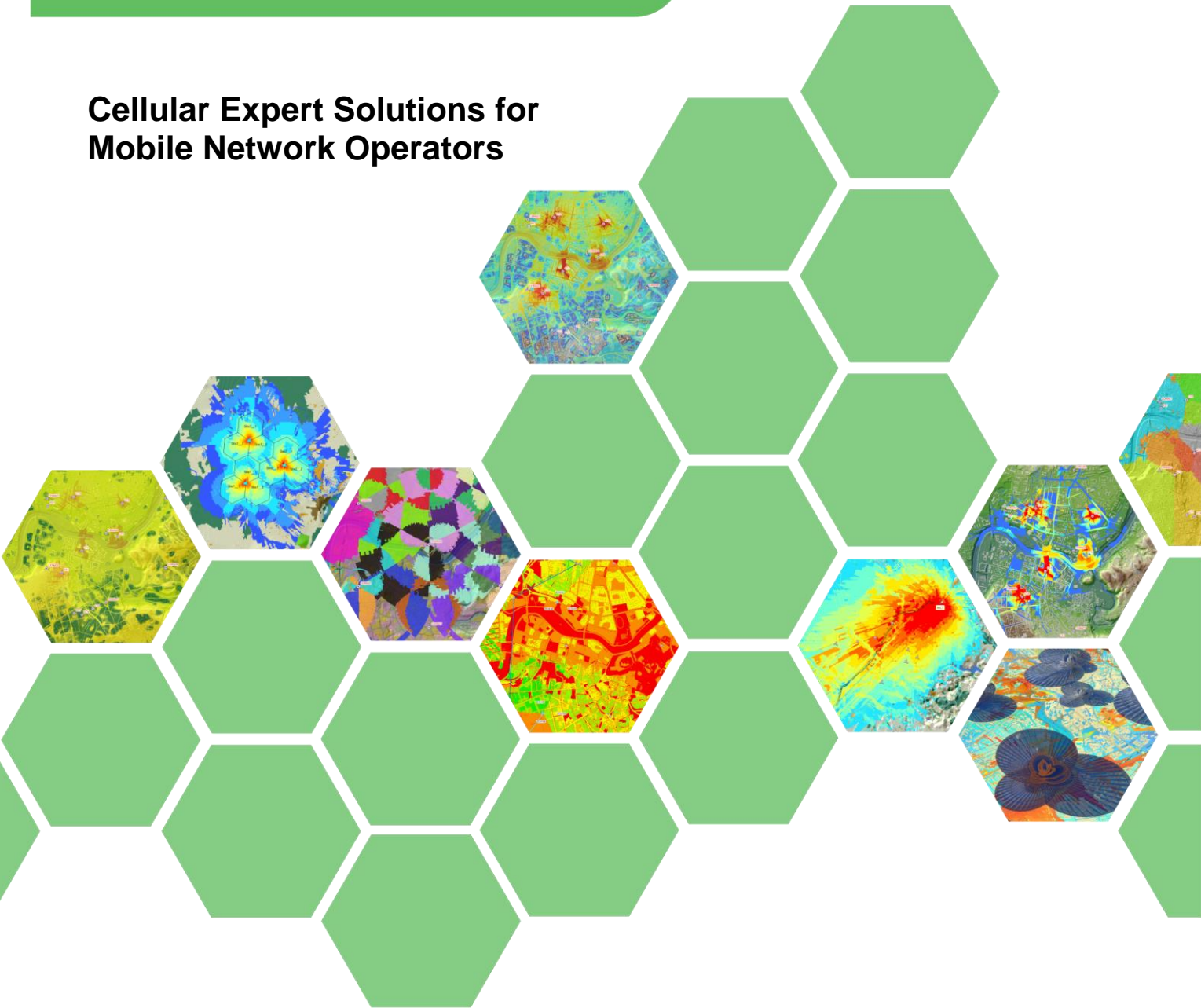




# CASE STUDY

## Cellular Expert Solutions for Mobile Network Operators





# Cellular Expert solves SOFTBANK MOBILE complex Network planning tasks

## About the company

SOFTBANK CORP. was established in Tokyo, in 1981. This Company is one of the major Telecom companies in Japan. The company provides broadband, mobile, fixed-line services as well as manages Japan's largest Internet portal company – Yahoo Japan. One of the leading company in SOFTBANK Group is SOFTBANK MOBILE Corp. which provides wireless network service to over 136.04 million subscribers. SOFTBANK MOBILE's 3G Service covers over 99.9% of Japanese Population.

## Project scope:

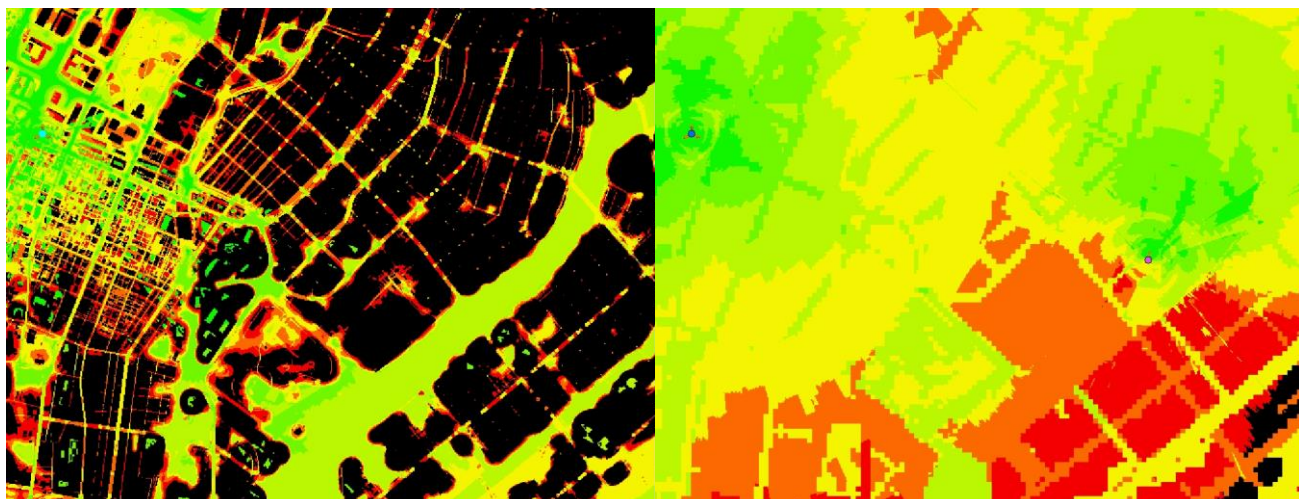
Japan consists of many different regions. Around 70-80% of Japan's territory is covered by mountainous islands, forests, and areas which are not very suitable for industry or agricultural activities. This caused very high population density in urban areas. Japanese are world famous for their interest in technologies, especially wireless ones. All above mentioned circumstances made SOFTBANK MOBILE wireless network planning in urban and provincial regions very complicated and complex. Due to the peculiarities of the regions and high consumer flows, SOFTBANK MOBILE is very busy and rapidly changing. To calculate such great and constantly changing amounts of data it is essential to have automated tools, which ease and quicken new as well as current network optimization processes. Moreover, SOFTBANK MOBILE network structure and planning are very complex, as the company uses UMTS technology which is most often used for network building in urban areas, but is very costly to build network in rural areas. For this reason, SOFTBANK MOBILE uses repeaters, which help to extend network coverage and reduce network building costs. Such network planning is very complex, so all the system requires automated and very precise wireless network planning tools.

Cellular Expert worked closely with the client to customize the application to meet its requirements. Cellular Expert has become an integral part of complex SOFTBANK MOBILE's wireless network planning system.



Cellular Expert software has entirely fulfilled client's needs and solved the problems. Examples include:

- ✓ **Powerful GIS platform** - SOFTBANK MOBILE appreciates that Cellular Expert perfectly functions with ArcGIS Desktop and their Windows OS based enterprise GIS.
- ✓ **Open Architecture** - Cellular Expert has easily integrated and applied to complex SOFTBANK MOBILE's network architecture.
- ✓ **Customisation** - Cellular Expert tools (e.g. batch processing) manages to operate large amounts of data. Such tools significantly save time, because all calculations are automated.



Clients' needs are very important for Cellular Expert team. According to these needs new tools are constantly developed as well as the newest technologies are supported.

### **Business value:**

Cellular Expert team has helped to migrate network and equipment data to client's data base. CELLULAR EXPERT COMPANY's specialists also assisted in collecting and preparing geographical information used for current network planning and development of prediction. Cellular Expert software helps to plan high quality radio network by defining the best network structure and network equipment configuration in planned territories. Cellular Expert team supports SOFTBANK MOBILE in solving Marketing & Customer Care issues and organizes technical trainings for future Cellular Expert users.

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