

Human Empowerment Driven by Resonant Communication

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2003 is the year in which we will take a resolute step toward achieving the idea of the “Resonant Communication Environment.” Resonant communication, as brought about by information communication technology (ICT), is a concept created by the NTT Group. It is explained in detail by the articles in this NTT Technical Review.

One of the most important aspects of resonant communication is human empowerment. In this context, this means empowering human abilities in various ways through the benefits of broadband and ubiquitous technologies and services.

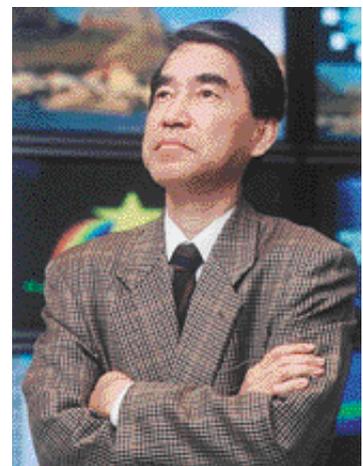
First, consider human empowerment from the perspective of the individual. We used to be limited to information that we could perceive through our five senses, but various artificial sensors have already made it possible to detect gases, such as CO₂ and NO₂, and geomagnetism. The efficient use of artificial sensors along with the information provided by them enhances our perceptual abilities. Combine these sophisticated sensors with networks and we have a powerful means of exploiting a wide range of information remotely.

Second, consider human empowerment in terms of people as a group, that is empowerment in knowledge. When faced with a problem that is too difficult to solve alone, we usually ask somebody nearby for help. However, we have already entered an entirely new environment where we can tap the accumulated wisdom of the whole world. When enormous numbers of individuals, computers, and objects are networked, these entities begin to work together as a whole on a global scale in the form of a “superbrain.” This brings us “Knowledge Empowerment.” Peer-to-peer and grid-computing are representative of some

primary technologies moving us toward the super-brain.

Knowledge empowerment does not simply mean more and more information. More important is to improve the quality of information by means of collaboration between people and ICT to eventually produce a synergetic effect. This empowerment will not be an additive effect of people plus technology, but a multiplicative effect. Given full play, these effects will stimulate our senses, bodies, and brains to bring out hidden abilities and thereby deepen our wisdom.

We believe that human empowerment or, more generally speaking, digital empowerment in the resonant communication environment, offers many possibilities for the future. To help extend these possibilities in as many directions as possible, it is our desire to actively share to the maximum extent on a global scale our technical and business vision and up-to-date R&D activities. Thus, we decided to publish this new monthly NTT Technical Review, and I sincerely hope that it is enthusiastically accepted as a forum for the NTT Group to communicate resonantly with the world and enhance people’s interests in our activities.



Photograph by Yoshinobu Ogawa