Local Government ICT Portfolio Management

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ABSTRACT

The ONE DCC ICT Portfolio Optimisation Process - IPOP has addressed the problem of projects with little or no value entering the portfolio. This improved process which has been in use since June, results in an Optimised Portfolio which benefits the Council with projected savings of $37,440 and an increase in Portfolio value of 20% ($400,000).

Keywords

Project management, portfolio, local government, capstone

1. INTRODUCTION

The Business Information Service (BIS) department of the Dunedin City Council (DCC) require a system to select an Optimal Portfolio from competing projects. Information Technology Portfolio selection is an integral decision in many organisations. It must make justifiable and informed decisions on investments where the effective application of limited resources is as essential as the process itself.

This paper discusses the implementation of a structured framework for IT Portfolio selection through a decision support system (DSS). This is called the Information Technology Portfolio Optimisation Process (IPOP).

The DCC Mission statement is: To be one of the world's great small cities; we will be a city of connected people, cohesive communities and quality lifestyle. Strategic Management at the highest levels in the council namely the Councillors and the CEO set this mission to provide a sense of direction for both internal and external stakeholders. The aim of the CEO, CFO and CIO (collectively named the C-suite) is to operate and manoeuvre the Council with mission and vision in mind.

The Dunedin City Council (DCC) is a Municipality comprising over six hundred staff; it is responsible for the local governance to the Dunedin City Area of a total of approximately 120,000 residents. The area of the organization that handles all things Information Technological is the Business Information Services (BIS). The BIS is experiencing pressure from various sources, both internal and external to "Do more for less" and to be more effective with what they do have.

With an increased awareness of spending and a limited amount of resources to work with, the BIS have more Projects requested than resources to accommodate them which is a big problem for them. If BIS has 60 project requests in a yearly budget cycle then they have 2^{60} ($11,529,215\times10^{11}$) possible project selection choices, of which most are not optimal; but is a large amount never the less.
The problem can be coupled with conflicting strategic management priorities, dictating projects and priorities to BIS. These projects sometimes referred to as "Pet" or "Squeaky Wheel" projects, where the loudest or most noticed project gets priority and valuable Portfolio resources, thus resulting in not doing the most important projects, ending up in a less effective Portfolio.

Project portfolio selection is a periodic activity that's objective is to meet company's objective without violating constraints such as budget and time. The successful application of selecting a project portfolio results in an increase in value added to the organisation, efficient use of resources, higher project completion rate and higher staff moral from "Doing the right projects" instead of just "completing them".

2. Technical Highlights

The One DCC project has addressed the problem of projects with little or no value entering the BIS portfolio, this improved process results in an optimal portfolio which benefits the Council with better decision making capabilities, saving time and money.

Figure 1: The implemented IPOP process: schematically (left), and as a VBA/Excel application (right)

The process used (IPOP) was created through an iterative collaboration and supervision with two senior staff at BIS, where the understanding the problem space changed and narrowed with time into a strong and robust process which could be rolled out to solve any general project portfolio optimisation.

The ICT Portfolio Optimisation Process (IPOP) starts with the Requestor, this is a Council employee, it could be from any council functional business unit like Parks and Recreation, Roading, Museums or Libraries etc.

The Requestor wants a project undertaken and submits a business case, the business case is structured in a way to ensure they have their supervisors sponsorship this ensures accountability. If the Requestor can't finish the business case for various reasons some of which can be things like not having all the required information, the Requestor sends a partially filled out or fully filled out business case to BIS.

BIS receive the business case and if incomplete they Communicate with the Requestor to finish the business case. Once the business case is completed, BIS undertakes a Review of the business case to make sure it is accurate and paints a realistic view of the need or opportunity for needing a project in the first place. The Review is where BIS Collaborate with the Requestor to alter the business case to reflect the most accurate

picture and Verify its contents to make sure it doesn't contain any false information.

Once BIS have finished its Review and Verification, it submits the business case for a Cost Benefit Analysis (CBA) check, the reason for this is to be a first stage cull where projects with costs outweighing there benefits don't progress to the potential portfolio. With business cases with a positive CBA check moving forward to the pool of passed projects, at this point whether passed or not, feedback should be given to the Requestor.

Once in the pool the decision makers can view the contents of these projects, this affords the decision maker not having to go through potentially up to 100 business cases. The portfolio optimizes the projects by maximizing the value and keeping within certain constraints like budget and hours.

The Decision makers have the optimal portfolio and should have the ability to mix the portfolio to see different scenarios, the final decision is up to the decision makers but with staff view open on the portfolio any large deviations should have to be justified, this ensure transparency and accountability by making the process as visible as possible.