Title	社会インフラサービスに対するサービス評価モデルの 提案と交通サービスにおける事例研究~SLA概念を取り 入れたSISLA評価モデル~
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## **Abstract**

In this thesis, I carried out a research to propose a new model for social infrastructure from view point of service science, and to show its practical usefulness.

Although social infrastructure provides essential service for citizen's life, social infrastructure service is lacking in "direct interaction between service providers and customers," which is regarded as important in existing service science. Therefore, it is difficult to apply the method based on this "direct interaction" like urgent service customization by service providers, the concept of customer's loyalty to the service. In addition, it exists two characteristics of social infrastructure services, "inability to provide individualized customers with customized services" and "needs a lot of cost to provide services".

For these problems, in this thesis, I proposed a new service model consists of a conceptual model and an evaluation model especially focusing on the relation between providers and customers. To establish the model, I proposed a new concept called "Social Infrastructure Service Level Agreement (SISLA)" by extending the concept of SLA (Service Level Agreement), which is practically used mainly in IT services. The conceptual model has a new structure which expresses the relationship between providers and customers in social infrastructure services, and the relationship between front stage and back stage within providers. The evaluation model include the service attributes of social infrastructure service, the varuables for the provider's service level, fare, cost and customer's evaluation and equations for evaluation. Specifically, the evaluation values are following two types of value, which is novelty of this thesis, "Total evaluation for Social Infrastructure Services (Impression Value)" and "Managerial evaluation of social infrastructure service provider (Use/Compensation value)".

To verify the validity of the SISLA evaluation model, I applied this model to actual case, which is related to the transition of services level of the two airlines against the new opened Hokuriku Shinkansen (Hi-speed train) in 2015. As a result, I found out that the strategies and passengers' transition of the two airlines can be estimated by the SISLA evaluation model. In this thesis, I contributed to expand the target of service science by inducing SISLA concept for social infrastructure service and by proposing new service model for social infrastructure service which can evaluate the service by two evaluation equiation. The proposed SISLA model is also useful in practical case.

## **Key Words**

Social Infrastructure, SLA(Service Level Agreement), SISLA(Social Infurastructure Service Level Agreement), Impression Value, Use/Compensation Value