

A close-up portrait of Professor Ryohei Nakatsu, a middle-aged man with dark hair, wearing a dark blue jacket over a dark shirt. He is looking directly at the camera with a neutral expression. The background is slightly blurred, showing a wooden chair and a window with blinds.

Soul Man

Director of the NUS Interactive and Digital Media Institute, Professor Ryohei Nakatsu, talks to INNOVATION'S Edmund Wee about his plans for the center.

Ask Professor Ryohei Nakatsu what the next generation of interactive digital media will bring and he replies “that’s a big question”. But as Director of the NUS Interactive and Digital Media Institute (IDMI), he is better-placed than most to make predictions.

“Thirty years ago, we expected mobile phones to come onto the market soon but how they would be used, we could not imagine,” he says. “From a telecommunication viewpoint, it’s ‘anyone with anyone, anywhere.’” However, divides between cultures and between different generations still exist. Nakatsu believes that future technology should overcome these barriers, making use of tools that go beyond language.

Transcendent goals

IDMI was established in April 2007 and leverages the university’s growing strength in research in science, computer science, engineering, arts and social sciences, performing arts, medicine, and architecture. It is an interdisciplinary research entity, an intersection where technologists, artists, and social scientists collaborate.

Nakatsu aspires to develop a kind of media that is all-transcendent, one that is multidimensional and which can support people in expressing their thoughts and ideas with more than language – to “express the human soul”, so to speak. Images, for example, can be a powerful form of communication. “When we grow up, we forget how to ‘use’ images. Of course, using language, we can talk, just as we use mobile phones. But still we are using the same language,” he says.

The quest to develop next-generation media will not be easy. Nakatsu says that developing media to succeed game machines and mobile phones is a long-term goal for IDMI. In the shorter term, he says that IDMI’s focus will be on enhancing the application of existing media, focusing on game machines. The application of games in education will be one of the key themes of IDMI, he reveals.

Nakatsu has also identified content as the key element in the new media of this century. “Hardware is only the base,” he says. He adds that connecting real life with virtual life is another area that the IDMI would like to research. People may live a “second life” in a virtual world, also known as living life in a network. “The problem with present interactive digital media is that there is an issue of connecting the two realities. The world is ‘closed’ in that sense; there is no connection,” he says.

Beyond soul


Part of the challenge of developing new interactive digital media is the need

for researchers from different disciplines to work together. IDMI is made up of eight laboratories, of which five are from natural science and the other three from social science; one lab focuses on linguistics and language. “It’s very difficult because the various researchers’ ways of thinking are so different,” says Nakatsu. At the same time, there is potential for “creative tension” between artist and engineers.

Nakatsu is optimistic about IDMI producing results soon. One reason for his optimism is Singapore’s openness to researchers from around the world. “Singapore is a very open place; it is easy for people to come and work together. It is at a very good place between the East and the West, and because of this there is a good chance for IDMI to expand” says Nakatsu. He says that IDMI is looking to increase its headcount from 80 to 160.

In fact, he predicts that IDMI will become world-class in two years’ time and that it will soon catch up with the Media Lab at MIT in the US, a leading research lab in this field. He has seen another lab do it. “When I was at the ATR [Advanced Telecommunications Research Institute in Kyoto, Japan], we could catch up and in some areas do even better than Media Lab, all in a period of seven years,” he says.

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That said, IDMI is not concerned with just playing catch up. “It is necessary for the East to come up with its own way of carrying out research, including its own research standards, and to achieve its own Eastern way of research with new directions,” he states. For instance, he is proud of how the East has come up with new ways to treat interactive digital media content, which the West is picking up. “In the Western world, people are studying affective computing – how computers can identify people’s emotions by listening to voice, and studying facial expressions, etc. This kind of thing has not happened in the past and this is really a very interesting trend,” he says. 

For more information, please visit the IDMI homepage at <http://www.idmi.nus.edu.sg>.