

## Business Creation in the 5G Era

The year 2020 saw the launch of fifth-generation mobile communications system (5G) services by many carriers in the global market. Today, with already about 80 5G networks in operation in more than 30 countries, the unprecedented speed of 5G deployment reflects the expectations generated by 5G. In the standardization stage, 5G came to be called an “enabling technology” that, instead of being limited to the mass market, could be extended to the business sector as in B2B2X (Business to Business to X). In addition to features such as low latency and large-capacity transmission in the radio section as frequently publicized in the media, 5G is being strongly identified as a design concept clearly different from past mobile networks. For example, 5G enables greater virtualization of the network and allows for edge computing<sup>\*1</sup>. Through contributions made during the standardization process, 5G has rightfully come to reflect the intentions of not just carriers and communications equipment vendors but also of new players such as cloud operators. From a position in charge of business in the 5G era, I must work to provide competitive businesses quickly with a clear understanding of this background—it’s not simply a matter of understanding 5G deployment from a technical standpoint. This viewpoint will become all the more important from here on with ongoing 5G enhancements and the coming of the sixth-generation mobile communications system (6G).

The three elements of business success, which have also been true in past migrations of the mobile network to a new generation, are “technical evolution of the communications platform,” “complementary technologies that can leverage the full potential of that evolution and tie-ups with partners having those technologies,” and “provision of services that naturally satisfy companies and individual customers as beneficiaries so that newly created services coincide with market preferences.” At NTT DOCOMO, we have been on the front line contributing to a range of activities from basic studies to practical development toward 5G. In particular, we quickly set up the DOCOMO 5G Open Partner Program to promote service development in collaboration with many partner companies. The 22 solutions announced simultaneously with the commercial launch of 5G on March 25, 2020 combine elemental technologies such as high-definition image processing, AI analysis, and eXtended Reality (XR) that can leverage the full potential of 5G. These solutions strongly reflect the 5G business features at launch time. As a business team, we have been proposing these solutions to different industries and engaging closely with various business sectors. In addition, we have been offering potential customers the chance to experience for themselves the new value offered by these solutions while continuing to develop customer-pleasing products.

At the same time, the ICT business environment is now extending into more advanced fields. The expanded



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business of cloud operators that I mentioned earlier combines the evolution and pace of the communications platform up to now, and it is believed that business in the 5G era will shift to a more diverse competitive environment reflected by keywords such as “cyber-physical fusion” and “Digital Transformation (DX)”<sup>\*2</sup>. In the face of these changes, NTT DOCOMO as a corporate enterprise will collaborate with partners to promote IoT businesses that have grown under 3G/LTE and a DX based on structured data generated by those processes. Additionally, going forward, we will promote high-definition image/video transmission technologies expected to grow considerably under 5G and an integrated DX that adds unstructured data generated by those technologies.

Finally, the fact that the commercial launch of 5G occurred at the same time as the COVID-19 pandemic will probably be discussed in various forms for years to come. The spread of this novel coronavirus presented social problems beyond our expectations resulting in new modes of living described by words such as “remote” and “dispersed.” In past migrations to the next-generation mobile network, there has always been somewhat of a time lag in the appearance of related technologies and creation of new businesses. This time, however, there is a strong feeling that new services will be created at amazingly high speeds in sharp contrast to past trends. I too am more proactive than ever and look forward to the challenge of making timely and relevant business proposals.

<sup>\*1</sup> Edge computing: Technology that distributes edge servers near users to shorten transmission distance and reduce latency.

<sup>\*2</sup> DX: The changes that digital technology causes or influences in all aspects of human life.