STRATEGIC INTENT PORTFOLIO MANAGEMENT SUMMARY

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1 EXECUTIVE SUMMARY

This document summarizes current research material in the relatively new area of ICT Portfolio Management. It brings a focus to the plethora of Gartner, Harvard and other published documents and is aimed at promoting internal discussion.

Project Management (PM) techniques have been used for many years with great success however, with Projects becoming ever larger and merging into Programs, we see flaws emerging in the use of the old PM techniques. Now that Programs are themselves becoming larger still and these are now merging into Portfolios, the size & influence of ICT is growing. There is a need for a dramatic change in the management and control in this new area of Portfolio Management.

Portfolio Management is still in its infancy, however research has paved the way for a paradigm change and a more strategic view to be taken of ICT projects. In today's business environment we need to more closely align and link ICT projects to Business strategy, but before we can control projects in this way we first have to measure the contribution individual projects make to the Business strategy.

The area is evolving rapidly. Many companies are focusing on the perennial cost-cutting and in 'sweating-the-assets' trying to gain the last few 'miles-per-hour' and the final few 'miles-per-gallon' out of their formulae-one ICT race car. However, what is often not realized is that the race-track their 'car' is on is more like a battlefield where a tracked or four-wheeled drive vehicle is more suited to the business terrain.

2 INTRODUCTION

Project management and programme management techniques have been used effectively for many years. The question is; can we identify any *evolutionary progress* and learn from common trends in the development of these techniques for the new area of portfolio management?

In straight-forward project management project activities are: listed; Gantt charts created and milestones plotted. The tools and techniques of Project Management work well and have yielded some dramatic successes.

When the projects become more numerous Programme Management evolved. Here many of the same tools and techniques were used and some progress has been made. However, cracks started to appear in areas where the programs became complex. Inter-project dependencies and the way one project feeds others became one of the key issues.

As companies became larger, costs became larger and both the projects and programmes became ever more complex, Portfolio Management became a necessity. In this new arena *simple project techniques fail*. New sets of: processes, procedures and tools had to be evolved in order to cope with what have become a large, inter-connected, inter-dependent set of programs. Portfolio Management was born.

New global competition has managers working hard to: reduce costs; match competitive advantages and global economies of scale. However, many of these companies are merely trying to imitate the advantages that their competitors have already mastered. Imitation will not bring about competitive revitalisation. In order to regain competitiveness, many strategies must be rethought.

2.1 Strategic View

Generally, strategic analysis focuses on current competitors and their resources rather than taking into account the *potential* for new competition. (Competitor analysis can be likened to taking a snapshot of a moving car; the snapshot gives little indication as to the car's speed or intended direction)

There are two basic and contrasting models of strategy that are not necessarily mutually exclusive, but have a differing focus: The "Western" approach and, The Far Eastern model.

- **The Western Approach**

  The Western approach to corporate strategy is focused on resource management and incremental improvements in operating efficiencies in an effort to beat the competition. However, this view limits a corporation's strategic horizon to maintaining the status quo, or to attaining cost and quality advantages that competitors may already enjoy. With today's increasing base of competition, managers must look for ways to build new competitive advantages. Competitive revitalistion requires a "***strategic intent***" that drives the entire corporation"

- **The Far Eastern Model**

  The Far Eastern model is more proactive. The Western model centers on balancing the fit between current resources and opportunities, while the Asian model leverages available resources to achieve nearly unattainable goals.

The Western model is more the strategic application of tactics than the tactical application of strategy.

2.2 Strategic Intent

Strategic intent takes an active management process to focus organisational attention from top to bottom in the firm on the "*essence of winning*".

All employees in a firm that are grounded in the strategic intent will have the same vision - beat the competition, be the best, be the market leader. Strategic intent accomplishes this by setting goals that require personal effort throughout the firm and produce a "team" commitment to targeted objectives.

Strategic intent should be consistent over time, providing short term stability to focus actions, while allowing longer range flexibility to take advantage of new opportunities without sacrificing the strategic intent itself. Strategic intent leaves room for improvisation and opens innovation opportunities.

Today's business world has never before been closer to military battle and many lessons learned on the battlefield are applicable to business operations. Due to the Products we produce and the work we have undertaken, we have a substantial advantage in this area. As a result, battlefield tactics are better understood here than in most other organizations.

- **Aligning Projects and Strategic Intent**

Corporate strategy typically begins at the top and cascades down through strategic business units via a process of collective conversations that engage stakeholders in off–site retreats, negotiations, and meetings of all sorts. At the end of that process, the corporate strategy ends up as collections, or portfolios, of strategic initiatives. *Programmes and projects become the change vehicles for executing strategic intent.*

Every project in an organization should contribute to its strategic plan. But how can we ensure this linkage? We need to make sure that we integrate all projects within the strategic plan. This integration requires a process for prioritizing projects by their contribution to the plan.

Managing Information Communications Technology (ICT) has been likened to managing the Products of a business. Businesses generally produce 'products' and the Business of the ICT Team is no different. However, rather than producing a 'Product' in the traditional sense the ICT Business produces products (ie: IT Projects) that support and directly contribute to the company's strategy.

In any manufacturing organization the Products produced will have a Bill-of-Materials (BOM), the ICT business also has a BOM, but this BOM consists of a unique set of materials, (viz: ICT Projects). The same principles that apply to a manufacturing company can be applied to ICT, it's just the raw material and the resulting 'Products' look very different.

- **Cracks in Project Management**

Cracks in ICT project management appear as businesses grow into enterprises, and as organizations increasingly rely on more and more complex ICT. Managing a number of projects under a programme of work is also suffering. Not only is it increasingly difficult to identify and support the strategy, but accurate project data becomes difficult to read and use effectively at the strategic level. When a number of projects are combined in to a programme, and a number of programmes combined into a portfolio, then the problems are compounded and, in many cases, appear intractable.

2.3 Implementation of Strategies

A project, programme and portfolio management office (PPPMO) equips an organization with the structures, tools and techniques it needs to ensure it has the right programmes and projects in place, that business and change priorities are balanced and it has the resources and capability to deliver them consistently and well. The P3MO ensures that not only are the projects done right, but also the right projects are done.

It should be remembered that *Portfolio Management* is just one aspect of the three part Value Framework (UK Gov). The other two aspects being: *Value Governance* and *Investment Management.* There is a substantive amount of work in each of these three Value Framework areas.

In today's climate of cost cutting and efficiency targets, delivering the change portfolio more effectively is a key objective. This means delivering the right mix of programmes and projects, consistently and well; faster and at less cost. Enabling strategies, tools and operational practices enable these benefits to be realised.

3 SCOPE

In 2003 it was claimed that IT had become a 'commodity' with a diminishing strategic importance for businesses. In a controversial article "IT Doesn't Matter" the author advises companies to **spend *less* on IT** and focus on vulnerabilities and not opportunities.

If IT investments do matter, the question is '***what is the business value of expensive IT investments'*** as they often remain unclear.

The evaluation of IT benefits becomes a vital topic for companies to ensure survival and sustained growth. Nevertheless, four out of ten companies do not measure the business value of their IT investments at all. Moreover, in those companies that measure IT value the executives' confidence in the results is stunningly low.

There is currently no common agreed understanding about the role of monetary ICT evaluations. Methods which go beyond monetary calculations are not commonly used in practice because of their complexity or subjectivity. There is a need for improvement in this area.

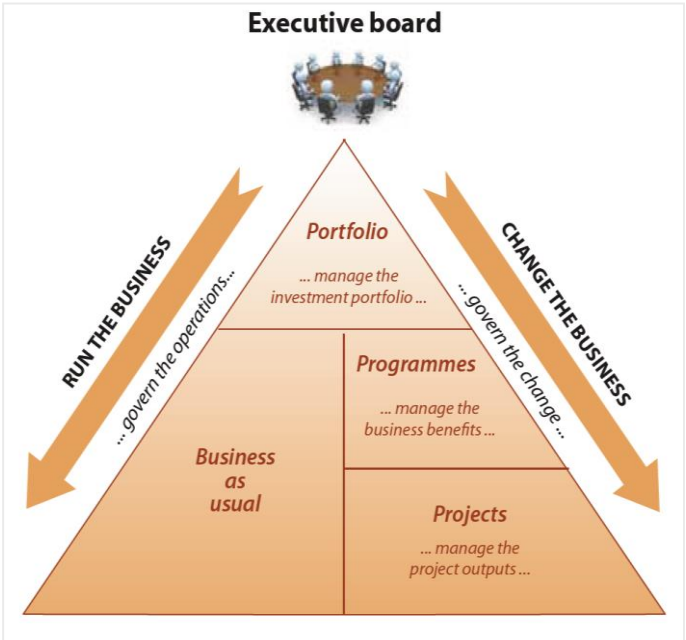


Figure 1
Portfolio Management Landscape

IT Portfolio management is distinct from IT financial management in that it has an explicit directive, a strategic goal in determining what to continue investing in versus what to divest from. At its most mature, it appears that IT portfolio management is accomplished through the creation of four portfolios: Application Portfolio; Infrastructure Portfolio; Project Portfolio and a Service Portfolio.

- **Application Portfolio**

  Management of this portfolio focuses on comparing spending on established systems based upon their relative value to the organization. The comparison can be based upon the level of contribution in terms of ICT investment's profitability.

Additionally, this comparison can also be based upon the non-tangible factors such as organizations' level of experience with a certain technology; users' familiarity with the applications and infrastructure; and external forces such as emergence of new technologies and obsolescence of old ones.

- **Infrastructure Portfolio**

For an organization's information technology, infrastructure management is the management of essential operation components, such as policies, processes, equipment, data, human resources, and external contacts for overall effectiveness. Infrastructure management is sometimes divided into categories of systems management, network management, and storage management.

The ability of organizations to exploit ICT infrastructure, operations and management sourcing/service solutions not only depends on the availability, cost and effectiveness of applications and services, but also in coming to terms with solution providers, and managing the entire sourcing process.

In the rush to reduce costs, increase ICT quality and increase competitiveness by way of selective ICT sourcing and services, many organizations do not consider the management side of the equation. The predictable result of this neglect is overpayment, cost overruns, unmet expectations and outright failure.

- **Project Portfolio**

This type of portfolio management specially addresses the issues with spending on the development of innovative capabilities in terms of potential Return on Investment (ROI), reducing investment overlaps in situations where reorganization or acquisition occurs, or complying with legal or regulatory mandates.

The management issues with project-oriented portfolio management can be judged by criteria such as ROI, strategic alignment, data cleanliness, maintenance savings, suitability of the resulting solution and the relative value of new investments to replace these projects

- **Service Portfolio**

Service portfolio management addresses the issues with spending on the development of service capabilities. In some case it is directly related to the Service Catalogue and linked to maintaining the 'lights-on' capability of the organization.

4 PORTFOLIO MANAGEMENT

Strategic planning is not strategic intent. Planning alone can cause competitive decline. Most companies make strategic plans but do not have strategic intent. The strategic planning process typically focuses attention on available resources and the feasibility of alternative strategies in utilizing existing resources.

This strategic planning process often acts as a "feasibility sieve" whereby strategies are accepted or rejected based on the ability to define the tactics needed to employ the strategy.

Viable strategies can, therefore, be eliminated due to the apparent lack of feasibility rather than their appropriateness to the organizational vision.

Western managers often admit that their strategic planning process focuses more on today's problems than on potential future opportunities. Strategic intent is focused on the 'ends', while the 'means' are left to be flexible.

4.1 Implementation of Strategies

Implementation of strategies requires actions and completing tasks and should focus on how to realize the named strategies. For example:

- Executing the work requires allocation of resources such as budget and equipment. Organizational resources are limited. In addition, multiple goals frequently impose conflicting demands on resources. This requires a project portfolio management & project prioritization based on organizational priorities.

- Implementation requires an organizational structure that supports projects such that the P3MO itself has top management or executive committee support.

- Project management processes for planning, executing, and controlling are essential to ensure that we are able to implement strategies effectively and efficiently. The P3MO is responsible for ensuring that smooth and effective projects management processes are in place and are followed properly.

- We need a 'project selection and priority' system to ensure strong alignment of projects with the strategy.

Many businesses have defined the: Business Strategy; Business Identity; Identification of Market and the Strategic Focus and now have to focus on the three difficult key tasks of:

1. Distributing Business Strategy to the Projects
2. Implementing Prioritized Projects and
3. Managing Prioritized Projects.

4.2 Distributing Business Strategy to the Projects

Once the strategy has been determined and has been approved by the company executive team, the responsibility of project success does not fall solely at the feet of the Project Manager. The chief executive officer (CEO), chief information officer (CIO), directors, functional management, and staff all have specific tangible and intangible roles in the project(s). In this manner, mutual expectations can be met and benefits realized. For a successful transition from strategy to project, the business must have in place:

- **Agreement on what needs changing**, and why. (This should be clearly supported by the project sponsor)

- **A common "language"** for analyzing and describing requirements, based on a shared understanding of the business processes across "client," purchasing, and information systems (IS) departments. (We must not assume that this is the case)

- **Agreed processes** that involve the users in the selection and design of systems solutions. (Consider making a "client," rather than an IS specialist, the program manager responsible for delivering the business benefits)

- **The support** of skilled experienced technology project managers. Each and every project should have a mission. The mission identifies the organization or client's requirements and clearly defines the purpose or value of the project. A project's mission must be completed for success of the project.

Objectives define the success criteria for the project. The objectives relate directly to the completion of the project's mission. Completing all of the objectives should accomplish the project's mission. Measurable objectives provide a method of quantifying the results and establishing quality standards to evaluate the success of the project.

4.3 Implement Prioritized Projects

Once we have distributed the strategy to the projects we normally see that we have more projects that can be executed as compared to resource and budget. The prioritizing of projects is very much like the solution in managing investments and implementing strategy. In fact, it is the same. With this information P3MO is the main entity responsible for defining portfolio management system and seek the best approach to prioritize the projects for maximum and optimum utilization of resources and budget. Extending this principle to project prioritization means we should:

- **Understand** how important a project is. How well does it aligns with the business objectives?

- **Prioritise** projects early to allow lead time for effective decision-making. Also, the earlier we prioritise the more potential problems we can avoid before they become critical.

- **Introduce objectivity** into the prioritization process.

- **Consider** the fact that Prioritized projects must be executed sequentially. And remember, some projects are dependent on others.

- **Also use the fact that some projects** are easy to slot into non-peak times

4.4 Managing Prioritized Projects

It is the role of the Portfolio Management team to collect; analyze; summarize and present project and programme information such that the right projects are funded at the right time. The prioritization of the right projects ensures the business strategy is achieved at speed and at lowest cost; and that tracking progress towards businesses strategy is facilitated.

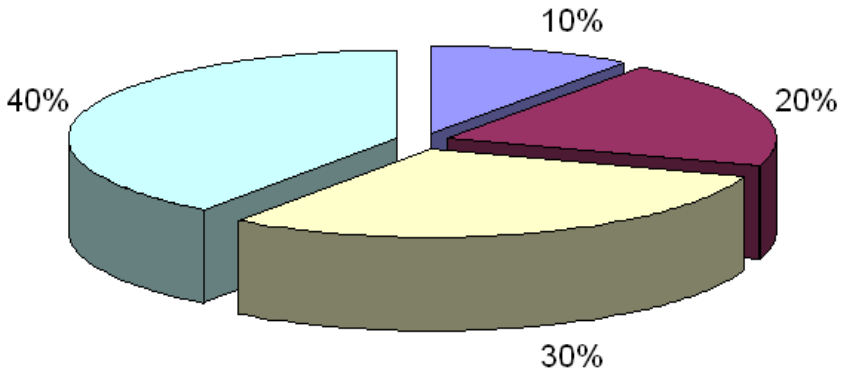
Managing a plethora of Projects within their individual Programme is complex; however there are sophisticated tools available to assist in this task. It is not the intention of this document to discuss these here, however trawling through the multitude of papers from industry, academia and the various Government Departments has brought to light many such tools.

Portfolio Management is derived from the financial sector where it is has been shown the best strategy for financial success is to hold a 'portfolio' of investments with varying degrees of risk.

A balanced financial portfolio charts the optimal way through the current troubled financial waters.

ICT Portfolio Management uses similar techniques. Strategic decisions are made where to focus the company's scarce resources. In the below example the P3MO Portfolio, the Applications Portfolio has been allocated 10% of the 'resources', whilst the Service Portfolio 20% and so on. It is within these strategic boundaries that each Portfolio lives. However, if business circumstances changes then the strategic balance of the risk has to change. The changes need to be carried out through a strict Governance umbrella and comply with the Life Cycle Management (LCM) constraints such as any other ICT Project.

P3MO Strategic Portfolio



Balancing the ICT Portfolio is a business critical activity. Business managers must understand the allocation of funding and the division between the four portfolios. (Viz: Applications, Infrastructure, Projects and Service). We need to ensure we avoid the Nobel prize winning finance paper issues such as the 'Tragedy of the Commons' (http://en.wikipedia.org/wiki/Tragedy_of_the_commons) and the over exploitation of 'free' resources, and benefit from their experience. (This is covered further in section 5.2)

In addition, it is relatively straightforward to identify the current ICT portfolio and see how closely we are aligned to the business strategy and key objectives. All that need to be done is:

(1) **List** the current key business objectives

(eg: Value Creation through to Innovation & Change Management, Human Capital Development etc.)

(2) **Determine** the overall ICT budget;

(3) **List** the ICT projects (past, current and planned)

(4) **Allocate** each project to one or more of the Key objectives; then

(5) **Summarize** and present the results.

If, in the above scenario, we find that we are spending relatively little on for example: HR Training systems and Course facilities then we should ask ourselves is 'Human Capital Development' really one of our key objectives?

An initial and limited analysis of this type was performed on 73 major UK Projects and the below graph (figure 3) obtained.

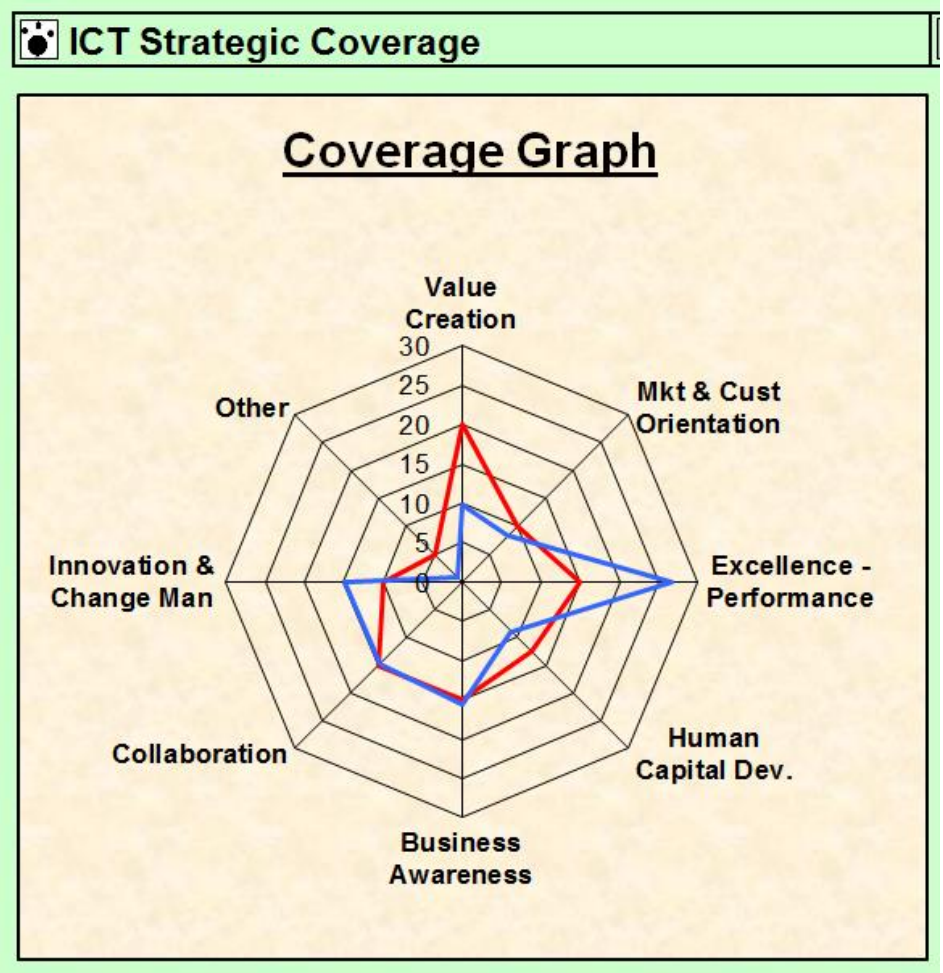


Figure 3 – Project Portfolio & Strategy Visualization

This graph indicates that (from a limited analysis) current IT Projects appear to be focusing on providing '*Excellence in Performance*', whilst senior management felt that '*Value Creation'* was, potentially, of more strategic benefit.

4.5 Prioritized Projects Reporting

Once the Business Strategy has been identified and the tasks of: Distributing Business Strategy to the Projects; Implementing Prioritized Projects and Managing Prioritized Projects have been completed we have to consider (as an integral part) the reporting, monitoring and controlling side of the equation.

The P3MO Reporting Outlines consists of just two central components; risk levels (%) as dictated by the Business Strategy and; the summary Portfolio Template. (The Portfolio Template details have yet to be agreed)

As we normally have more projects that can be executed we need an analysis that can help us view this issue and assist in the prioritization of projects. (Figure 4)

In this chart (Fig. 4) the vertical axis displays the Net Present Value (NPV) of a project whilst the horizontal axis indicated the business-alignment score. The **size** of the bubbles indicates the cost of the project concerned (on a logarithmic scale) whilst the **color** (darkness) of the bubble equates to the perceived risk level of the project. If we then link the bubbles together

to demonstrate and dependences (not shown below) we have an excellent picture that helps focus on projects that are low cost, support the strategy and are low risk. This type of Project Picture could also help us save money and valuable resources by closing projects that are unlinked and/or exist in the lower left-hand (no-investment) quadrant.

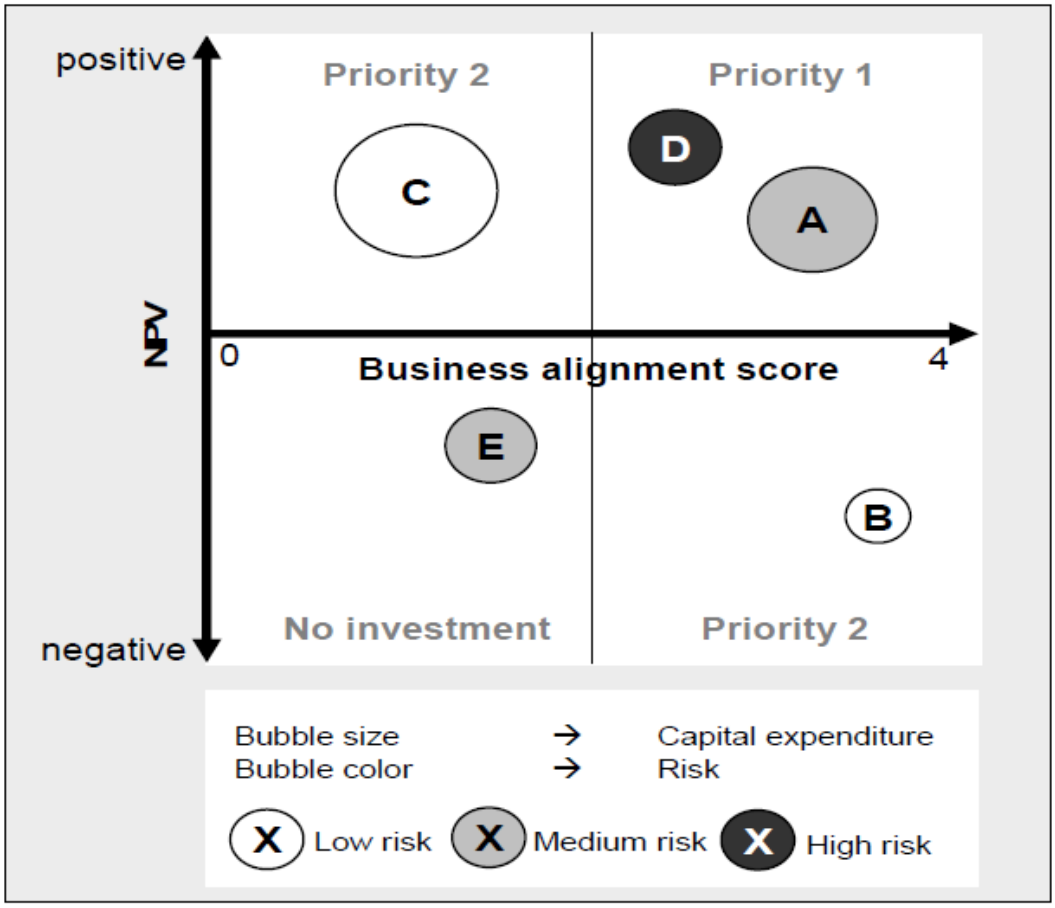


Figure 4 - Portfolio Prioritization Visualization

This chart shows us that projects A, D & C are key and should be protected, whilst Project E should be cancelled.

There is one more chart that may assist us in the critical field of project prioritization and dependence display, this is termed the Nodal Analysis Chart.

This chart (fig 5) is normally used in analyzing dependent events and other areas. This nodal analysis chart is shown for interest only at this stage as we are not delving into the numerous tools available at this time.

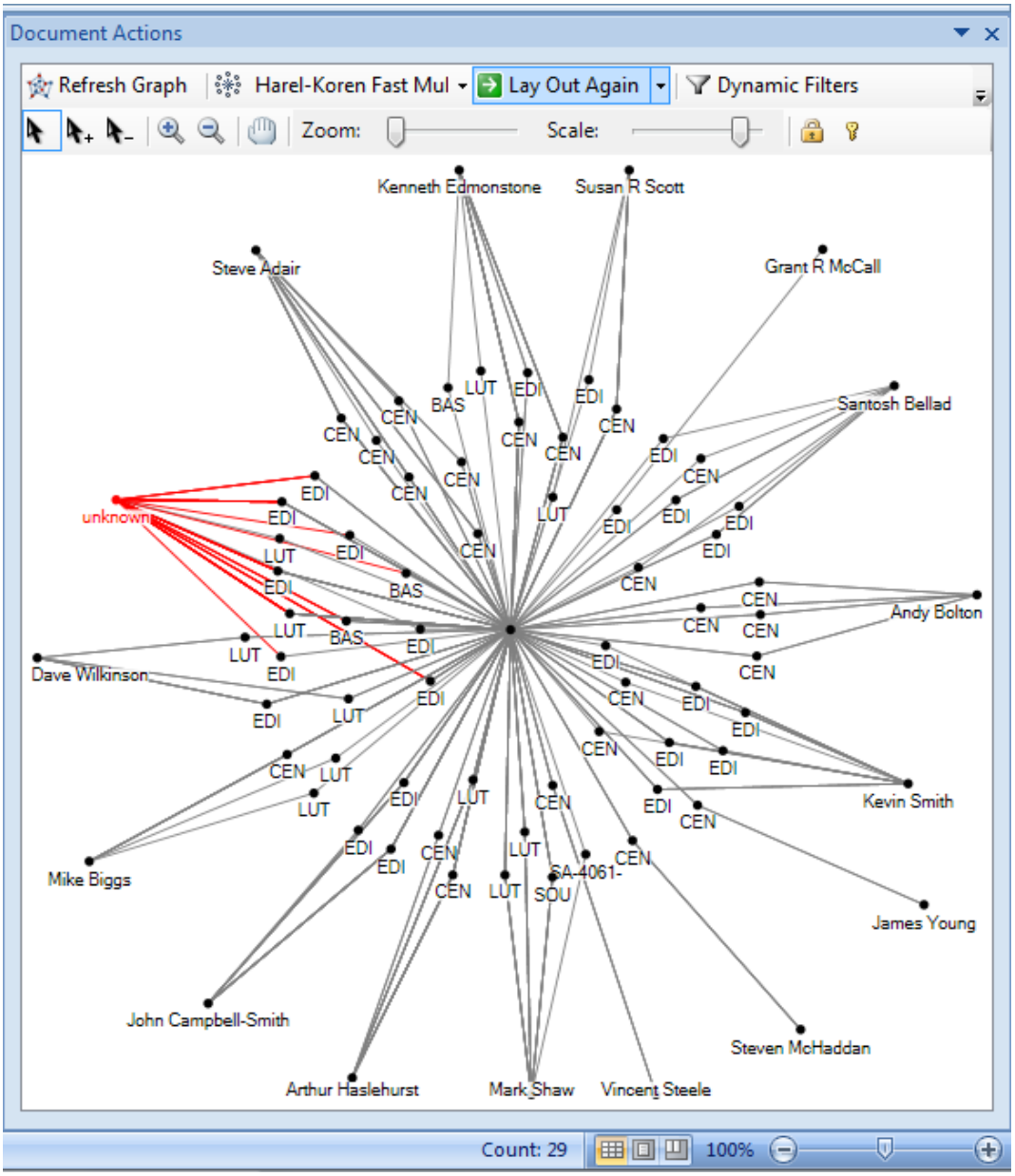


Figure 5 – Nodal Analysis Visualization of Project Management Discrepancies

This chart shows the projects at each of the sample main sites together with their Project Managers. It was surprising to find that several projects appeared to have no PM. (highlighted in red). (The chart was produced using the Billable Hours Report (BHR) and the nodal analysis produced through Microsoft Excel.)

This nodal analysis chart is shown for interest only at this stage as we are not delving into the numerous tools available at this time.

5 PROBLEM OR OPPORTUNITY

5.1 Competition

Back in 1970, few Japanese companies possessed the resource base, manufacturing volume, or technical prowess of U.S. and European industry leaders. Komatsu was less than 35% as large as Caterpillar (measured by sales), was scarcely represented outside Japan, and relied on just one product line—small bulldozers—for most of its revenue. Honda was smaller than American Motors and had not yet begun to export cars to the United States. Canon's first halting steps in the reprographics business looked pitifully small compared with the $4 billion Xerox powerhouse.

If Western managers had extended their competitor analysis to include these companies, it would merely have underlined how dramatic the resource discrepancies between them were. Yet by 1985, Komatsu was a $2.8 billion company with a product scope encompassing a broad range of earth-moving equipment, industrial robots, and semiconductors. Honda manufactured almost as many cars worldwide in 1987 as Chrysler. Canon had matched Xerox's global unit market share.

The lesson was clear: Assessing the current tactical advantages of known competitors will not help us understand the resolution, stamina, or inventiveness of potential competitors. Sun-tzu, a Chinese military strategist, made the point 3,000 years ago: *"All men can see the tactics whereby I conquer," he wrote, "but what none can see is the strategy out of which great victory is evolved."*

5.2 Resource

There appears to be some truth in the conservative dictum that everybody's property is nobody's property.

'Wealth' that is free for all (eg: IT Networks/Servers/Group-Drives etc) is valued by no-one because he who is foolhardy enough to wait for its proper time of use will only find that it has been taken by another....

For example, suppose we think of the players in a game as being herders using a common grazing meadow. For this meadow, there is an upper limit to the number of animals that can graze on the meadow for a season and be well fed at the end of the season. We call that number L. For a two-person game, the "cooperate" strategy can be thought of as grazing L/2 animals for each herder. The "defect" strategy is for each herder to graze as many animals as he thinks he can sell at a profit (given his private costs), assuming that this number is greater than L/2.

If both herders limit their grazing to L/2, they will obtain 10 units of profit, whereas if they both choose the defect strategy they will obtain zero profit. If one of them limits his number of animals to L/2, while the other grazes as many as he wants, the "defector" obtains 11 units of profit, and the "sucker" obtains -1. If each chooses independently without the capacity to engage in a binding contract, each chooses his dominant strategy, which is to defect. When they both defect, they obtain zero profit. (This is called the Hardin-herder syndrome.)

We have common resources, whether they be People, Networks or other ICT assets. If they are 'free' to use then we could find ourselves in the same predicament of every Project Manager 'defaulting'. This, once again, demonstrates the importance of not only prioritization but also of consultation and the gaining of a *common* view, a strategic purpose that we all understand and share.

The Lesson is clear: The centralization of services will leverage more output and support alignment across initiatives. Where companies utilize virtual offices, the P3MO will ensure they are working to consistent standards. It will give credibility to experienced trained staff as well as a clear set of tasks to the Strategic and Sponsor support functions. Performance Management will be aligned with portfolio, programme and project success.

6 MEASURES OF SUCCESS

One of the definitions of a P3MO model is:

> *"The P3MO model will provide a focal point for defining a balanced portfolio of change and ensuring consistent delivery of programmes and projects across an organization."*

It will help establish, develop and maintain (in some cases – re-energise) appropriate support structures that will facilitate:

- Informing senior management decision making on: prioritization, risk management, deployment of resources across the organization to successfully deliver the business objectives (Portfolio management)
- The identification and realization of outcomes and benefits via programmes and projects
- Delivery of programmes and projects within time, cost and quality and other organizational constraints.

This may be provided through a single office or through a linked set of offices, which exist across an organization, some of which are permanent, whilst others are temporarily linked to a specific programme or project.

6.1 Business Benefits of P3MO Implementation

A P3MO model can significantly increase an organization's chances of successfully delivering its strategy, reducing benefit-lost and delivering programmes and projects more cost effectively. It can do this in a number of ways:

- Maintaining a "**big picture**" understanding of the business change portfolio.
- Providing **decision support** to ensure the right programmes and projects are launched.
- Providing **standards** and processes to ensure consistency of delivery.

- Providing **independent** oversight, scrutiny and challenge to ensure things are done well (and right first time more of the time).

- Providing **assurance**, coaching and mentoring to build a competent workforce capable of first class programme and project delivery.

- Reducing **risks** and the likelihood and impact of events that would have a negative consequence; and, (conversely) increasing the likelihood and impact of events that would have a positive consequence.

- Identifying, **understanding** and managing multiple and cross-cutting **risks** and issues.

- Executing **change** more effectively and efficiently and improving organizational programme and project delivery.

- Protecting reputation and stakeholder **confidence**. Without the involvement of a P3MO in a strategic change management model these goals may still be reached, but in a fragmented or unstructured way that generates significant threats to the best use of scarce resources and achievement of required outcomes.

7 RECOMMENDATIONS

There are many options as to the way forward, but it is recommended that we should all consider the below four point plan:

1. Identity, list & catalogue the ICT assets (including IT Projects and the as-built environment – eg: networks, server farms etc)

2. Identity the Company's Business Strategy and key business drivers, then review and, where necessary, realign the ICT Strategy.

3. Analyze the ICT Projects and allocate percentages to each of the identified elements of the IT Strategy.

4. Identify and analyze Project interdependencies, review and priorities bottleneck projects

The Project, Programme and Portfolio Management Office (P3MO) is a complex and relatively new area. (<12 years). When the tried & tested project management tools and techniques are asked to 'step-up-to-the-mark' they fail. New tools, techniques & skills are needed to enable the new P3MOs area work effectively and facilitate maximum value to be extracted from this new and potentially very lucrative business environment.

8 AMENDMENT SUMMARY

Author	Summary	Revision	Date
Andrew WS Ainger	First (incomplete) draft – Team only	Draft 0.1	2016-05-10

9 TERMS OF REFERENCE

The P3MO field is a new and ever-changing environment. New thoughts and concepts are being generated by many institutions and some of these we can learn from. As a result this document will be in a continual state of flux. This document is for discussion purposes only.

10 RELATED DOCUMENTS

Directly related Company and other documents are listed in this section, in addition, referenced documents and standards are listed together with all referenced Company Forms.

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