

Research Activities Exploiting Location-Specific Advantages



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I have experience in both research and commercial development. Having been posted overseas twice now – the first time more than ten years ago at DCOMO Communications Laboratories USA, Inc. (now known as DCOMO Innovations, Inc.) – I believe that it is critical for overseas research to carry out activities that exploits “location-specific advantages.” In the case of DCOMO Communications Laboratories Europe GmbH (DCOMO Euro-Labs), “location-specific advantages” mean the benefits that come from carrying activities in DCOMO Euro-Labs in Germany, and then spreading out, to participating in efforts in the whole of Europe. To gain these “location-specific advantages,” we must understand Europe’s unique characteristics and circumstances. I would like to discuss here the region’s traits of “cooperation” and “competition.”

First, about Europe’s aspect of “cooperation.” On the continent, the pervasive climate is one in which time is taken to form industry consensus on communication infrastructure technologies, from research to standardization. This cooperation is a European tradition, and a feature of its culture. For technological developments such as GSM and 3G, consensus with in Europe was built by companies’ time-consuming efforts. My conjecture for the reason behind this mindset is that because there are so many countries in Europe, an infrastructure system based on common technologies is required for mutual exchanges. And because there are many countries with

different sets of circumstances, sufficient time is required to reach agreement among them.

Such a climate is still alive and well today. An example is Mobile and Wireless Communications Enablers for Twenty-twenty (2020) Information Society (METIS)*¹, which is bringing together technological trends to establish 5G wireless communication, with the goal of commercialization around 2020. DCOMO Euro-Labs is participating in this effort together with NTT DCOMO headquarters in Japan. We can take part in such an important EU project because we regularly participate in the research community in Europe. I think this is a part of its location-specific advantages. And because METIS will have global influence, we can also influence trends globally through METIS.

Next, I’d like to point out several conditions in Europe with respect to “competition.” The first is the international competitiveness of European vendors. Because of the climate of “cooperation” discussed above, European telecommunication equipment vendors are competitive internationally. Furthermore, there are strongly competitive manufacturers in several ICT-related fields. Examples include security hardware like security chips and the automotive industry, which will become more deeply intertwined with mobile communication going forward. The second situation is new competitiveness arising as a result of start-ups in the field of mobile applications, which we see in Europe as well. The success of Angry Birds™*², a game developed by a company in Finland, is a classic example. Many venture-backed companies are concentrated in metropolises such as Berlin and London. The third area in the European competitive landscape is the various technological efforts by European operators to maintain and increase competitive strength. Each operator is carrying out different activities, and there are also operators grappling with the same issues that DCOMO is facing. DCOMO Euro-Labs is conducting a technological survey on these competitive situations in Europe.

As we can see from Europe’s “cooperation” and “competitiveness,” the region has a variety of characteristics and circumstances. These features differ depending on the field, such as infrastructure technologies and application technologies. At DCOMO Euro-Labs, we are striving vigorously to exploit the location-specific advantages of being situated in Europe to make “Smart Life Partner,” the mission of NTT DCOMO, a reality.

*¹ **METIS:** EU research project laying the foundation of 5G wireless technology. Scheduled to run from November 2012 to April 2015. Participants include communication vendors, mobile carriers, and universities.
<https://www.metis2020.com/>

*² **Angry Birds™:** Registered trademark of Rovio Entertainment Ltd.