

Identifying, making sense of consumer patterns

\$50m research projects will help businesses meet needs of customers

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TWO new research projects here, costing a total of \$50 million, aim to pull together the vast torrent of digital data left behind as consumers shop and travel around.

By distilling this avalanche of data, the projects, launched yesterday, aim to equip retailers and other firms with a clearer picture of shoppers' likes, dislikes, and spending and travelling patterns.

They will also focus on data such as video-watching habits.

That, in turn, should mean consumers and visitors here will get targeted information on where to go for the best buys and promotions as well as recommendations.

Singapore is a test bed for these pilot projects.

The research, funded by StarHub, Singapore Management University (SMU) and the National Research Foundation, could lead to innovations and services that will be sold abroad.

Already, one early finding shows Canadians visiting Singapore tend to shop at Tanglin Mall.

Knowing this, the Orchard Road Business Association can tell members that the mall is the best spot to sell to Canadians.

The association worked with specialist software firm QlikView to study where shopping crowds are gathering in Orchard Road.

In another early finding, IBM Singapore studied travel patterns of train and bus commuters so urban planners can help locate new stores or new transport services.

They are both part of SmartHub, a three-year "big data" research project led by StarHub.

SmartHub was launched by Deputy Prime Minister Teo Chee Hean at SMU. He also launched LiveLabs Urban Lifestyle Innovation Platform, another big data research project.

SMU's School of Information Systems is undertaking this five-year project.

"Big data" refers to the vast levels of data regular computers cannot handle. Illustrating this, Mr Teo said that in one minute, Google gets two million search queries while YouTube users upload 48 hours of new videos.

Faced with this avalanche, businesses need help to identify and understand patterns, so that they can draw finer customer segments or develop new products and services more closely tailored to users' needs, he said.

Singapore is well-suited to the research, with its robust intellectual property regime, tech-savvy and well-educated population, and multicultural, cosmopolitan society offering cultural insights.

Mr Teo said the research will increase the quality and quantity of innovations in the interactive digital media space.

While StarHub will focus on research on the use of big data for business use, SMU will focus on the technologies of efficiently collecting and analysing data.

Initially, StarHub and SMU will work with outfits such as CapitaMalls Asia, Nanyang Polytechnic, Changi Airport and Sentosa Leisure Group on their research.

A key part of the project is to build local expertise in big data analytics.

Mr Tan Tong Hai, StarHub's chief operating officer, said data scientists who understand human behaviour and sociology are needed to interpret the data collected.

"We're short of data scientists, and Singapore must not miss the boat to participate in big data because it is crucial to the success of our businesses," said Mr Tan, who attended the launch.

Data collected for SmartHub will come from StarHub's mobile, pay TV, broadband and fixed phone line customers. SMU aims to collect data from 30,000 people from next year.

Both organisations stressed that the information they collect will have personal details scrubbed out before it is analysed. The data received by research partners will contain only information such as ages and places frequented.

SMU's LiveLabs director Rajesh Krishna Balan said people will have to opt-in to get their data collected. "Everything that our business partners need to do will have to go through LiveLabs. They do not have access to the data. And only a few of my staff will have access to the data," he said.

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