



CAPSTONE PROJECT SUMMARY

DEPARTMENT OF ECONOMICS AND BUSINESS

TECHNOLOGY MANAGEMENT AND INNOVATION

2020-2021

Title: Digital Transformation of a National Statistics System

Development and Technical Improvement Concept

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0 Statement of purpose

I have been working in the IT sector since 2012 which date also marks the start of my professional specialisation in delivering IT solutions for governments (Business-to-Government, B2G) in a public-private partnership (PPP) collaboration. Since then, I have been involved in various public administration management related project implementations in the Southeast Asian region that earned our team a reputation to have a chance of taking part in an upcoming procurement.

My studies at the Central European University (CEU) under the scope of Technology Management and Innovation (TMI) course helped me not only to broaden my knowledge about technology management in general but also to be able to position myself/ourselves in the compound service value chain.

In the light of the above, I am aiming to present a concept of development and technical improvement of a national statistics system which might be serving as a material to raise awareness of the development needs of the project owner organisation, and also to raise fund for the implementation at the same time.

This case analysis has been compiled based on my own experience and research, onsite surveys, interviews and discussions. Its content fully and only reflects my personal point of view.

1 Background & project introduction

1.1 The project owner

The project owner is a national statistics office in the Southeast Asian region that is committed to execute its mid and long-term development plans. The organisation is in charge of collecting, assessing, evaluating data on a national scale, then publishing at the same time. The agency is also responsible to provide specific statistics reports to support the local government's political and economic development plans.

As the project is located in one of the least developed country, the project owner and its government would welcome any development aid to cover all expenses of the implementation phase. Since the Government of Hungary maintains good relationship and has long-term investment plans with the local government, there is high chance the project will receive funds from Hungary.

1.2 The case

The current wing-to-wing data management procedure is heavily paper-oriented, printed forms are used for data collection which needs to be carried out by local village officers. The survey will be followed by an aggregation on district level, then on province level, which will end at the central level statistics office. It is obvious to see that the existing practise is highly time consuming and resource intensive which causes delays in the data publication and dissemination.

General information technology literacy is moderate among officers of the agency, therefore, all in-house IT improvement attempt ended up with inadequate results causing more confusion than the original idea of simplifying the overall workflow.

2 The solution

The project will not stop only at re-designing of data management processes but also has intention to deliver custom software development services, infrastructure upgrade solution, and capacity building plan to ensure the long-term sustainable operation of the new system.

2.1 Legal framework analysis

To be able to streamline the existing procedures, the project needs to design new public administration practices which will be part of the legal framework analysis workgroup.

2.2 Software solution

Another pillar would be the custom software development solution delivery which also offers integration services to other commercial-off-the-self software modules.

2.3 Hardware implementation

Hardware infrastructure implementation and integration would be the third essential improvement pillar of this project as the newly designed software solution needs a firm infrastructure to be operated on to serve all demands and requirements of the project owner.

2.4 Capacity building

On top of all services so far, training and capacity building activities need to be facilitated as well among officers on different levels of the organisation. These services are to establish a professional supply of experts to the national statistics system.

Having the above-described service package executed, the national statistics office will be playing an extremely important role among other local government organisations, serving as its main data provider to support its political and economic improvement efforts.

3 Main beneficiaries

Obviously, the project owner, the national statistics office will be the main beneficiary of this development project. The supervisor ministry will also have a step ahead of other ministries by overseeing a digital database with the most advanced technology behind. Having up-to-date statistical data in hand, the local government will have information backing up its development plans when it comes to an inter-governmental cooperation with other countries.

As of Hungary, the Hungarian Government will gain strategic, political and economic partnerships in the Southeast Asian region, and also promotes export activities of some Hungarian companies by financing the project.