

# Singapore gets creative in the digital space

## Republic wants to grow into a global IDM capital

By **AMIT ROY CHOUDHURY**  
 [SINGAPORE] You may not have heard of Petimo yet. However, chances are your children will soon know all about this cuddly little social networking robot.

With Petimo, children can make friends by touch-

ing two of them together at school. Once they do so, they will become virtual friends in a social network. Parents will also be able to approve who their children are friends with.

The Petimo robot has been designed by the Keio-NUS CUTE Centre and has won accolades and international awards. CUTE stands for Connective Ubiquitous Technology for Embodiments. It is based at the National University of Singapore (NUS) and is part of the International Research Centre@Singapore (IRC@SG) initiative of the Media Development Authority of Singapore (MDA).

CUTE is one of several such initiatives backed by MDA in the interactive digital media (IDM) space.

Speaking to BT, Michael Yap, executive director of the IDM programme office (IDM PO) hosted by MDA, notes that the IRC@SG funding initiative provides the opportunity for local institutions to work with international research partners on

joint research for the IDM sector in Singapore.

IRC@SG is part of the IDM PO which was created within MDA with a funding of \$500 million from the National Research Foundation to support Singapore's long-term vision of growing into a global IDM capital.

IDM PO has four focus areas out of which the IRC@SG falls under the i.Rock (IDM Research Oriented Centres of Knowledge) programme.

The i.Rock programme's objective is to build world-class R&D (research and development) capacity in institutes of higher learning (IHLs) here by partnering with the best in the world.

To date, IDM PO has funded seven research centres. With IDM PO's funding and in-kind contributions, the total value of the IRC network is about \$200 million.

Mr Yap observes that, as a result of this initiative, to date 95 papers have been published in top-level inter-



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national scientific journals and conferences, and IRC technologies have also been used by Singapore-based companies such as ST Electronics.

Grants have been secured from various organisations such as NEC Corporation in Japan, and the research work of IRCs has also resulted in one spin-off company; eight patents have also been filed to date.

Adrian David Cheok, co-director of the CUTE centre, feels MDA has been a catalyst for boosting creativity in Singapore.

"More and more, the economy is dependent on creative talent rather than the traditional model of incremental work. What we need in Singapore now are companies like Apple, which focus on radical design and innovation." This is a step in the right direction to create such home-grown companies, he adds.

In a chat with BT, Nadia Magnenat Thalmann, direc-

tor of the Institute for Media Innovation (IMI), Nanyang Technological University (NTU), notes that The BeingThere Centre at the IMI will enable Singapore to be a global leader in 3D video-teleconferencing and telepresence technologies.

"The technologies stemming from this research will enhance real-time communication and allow people from various places around the globe to have the feeling of being present and together in the same room. It could also help to reduce people's need for travel by enabling them to hold more 3D video meetings online instead," she adds.

Chua Tat Seng, co-director of NExT (the NUS-Tsinghua Extreme Search Centre), says his centre is focusing on constructing the dynamic and live information collection on Singapore and Beijing, to support access by both residents and tourists of these two cities.

Prof Chua adds that the coverage of information will include photos, videos, venues, places of interest, food, shopping, transportation, as well as various pieces of real-time information such as the calendar-of-events, current topics of discussion on Twitter and forums, and traffic conditions, etc. "Through the system, the users can preview any location via maps or directories and view images and videos of places to visit," he adds.

Interestingly, while NExT is working to get more information available to users, LARC (the Living Analytics Research Centre at the Singapore Management University) will study the complex trade-offs between privacy protection and benefits of sharing one's information with a broader social network.

"This will be done in a variety of ways, including technology for privacy protection, as well as economic and behavioural approaches to export how people prefer to make these trade-offs," a LARC spokesman told BT.

MDA's Mr Yap notes that beyond keeping track of qualitative indicators, IDM PO is conscious about the need to seed commercialisation.

"Projects with commercialisation potential will be provided the opportunity to engage with industry . . . We believe that this will not only provide local researchers the opportunity to validate the effectiveness of their research, but are also avenues for researchers to gain valuable insight and feedback for future research directions," Mr Yap adds.