



Automated creation of Project Management Deliverables

How a simple project tool can foster Digital Transformation

Capstone Project Summary

on creating an excel based, automatically generated Project Plan and its potential use in the future.

Gabor Fogarasi

TMI - 2020

Automated Creation of Project Management Deliverables

How a simple project tool can foster Digital Transformation

Capstone Project Summary - Gabor Fogarasi - TMI 2020

Why Nokia?

I have chosen Nokia Solutions and Networks for my capstone project as I believed I can give value to Nokia for a number of reasons. I have spent most of my career in the pre-sales organization of large IT and Telecommunications companies. Nokia perfectly fits the profile, and the project was contributing to the solution of a pre-sales business problem. There was one more compelling reason, I have previously built sophisticated excel tools, automating complex decision making processes and calculations, creating outputs for different stakeholders in the business – Internal reviews and approvals, delivery, and contributing to the client-facing proposals, and upon a successful bid, on the contract itself.

The business problem?

Nokia's key business problem is about how to automate the creation of such a project plan. It should not take up an engineer's / Project manager's time, there must be a way to generate it automatically based on the costing document.

From a business process perspective, the current process is inefficient, takes up valuable man-hours, slows down the process, delays an internal review. Deal reviewers want to see a standardized project plan, comparable to each other over time, so they can ask relevant questions, spot bottlenecks easily. A quick, preliminary project plan would also be great to show the client, discuss timelines early on, allowing time to modify if necessary.

Scope of the Capstone Project

To understand how the costing file's data structure is built up, and create a detailed project plan in excel, based on the costing file. The project plan is generated automatically, containing timelines for each work item. Start date, duration, end date.

Requirements, key features requested

Requirements revolve around Activities, let's define what is an Activity: It is a single work item, a distinct deliverable during the project. It could be a physical, on-site deliverable, like server testing or a customer sign off, or, it could be the creation of a technical documentation

- Day and Week view for three years. Typically, a project at Nokia lasts no more than three years.
- Quantity of a given Activity (for example Number of servers)
- If multiple Quantity of an activity is ordered, can they be delivered at the same time or one after the other?
- Time for each Activity comes from Nokia.
- Extra Time can be added for each Activity manually to account for unique circumstances.
- Dependencies: Certain activities can only commence, once others have completed. For example, Server testing can only commence after the hardware has been delivered to the customer site and set up. Dependencies become complicated when a certain Activity depends on the completion of multiple prior Activities.

What did the current version achieve?

At the moment The project timeline is a quick decision aiding tool, allowing management to oversee the project, and ask relevant questions from the deal team. It can also show a crude timeline for the client about the proposed works. It solves the immediate business problem, speeding up the RFP process, standardising the project plans on deal reviews.

What could it become in the future?

The generated project plan is a great basis, an input of a more robust project plan, created in Bower BI. It could be a separate project to explore how can Nokia implement it, but I see great opportunities for further use.

First, Power BI is a much better visualization tool. This Excel project plan could be an input source for a PowerBI dataset, allowing to create wonderful visualization of the project plan. Excel is quick, fast, easy to handle, but not suitable for creating jaw-dropping presentations, creating client-facing materials.

The real power of Power BI

Power BI could automate things even further, based on the project plan's dates.

Nokia's delivery organization could use this to automatically create necessary meetings, reminder emails for stakeholders during the implementation phase. Of course, deadlines change in real life, which is why the delivery manager has to keep an eye on the project's progress. However, this kind of automation would free up much of his workload, allowing one delivery manager to handle more projects simultaneously.

To integrate further, even purchase orders can be created automatically, subject to a single approval, as the excel behind the project plan contains a solution design as well.

Power BI would also allow for an automated costing output too, and an automatic, visual RFP response to be generated with all relevant standard terms and conditions, Statement Of Work assigned to the solution items.

Potential business outcomes, Digital Transformation

80% of the RfP response can be automated based on the project plan and the Solution and Pricing information behind it. RFP turnaround times could be faster, more accurate, eliminating human error from the automated process.

This may be a simple project plan, a proof of concept. However, it has the potential to increase its business value by opening the door for more automation. Transforming the way Nokia is creating RFP responses, faster turnaround times, with less human effort. This is the holy grail of digital transformation, better business outcomes by automation.

Table of Contents

Why Nokia?	1
The business problem?	1
Scope of the Capstone Project.....	2
Requirements, key features requested	2
What did the current version achieve?.....	2
What could it become in the future?.....	3
The real power of Power BI	3
Potential business outcomes, Digital Transformation	3