Prices, Labour, Manufacturing, Services, and International Trade easily accessible. By providing users with convenient access to this information, the app sought to bridge the gap between complex datasets and the public's need for readily accessible and easily understandable data.

The enhanced SingStat Mobile App was honoured with the prestigious Recognition of Excellence award from OpenGov Asia. This accolade highlights the app's outstanding contributions to enhancing user engagement and data accessibility. It highlights Singapore's dedication to data transparency and accessibility, significantly strengthening its digital infrastructure capabilities.

In an exclusive interview with OpenGov Asia, Priyadharshini Navaratnam, Director of Communications and Engagement at DOS, along with her team, provided insights into their digital transformation journey, which aims to boost efficiency and enhance public service impact.

Priyadharshini shared that the initial launch of the SingStat Mobile App in November 2014 was met with positive feedback and demonstrated its potential to improve public access to statistical information significantly. However, as user expectations evolved and the digital landscape continued to advance, it became apparent that continuous improvement was necessary to maintain the app's relevance and usability.

Priyadharshini explained, "This understanding laid the groundwork for a major enhancement project aimed at refining the app's user experience. The team launched an in-depth User Experience Design (UXD) study to meet these evolving needs. This study commenced with a comprehensive landscape review, comparing the app with other high-usage apps, including those from major banks and media companies. The objective was to identify best practices and areas for improvement by analysing how leading apps tackled user experience challenges."

Following the landscape review, the team conducted an extensive online survey involving over 500 respondents and in-depth interviews with various DOS officers. This dual approach provided valuable insights into user experiences, preferences, and pain points. The feedback revealed critical areas for enhancement, including usability issues and the need for additional features to better meet user needs.

One of the most significant innovations in the enhancement process was including a co-design workshop. This workshop involved external participants invited to contribute directly to the app's redesign. By actively engaging users in the design process, the team gathered direct feedback and suggestions that proved invaluable for the redesign. This collaborative approach ensured the app's new features and improvements aligned with user needs and expectations.

The feedback from the co-design workshop led to the development of a new information architecture and a design prototype. The team then engaged an iterative design process, inviting external participants to test and refine the prototype for improved usability.

Priyadharshini noted that this approach enabled the incorporation of feedback from a range of users, resulting in a more intuitive and user-friendly design. Key improvements included better placement of navigation icons, enhanced data visibility, and a more cohesive overall design.

The enhanced SingStat Mobile App introduced several standout features to enrich the user experience and enhance data accessibility, including:

Personalised User Experience: Users could specify their interests and preferences, allowing them to create a customised list of recommended indicators. This feature ensured users received data tailored to their needs and interests, making the app more relevant and valuable.

Enhanced Navigation: Data categories were now grouped by themes, facilitating a more precise view and seamless navigation. The redesigned 'Home' screen featured prominent navigation icons, making accessing key indicators and data categories easier.

Interactive Features: The app included an interactive walkthrough tutorial for new users and a comprehensive user guide accessible from the main menu. Users could compare data from different charts, bookmark customised charts, and synchronise information across multiple devices, enhancing the app's interactivity and functionality.

Improved Search and Bookmarking: The search functionality was enhanced to group results by data categories and display the five most recent searches. The bookmark feature allowed users to save and easily access their preferred data, improving the overall user experience.

In addition to these features, the SingStat Mobile App facilitated government-to-citizen (G2C) and government-to-business (G2B) interactions by offering easy access to commonly requested data and more in-depth exploration through the SingStat Table Builder which is DOS's e-Service. This functionality supported public sector agencies, policymakers, businesses, researchers, and the general public in making informed, data-driven decisions.

The development team remains focused on further expanding the app's capabilities. Upcoming features include an extended search functionality incorporating data from the SingStat Table Builder and a chart zooming function. These enhancements are expected to refine the app's ability to deliver reliable and actionable insights, ensuring it continues to meet the needs of its diverse user base.

The enhancement project saw collaboration among three key sub-teams: the Communications and Engagement user team, the Digital Service Transformation team, and the Vendor team. Priyadharshini emphasised the significance of creating a collaborative environment for effective team coordination. She added that regular meetings and an agile development approach were essential for maintaining clear communication and ensuring the project remained on track and aligned with the agency's objectives.

"This collaborative effort allowed us to address challenges promptly and implement user-centred solutions effectively," she said. "By maintaining open lines of communication and continuously iterating on our processes, we were able to respond swiftly to user feedback and deliver a product that truly meets their needs."

The enhanced SingStat Mobile App has received widespread praise for its improved navigation and user-friendly interface. Users have commended the app's role in making statistical data more accessible and understandable, furthering the DOS's mission to empower decision-making with reliable data.

Priyadharshini believes that the SingStat Mobile App is a powerful example of how digital tools can be leveraged to bridge the gap between complex data and public understanding, reinforcing Singapore's leadership in promoting data transparency and accessibility.