The objective of this paper is to provide a concrete integrated roadmap structure and a supporting tool for efficient roadmapping, in order to enhance interdisciplinary research on product-service.

It clarifies definitions based on literature review. The integrated roadmap structure is designed by overcoming limitations of the existing product-service roadmaps. A modified quality function deployment technique is developed to be used as a means for the integration process and applied to the mobile communications industry.

The roadmap and roadmapping process have potential advantages that can help strategic planning and management of product-service.

There are issues related to complexity of the suggested technique. The suggested approach stimulates communication between manufacturers and service providers, providing a useful guidance to picture the long-term future from the same perspective.

The paper provides a holistic approach on the development of the product-service sets, which is characterized by challenges and uncertainties.

Technology roadmaps have evolved to be adapted to new trends. A roadmap for the product-service set still has not been fully solidified. Therefore, this research reviewed the roadmaps that include both products and services, and suggested the integrated roadmap that defines the product-service in an effective way. The architecture of the roadmap segregates product-related dimensions from service-related dimensions to provide detailed information and also to make the roadmap easier to understand. The modified QFD is the supporting tool that makes integration possible. QFD has been used for supporting the roadmapping process. By modifying QFD, an effective technique was developed and successfully incorporated into the roadmapping process.

The mobile communication business model demonstrated the initial stage of the roadmapping. Two major advantages of the integrated roadmapping were found:

- The integrated roadmapping helps experts of products and services to have a common vision.
- It saves time and money by avoiding many conflicts and modifications that could appear during a sequential design process.

The integrated roadmap itself is also critical in that it provides the right direction for the development of successful offerings and long-term strategic planning. This research has some limitations that should be overcome in future research. Although it was claimed necessary for
successful integration, considering relationships between market, product and service all
together is not simple.
The original QFD or linking grids take only two of those mentioned, which makes the processes
much simpler. Considering all three simultaneously can be a complex process, and it may
increase exponentially as the attributes get subdivided.
So caution should be exercised when determining which attributes are to be included in QFD.
Or development of a more systematic and simpler technique that still considers all three
relationships at once should be attempted as future research.
The aim was to demonstrate the QFD process in order to verify usefulness and practicality of
the proposed roadmap, it is suggested that a complete integrated roadmap be built, following the
proposed process in the future.
Finally, a computer-based system is required to increase utility and update roadmaps frequently.