Project Portfolio Management and Optimisation

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Introduction

Organisations invest in programmes and projects to ensure sustainable growth and an acceptable return on investments for their shareholders. Suffice it to say here that a programme is a collection of related projects, linked together by a specific business need and clear benefits.

A project portfolio, on the other hand, is a collection of programmes and projects that define the totality of an organisation's investment in change to achieve strategic business objectives. Van Heerden et al, (2015) describe this in a pyramidal hierarchy, starting from enterprise strategy at the top, down to projects at the bottom, as shown in Figure 1.

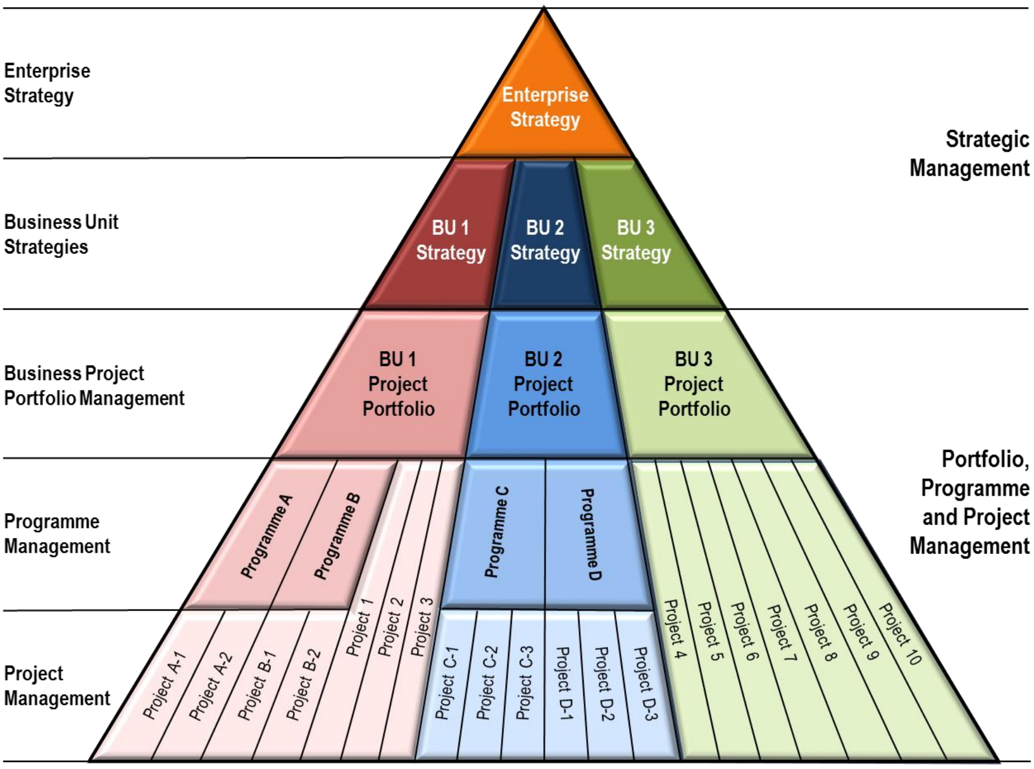

Figure 1: Putting portfolios, programmes and projects in perspective (from van Heerden et al, 2015)

Enterprise strategy informs the strategies of individual business units. In turn, the business unit strategies should drive the development of a portfolio of programmes and projects to be implemented per business unit. This portfolio should address the business objectives and needs and be within resource constraints.

In this article, the primary focus is on the management and optimisation of the project portfolios to ensure that business needs are adequately addressed, and value is maximised.

Project portfolio management

Project portfolio management (PPfM) is a coordinated collection of strategic processes and decisions that together enable the most effective balance of business as usual and organisational change in terms of programmes and projects. PPfM is mainly concerned with aligning projects with corporate strategy, and on methodologies for project valuation, selection and ranking. The output of PPfM is a collection of selected projects, ranked according to their contribution strategy.

The requirements for effective PPfM in any organisation are shown in Figure 2. Each of these aspects is discussed in more detail below.

Figure 2: Requirements for project portfolio management

Referring to Figure 2, and starting at the top, effective PPfM can only be achieved if all the following requirements are in place:

- **Enterprise and business unit strategy:** Organisational and supporting business unit strategies exist, containing well-defined and agreed strategic objectives with associated targets and measures. The portfolio office works closely with strategic planning and performance management departments/functions in linking the forecast impact of the project portfolio with the strategic objectives and performance targets.;
- **Programme and project proposals:** Change initiatives, i.e. programmes and projects, must be available for meeting the strategic objectives. A formal procedure for capturing, categorising, justifying and presenting these initiatives must be in place. This includes the governance of the PPfM process. The benefits and strategic contribution of each change initiative must be defined in a business case on a consistent basis to understand the performance contribution.;
- **Human and capital resources:** Resources, be it technology, capital or manpower, almost always constrains an organisation's project portfolio. The reason for the PPfM process and portfolio optimisation is to maximise value for the business, given the resource constraints. Four levers can be engaged to manage resource capacity constraints, namely the changing of project timescales, decoupling of development from roll-out, descoping, and removal of projects from the active projects portfolio.;
- **Project portfolio management office:** PPfM is a dedicated function that requires suitably qualified manpower. Depending on the size of the organisation, it can vary from a virtual office with a part-time incumbent, to a fully staffed PPfM corporate office (PPfMO). The project portfolio management office can be associated with the organisation's project management office (PMO), but must be sufficiently independent of project delivery so that its analyses are objective and credible, and it is not accused of being biased.;
- **Portfolio management and optimisation principles:** The principles and methodology for PPfM must be developed, agreed and used to ensure consistent approaches are applied and to provide a clear line of sight across the portfolio. Senior management must understand and support the PPfM process. Of importance here is agreement on the methodologies for optimising the portfolio, because it may lead to the delay, descoping or cancellation of 'pet projects'; and
- **Reporting and feedback:** Performance of the overall project portfolio, as well as performance of individual programmes and projects, should be reported to the organisation's decision-making bodies in a standardised manner at the agreed frequency. This allows for closing the loop to the strategic objectives, fine-tuning of the PPfM procedures and other interventions as may be required. A full review of the portfolio should take place on a regular basis (at least annually), to ensure the portfolio remains aligned with the strategic objectives.

Project portfolio optimisation

Project portfolio optimisation (PPfO) is an essential part of the PPfM process. It involves the selection of the best combination of change initiatives (programmes and projects) to ensure that all mandatory needs are met and that the company generates the maximum return on investment for all shareholders under current resource constraints.

PPfO is done with a multi-year view, and aims to prioritise mandatory/compliance projects, current ongoing projects and discretionary projects according to their strategic fit, profitability and risk. PPfO is a four-step process, as follows.:

- **Prepare project business cases:** Prepare and compile business cases for all change initiatives according to a pre-determined methodology and standard. This is normally done by the proposers and business unit management for their programmes and projects.;
- **Standardise and correct business cases:** This is also known as 'scrubbing'. The objective is to ensure that all data, assumptions, calculations and logic are correct for all projects so that they can be compared on an equitable basis. Scrubbed projects should have the correct classification, demonstrate a clear link between strategic objective(s), identify interdependencies with other projects in the portfolio, reflect the most realistic benefit scenario with no double counting, and be error free.;
- **Optimise individual projects:** Individual projects are optimised to ensure that projects are the best that they can be in terms of potential benefits versus capital required. This process was described in detail in the August 2017 Insight Article, entitled *Value Chain Optimisation* (van Heerden, 2017). During project optimisation, ways will be explored to reduce capital expenditure, accelerate project implementation timing and increase benefits.; and
- **Optimise overall project portfolio:** Prioritise and sequence projects to ensure delivery of strategic objectives, compliance risk, and return on capital invested. This is done by the project portfolio office in consultation with business unit management.

On completion of the scrubbing step and optimisation of individual projects, project prioritisation can be done. Prioritising ranks the change initiatives within the portfolio based on one or more agreed measures. The most common measures are financial metrics (Financial Index (FI), NPV, IRR and payback) or some form of multi-criteria analysis. The purpose of prioritisation is to help senior management and the portfolio governance body answer the following questions:

- Does the overall portfolio present an adequate return on investment?
- Is the portfolio balanced in terms of all business units?
- Does the portfolio support short- and long-term sustainability?
- Which initiatives should the organisation invest in?

- What are the most important initiatives?
- What initiatives must be resourced above all others? and
- Should any ongoing project be descoped or stopped?

It is only when the proposed change initiatives have been prioritised that detailed project portfolio 'balancing', or sequencing, decisions can be made, if considered necessary. The purpose of the balancing exercise is to ensure that the resulting portfolio is balanced in terms of timing; coverage of strategic objectives; impact across the overall business and business units; stage of initiative development; overall risk profile; and available resources.

Scrubbing and project optimisation will result in changes to the initial profitability and/or capital required for different change initiatives, and thus change their relative priorities. The balancing step can result in further changes. The final deliverable from PPfO, which needs to be approved by the project portfolio governing body, is presented in Figure 3.

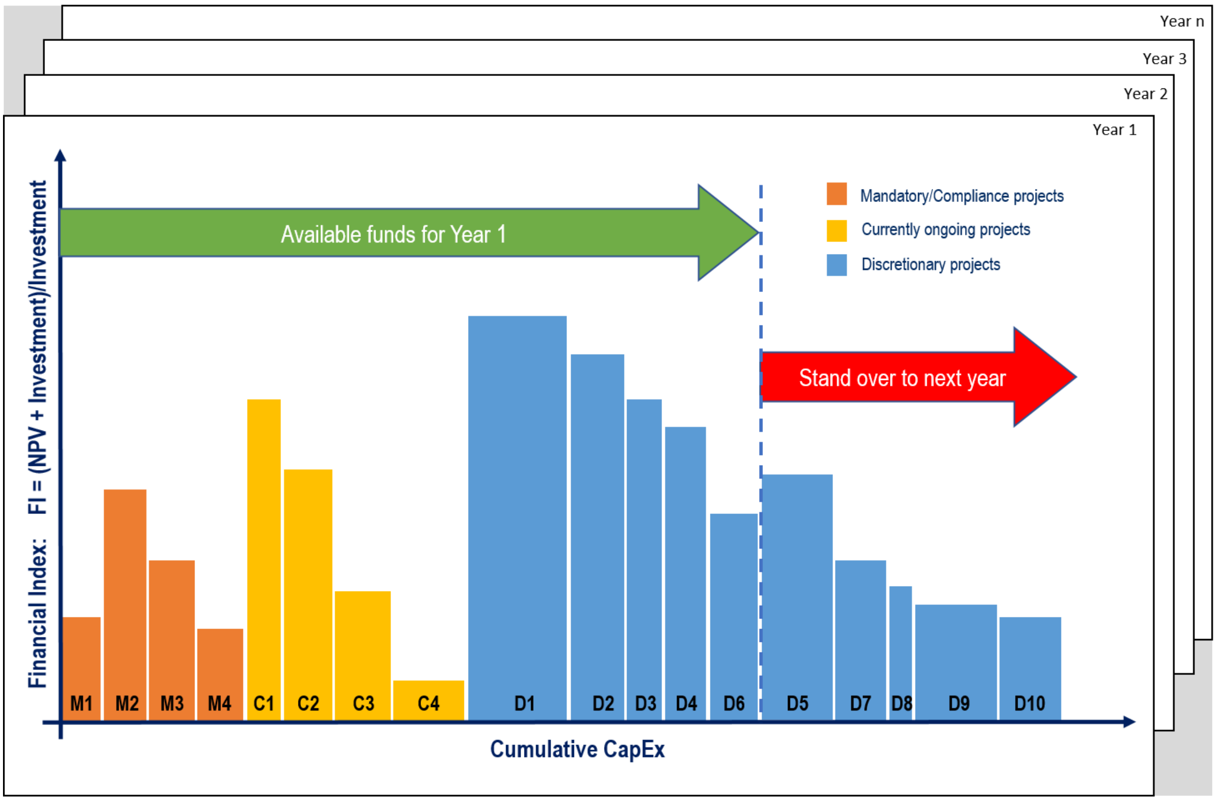

Figure 3: Project priorities after scrubbing, project optimisation and balancing

Figure 3 shows four mandatory projects (M1 to M4), four currently ongoing projects (C1 to C4) and ten discretionary projects (D1 to D10). The available funds for Year 1, shown in green, is sufficient to do the mandatory projects, continue with the ongoing ones and do five of the ten discretionary projects. The remainder of the discretionary projects will have to stand over to the following financial year. Additional, and hopefully more profitable, projects will be identified via the projects pipeline in the interim period and these will be included in the analysis for the next year.

Problems arise if the available funds are insufficient to cover the mandatory and the ongoing projects for any given year. In this case, no discretionary projects can be started and some of the ongoing projects will have to be delayed. Alternatively, the organisation can enter negotiations with the relevant governance bodies to reschedule or descope mandatory projects.

Note that discretionary projects D5 and D6 have been switched around in Figure 3: this means that a less profitable project is proposed for the capital budget than would have been the case if only financial metrics were considered. This shows the potential effect of portfolio balancing, as described above. A less profitable project can take the place of a more profitable one to balance the portfolio in terms of achieving strategic objectives across all business units, because the available funds are insufficient for an additional large project, or because of project interdependencies. However, interdependencies are often an indication that the projects in question should rather form part of a programme and be evaluated as such.

Benefits of portfolio management and optimisation

The benefits of PPfM and PPfO are significant when fully adopted. According to the UK Office of Government Commerce (OGC, 2011), organisations which adopt a portfolio management approach can realise some or all the following benefits:

- More of the 'right' programmes and projects are undertaken with greater financial benefits and measurable contribution to strategic objectives;
- More effective implementation of programmes and projects via management of the project development pipeline, dependencies and constraints;
- More efficient resource utilisation, with the option of redirecting resources when programmes and projects do not deliver or are no longer making a sufficient strategic contribution;
- Greater benefits realisation through exploitation of the capacity and capability created across the organisation for PPfO, and capturing and disseminating lessons learned;
- Enhanced transparency, accountability and corporate governance of the project selection process;
- Improved interaction between relevant stakeholders, including senior managers, in understanding and meeting organisational needs and expectations and in communicating strategic objectives;
- Elimination of redundant and duplicate programmes and project portfolio optimised by the unbundling of projects;
- Improved awareness of aggregated project risks and steps to minimise these; and

- Improved cross-organisational collaboration in pursuit of shared goals and assurance on consistent and competent programme and project management.

Concluding remarks

Programme and project management specifically focus on 'doing things right', whereas PPfM is more about 'doing the right things'. PPfO ensures that projects can be evaluated and prioritised on an equitable basis.

PPfM supports effective corporate governance because it links delivery of the organisation's strategic objectives with investment in change, in a transparent way that enhances effective accountability. It also provides a framework of rules, practices and decision-making bodies for managing the delivery of the project portfolio that is consistent with best management practice. Lastly, it provides an audit trail demonstrating the rationale behind investment decisions.

Remember that PPfM will not make decisions regarding the content of the project portfolio, change initiatives to be included or to be stopped. However, it will provide the information that enables senior management to exercise informed judgement, and it also makes decision-making more transparent.

Feel free to contact any of our consultants for assistance with PPfM and PPfO in your organisation.

References

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