


کد سند: RO-S-F-28-04	معاونت پژوهشی	
تاریخ صدور: ۱۳۹۹/۴/۲۲		
تاریخ ویرایش: ۱۴۰۰/۰۳/۲۵	فرم خلاصه انگلیسی طرح/پروژه	

Project Title: Business model of power industry laboratory network at NRI

Department:	ABANIROO	Employer:	NRI - Niroo Research Institute
Project/Program Manager:	Vahid Ghorbani Pashakolaie	Executor:	Davar Rezakhani
Project Financial Code:	194002	Project Quality Code:	PABAPN06
Type of Project/Program:	Development Research	Assistant:	ABANIROO

Project Staff: Shadi Adibifard

Keywords:

Abaniro, business model, model ecosystem, strategic framework, member laboratories, operators, suppliers, importers and manufacturers, universities and research centers

Project Necessity:

Upgrading test chain management on equipment used in this industry is essential. One of the most basic strategic measures in this regard is to lead the establishment of technical and management systems based on national and international standards in laboratories, and one of the executive strategies for managing this issue is to create a comprehensive network of laboratory capabilities in the country. The field of technology is the electricity and energy industry. Identifying and creating a suitable network of qualified laboratories will provide maximum use of existing hardware and software in the country. Also, the strategic management of these laboratories with the approach of supporting internal manufacturing will lead to performing tests and presenting their results to manufacturers in the direction of improving the quality of production equipment and making network laboratories the safest place to perform tests. Will convert controls on imported goods and equipment.

Project Goals:

In the present report, the elements of the business model of the laboratory network of the electricity industry will be drawn and explained, and then the extracted business model will be displayed. During the extraction of the business model, using the opinions of executives and experts, five types of questionnaires were designed separately for

different types of customers and stakeholders. Our main objectives are analyzing the questionnaires and finally building the business model.

Abstract:

Laboratories are one of the main pillars of industrial economics. The final stage of the industrial production and innovation process needs to be tested in laboratories. The electricity industry, as one of the key industries whose operation directly affects the welfare of society, has always been considered by government centers. In addition, the use and operation of defective equipment in the electricity industry in the production, distribution and transmission sectors increases the likelihood of blackouts in the electricity industry.

Therefore, one of the questions related to this research is whether it is possible to use the high capacity of laboratories in the industry and also the number of laboratories in the electrical industry, to improve the quality and improve the tests in this industry? In this research, an attempt is made to provide a suitable solution by creating a laboratory network as well as designing a specific business model.

In this document, the final results of the laboratory network model canvas in the country's electricity industry are discussed, and the final model canvas is expressed in the standard framework of the business model canvas from stakeholder's point of view. The final document of the business model of providing services in the laboratory network of the electricity industry includes the steps of extracting the model canvas and finally presenting the structural shape of the model canvas which will be presented in line with the structure of the model canvas. It is mentioned that the steps of completing the business model canvas in each step and each group of customers, which were determined and compiled in expert meetings, have been extracted. In addition, the strategic framework of the laboratory network business model will be presented in order to provide executive solutions and finally practical conclusions.

Steps and Methodologies:

In the present study, first the basic definitions in the business model, the elements of the business model of the electricity industry laboratory network were drawn and explained, and then the extracted business model was displayed. During the extraction of the business model, using Comments of facilitators and experts, five types of questionnaires were designed separately for different types of customers and stakeholders, and the opinions and ideas of officials and trustees of the country's electricity industry laboratories, as well as stakeholders including Tavanir, Niroo Research Institute, etc. were obtained in relation to the main elements.

In preparing this report, first in expert meetings, the opinions of industry experts about the network business environment, as well as questionnaire questions, etc. were collected. The main experts accompanying this project included the following people: Engineer Mirsadri, Energy Industries Laboratories Company (APIL); Engineer Jafari Behnam, Jihad University of Science and Technology; Engineer Parviz Ghasseini, Electricity Industry Syndicate; Dr. Hamidreza Bazi, Engineer Amir Farhadi and Davar Rezakhani

Main Results (technical outputs, patents, papers, books, reports, etc.):

The main results are as follows:

The most important value proposition requested by laboratories is "development of feasible tests" and "development of a competitive mechanism".

- To present these two value propositions, 5 key activities must be performed, which are also formed by the cost structure of these 5 key activities.

- Providing consulting services in the field of maintenance of O&M equipment requires financial, intellectual and consulting resources. Examination of the ability of laboratories to pay in this case has shown that about 75% of the costs of maintenance consulting are reimbursable to customers and the amount of network revenue can provide the financial resources needed to provide maintenance services, so if these services are required To cover other expenses from the income from the membership fees of the laboratories in the network so that the network does not suffer from cash flow deficit.

- The most important value proposition requested by suppliers of goods and equipment is "knowledge base creation".

To meet this value proposition, key activities including "network expertise" and "business intelligence" are essential.

- The resources needed to "build a network of experts" must be provided by stakeholders.

- The most important value proposition requested by contractors and operators of goods and equipment is "improving the quality of tests requested by operators".

- The main cost streams of this group of customers are related to the key activity called "providing educational services".