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## The Art of Singing from the Same Song Sheet During Changes; Some Empirical Evidence of a Real Live Project

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### Abstract

*The need of organisations to find better returns and greater utilisation through capacity management is a constant and all pervasive aspect of contemporary management. All organisations are finding that management of its assets, in all forms, is becoming an imperative that is changing the focus of all who manage and work within the organisation. The reality of this is often a shock and becomes a change process of ensuring that all concerned share the same vision, the same direction and understand the vital aspects of the performance measures that are now being utilised. This paper utilises a metaphor of a choir that must sing in harmony and concert otherwise the resulting disharmony will lose the business competition and the choir will be forced to disband. Just as a financial institution will look for the best return from its investment portfolio, a project management organisation was researched as a case study; the paper demonstrates the combination of two fields of financial management study (project management and change management) create a useful tool for gaining the support of fellow managers, and workers from different levels, and functions of the business and from various divisions to achieve the desired improvement in return of investment of assets used by the organisation.*

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### Key Words

*change management, financial management, project management, value add*

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## I. INTRODUCTION

Assets in an organisation are important items and can be managed but a company's workforce is different as they are not an asset as such but real living human beings with feelings who can think for themselves. The workforce is the lifeblood of organisations and they represent one of its most potent and valuable resources but they have a huge impact on the return on investment of tangible assets. Frequently the drive to improve returns on asset performance requires a change in the process involved in measuring the performance and in the manner of asset usage; including rescheduling staff, altering the functions, and restructuring responsibilities etc. A common occurrence is the need to change attitudes of employees at all levels and in different divisions or departments. Included in this is the need for a unified and agreed strategy to drive the organisation forward into future increased performance of assets employed. To ensure the maximum benefits are gained and success achieved, changes should be managed properly according to [1]. A prime factor in this is the need to have efficient and effective staff; this is complicated in the current employment environment with the mix of characteristics of the workforce (i.e. age, gender, and generation). Effective asset performance is dependent on the talent willingness and skill pool which comprises the workforce. Despite the expected severe increase in population globally, the war for talent is on. Organisations should be able to adapt to changes whether it is global market changes or workforce requirement changes.

The baby-boomer generation is slowly leaving the workforce and is being replaced by generation Y, people born in the late 1980s and 1990s. The values changed dramatically between these two generations as generation Y grew up with technology that did not yet exist when their parents started their careers. Managing generation Y offers real challenges because of their different values towards commitment and motivation. In some instances generation Y do not expect something permanent because they have seen so many changes and takeovers and so tend to distrust the prospect of long-term or predictable futures.

Recruitment supplies a pool of suitable applicants who can enter the selection process but this process should be so good to attract a sufficient number of job candidates who have the abilities and aptitudes needed to add value to the company even during changes in the organisation.

It becomes evident that project managers performing human resource (HR) roles need to be equipped with distinct skills that support their roles and responsibilities. To act as a change agent is one of these distinct roles and necessary skills are required to be successful. Increasing tightening of competition implies that all New Zealand organisations are under pressure to react to these changing conditions by cultivating a competence in human resource management (HRM) [2]. Operations management is not spared from these changes and the dependency on the HR departments.

The analogy of a choir is used in this paper to get agreement among us so that we are all singing from the same song sheet even during changes in our organisation (see model on page 14). The choir is entering a competition (the urgency for changes). There is a new judge (profitability in the global market) with a reputation as a stickler for precision, for harmony, for maintaining the tempo but expecting new invigorating music (new products or skills to outperform rivals). Furthermore, this judge expects high performance (increased profits after

changes made) often improvement in competitive position depends more on having better processes or asset utilisation than others. On the other hand there is a rival choir (competitive markets) with a stunning reputation (brand reputation), led by a former member (ex-employee of your organisation who knows your organisation in-side out) who lays down a challenge that cannot be refused. Questions are now being asked such as: what do we do now? How do we get such a repertoire that we can all use and all achieve our goal so we can continue as a choir? If we do not get a placing in the competition, we will lose members, lose our audience (customers) and eventually cease to exist. The main question then is: how do we ensure survival?

This research project is used to demonstrate that a project management approach taken to a change management situation assists in gaining the desired financial outcomes, especially when the change expected requires actions across levels and departments in an organisation. The research conducted confirmed that a project manager requires a very specific range of project management skills; similarly change management requires a range of particular skills. Project management must not only deliver the clients' product (in this case the choir in harmony) on time and within budget, but must also meet the firm's project objectives in terms of profit, client relationships, and reputation etcetera. The ability to achieve both sets of objectives relies on the ability to harness the firm's key resource, its people. If any changes need to be made, the project manager should either be the change agent or appoint a suitable person as change agent with the right skills and abilities to lead the company through the change.

[3] point out that it is important organisations understand their business model and that project, programme and asset portfolio management are positioned appropriately within the business. When projects are initiated it must be decided how they will be structured within the parent organisation, especially in terms of resource allocation and management [4]. This applies whether the project is being initiated by an organisation conducting a few occasional projects or by a fully project-based organisation. Although the relative importance of the project to the organisation will in large part determine what level of management focus and priority is given to the project [5].

The need for change becomes evident when there is a gap between organisation, division, function or individual performance objectives, and actual performance in the organisation. That is we need to establish the acceptable and required return on investment and other performance requirements of the organisational tangible assets etc. This includes days available for operation, capacity utilised. It is generally accepted that indicators such as changes to total net profit, sales per employee, labour costs and accident rates can identify performance deficiencies. Change dramatically shortens the life span of organisations. This in turn reflects organisations' inability to phase out strategies, policies, and businesses that are no longer relevant, while creating new activities, products, services, and strategies to sustain performance, relevance, and success. The HR manager will have to improve the balance between the competing demands of managing current performance, and letting go of some other activities, attitudes, and patterns of thinking. In any organisation the productive utilisation of resources is a key business driver. Taking the view that the necessary changes in actions, performance and attitude of various staff need careful planning and the process of

change has a series of steps leads easily to the recognition that project management is a useful tool or technique to guide the entire change process. This is increased if the necessary changes impact on shared resources or resources from various functions, departments and divisions of the organisation.

To maximise utilisation of resources it is typically necessary for project-based firms to assign resources very carefully and only where and when necessary to minimise wastage. This is due largely to the size and nature of typical engineering projects; the same is true of changes in asset management expectations. Projects tend to be relatively small and unable to sustain full time standalone project teams ring fenced from the rest of the organisation, again the change management team is often not a permanent department but a team created to ensure the necessary changes occur. Rather they tend to be isomorphic in nature with team members changing as the project progresses, i.e. technical specialist providing their input before handing over the project to the next person, and as different departments (possibly in different locations) become involved in the changes taking place.

Resources could be shared across multiple projects but it creates a number of unique resource management challenges not experienced in a single project environment. The change management across divisions or departments also has similar circumstances to multiple projects. Managing in a multi-project environment requires the constant juggling of projects to keep many different clients satisfied at the same time, whilst having to compete with others for the key resources required to deliver projects. This research project examines the key process used by project-based engineering consulting firms to ensure the effective and productive utilisation of resources, the changes made to survive. Therefore to determine the songs fit to organisational strategy and the assets and to “tune” them to perfection so that the judge (profits) could allow the choir (organisation) to stay in business (choir to exist).

## **II. PROBLEM STATEMENT**

Changes in any organisation could be problematic if not managed properly; the choir loses its resonance, its harmony and becomes discordant. With people being the primary resource of organisations, their utilisation and productivity has a direct bearing on revenue generation and overall business performance. Often it is the human resources willingness to utilise assets efficiently that govern the returns received. Similarly constraints caused by employment agreements and work life balance expectations can result in less than ideal asset performance. Based on the proposition that the performance of an organisation is directly related to the effective allocation and utilisation of its resources, the problem that is addressed in this paper is: how does the organisation establish the urgency for changes, appoint the change agent, determine and allocate tasks, add or remove staff members, unfreeze and make the changes and then re-freeze and stabilise the workforce with the least disruption and the best outcomes? In other words: how do we sing from the same song sheet during changes?

## **III. OBJECTIVES OF THE STUDY**

Project-based organisations, like most business enterprises must decide on how to invest the resources they do have to best effect [5]. For project-based organisations the key resource are people. Just as a financial institution will look for the best return from its investment

portfolio, a project-based organisation must also look to achieve the best returns from its project portfolio (collection of projects where the efforts of its human resources are invested) during and after changes have been made. The over-arching principle of change management is the selection and prioritisation of projects based upon their alignment and contribution to the organisation's strategies and objectives [7]; the principles of change management should also be applied to the multi-project environment. The objective is to identify / confirm the key processes in change management adopted by organisations to assign resources and ensure that it works efficiently and effectively during and after changes have been made.

## IV. METHODOLOGY

### A. Background

Three qualitative case studies make up the empirical basis of this research project. Due to paper length constraints, only one case study is discussed; the other two are discussed in other papers. Key to this qualitative approach was the real life setting of the case studies within an engineering consultancy firm that undertakes multiple projects simultaneously using shared resources. The chosen case studies were all infrastructure development projects managed within provincial offices of a New Zealand engineering consultancy firm. The chosen projects were interdependent (connected) because they shared the specialist resources retained within specialist functional group. The real name of the organisation used will not be revealed.

Case studies are also considered the preferred strategy for addressing the 'how' questions when the focus is on a contemporary phenomenon in a real life context [8]. For this particular research the strength of a case study is that it enabled the researcher 'to investigate and report the complex, dynamic and unfolding interactions and events, human relationships and other factors' at play in the multi-project environment described above [9 p181]. Recognising that the participants roles and functions are influenced by organisational and institutional arrangements, it was important for the researcher 'to catch the close up reality' of particular situations as well as the experiences, feelings and thoughts of participants in response to those situations [9 p182].

### B. Case Study Design

The case study was developed in two stages. The first stage involved separate case study investigations; collecting and analysing data within each of the three projects to gain an insight into the effectiveness of the project human resource management processes used by each. These individual case studies were designed to identify the specific human resource management processes adopted within each project setting, as well as the metric used to track how well the project performed.

The second stage involved a cross-case analysis of the three cases in order to determine whether there were any identifiable themes relating to project human resource management that contribute to (or alternatively undermine) project performance. The cross-case analysis was designed to analyse the consistency of findings across the individual cases and aimed to ensure the construct and internal validity of the findings.

### **C. Data Collection**

Data was collected from multiple sources, specifically project documentation and records, and semi-structured interviews were used to increase reliability and validity of the findings. A total of twelve face to face interviews were conducted with key project participants. Recognising that in the multi-project environment project performance is often affected by events external to the project [3][4][5][6][9]; these interviews were aimed at adding texture to the research; providing context and background information which allowed broader explanations relating to project performance to be developed.

### **D. Questionnaire and Interviews**

The basis of the interviews was a semi-structured questionnaire seeking information about the project human resource management adopted by the different Project Teams and their governing Business Group. The interviews were conducted by the researcher between 16 February and 20 March 2009. Each interview was tape recorded and transcribed, yielding approximately 10 pages of transcript. Data collected from these multiple sources and collection methods provided the researcher an opportunity to triangulate results in order to strengthen research findings and conclusions.

## **V. LITERATURE REVIEW**

### **A. Background**

One of the impediments for efficient utilisation of staff in the multi-project environment where projects are undertaken concurrently is multi-tasking, where resources are pulled back and forth between projects. Multi-tasking divides attention, reduces focus and ultimately reduces the efficiency of the project resources [10][11][12].

Resource allocation must also deal with the issues of capability and skill. Invariably there will be a gap between the capability and skills of the available resources and that which is ideally required for the project [13]. Often this becomes a political issue and causes competition between project managers for the best resources [5]. Any skill and capability gap presents a risk to the project that needs to be explicitly understood before it is accepted. [13] points out that the project manager is responsible for the resultant impact any skill and capability gap has on the project and therefore should not ignore or simply accept the skills and capability gaps. The lack of skills to complete the job should appear on the risk register [13]. In this analogy/metaphor the project manager is the choir master, whose task it is to ensure that the rationale, the performance measures are understood and implemented. This tuning of the choir may result in reassigning resources (human and tangible), the realisation that some personnel need replacing or retraining and determining the best approach to achieving this without creating too much disruption to the organisation. A key facet of change management is the recognition and reduction of fear perceived or experience by personnel affected by the change. .

Skills and capability add to the dynamics of resource allocation and scheduling in the multi-project context. Skill and capability gaps result in increased error rate and rework and poor performance against schedule, creating delays across projects inter-related projects [10].

Often the only method to make schedule delays is to reassign resources from another project; however this only creates wider problems across the entire portfolio [14][6].

[5] explains that the goal of organisation is to 'plan for consistent and continuous use of the fewest resources (p.129). Utilising resources at a constant rate is considered more efficient than trying to react to sharp peaks and troughs in workload; this is a part of asset management i.e. the level production strategy over all available hours to gain the highest possible output and returns. [13] also suggests looking beyond the organisation to external contractors and consultants (especially if used as change agents) to secure resources as a means of addressing workload peaks. This not only helps address short term peaks in workload but is also a means of ensuring the right capabilities and skills are secured for the project.

Although resource allocation is typically thought of as a planning and scheduling issue there is now a growing body of literature that suggests that multi-project management needs 'to go beyond resource allocation and start addressing incentive structures, accounting systems, and other deeply embedded features of the organisation' [11], p.408. [9] identify that multi-project environments are inherently complex dynamic systems influenced by a wide range of human and organisational issues as resource availability, skills shortages, workforce productivity, workforce exhaustion, staff attrition rates, hiring and firing policies, rewards and recognition, organisational culture and communication. The effect on tuning our choir is now evident; all members regardless of where they are located (hierarchical or geographic) are interacting and shared resources needing careful assignments to ensure the best functional levels.

In true multi-project environments several projects are undertaken concurrently sharing at least some of their resources from a common pool [11][16][17]. When related to change management, this multi-project approach can be used to ensure the changes occur simultaneously in different parts of the organisation. This sharing of resources creates interdependencies (connectedness) between projects [10][6][14]. As a result of the connectedness of projects multi-project settings present a fundamentally different management challenge than single projects [18][19][15][20][10]. The connectedness of projects in the multi-project environment means that actions taken on one project are likely to have an impact on other projects and possibly the performance of the entire organisation [6]. Multi-project environments are inherently complex due to the connectedness of the projects due to the sharing of resources, creating a potential difficulty in tuning the choir.

The project manager (or change manager) must address three principle questions in relation to resource allocation in a true multi-project environment [13].

Where are the resources going to come from, and importantly does the project sponsor have sufficient authority to allocate the resources required?

How are the people allocated to the project going to interact with the wider organisation?

How are the project team members going to be organised within the project?

To address the allocation and management of [4] propose a hierarchal framework for capacity planning. This framework recognises that resource planning in a multi-project

environment is an iterative process due to the progressive development of the project requirements [21] [22]. The hierarchy of resource planning identifies four resource planning functions:

- 1) Strategic resource planning,
- 2) Rough cut capacity planning
- 3) The resource constrained project schedule,
- 4) Detailed scheduling and resource allocation [4].

Change is now as powerful a factor in organisations as productivity has been for years [23 p325–40] sees transformation in an organisational sense, as being associated with the restructuring of organisations needing to respond to changes in their environments, missions, strategies, advances in technology, and leadership. Structural adjustments are often made to either enhance the organisation's competitiveness, or for reasons of survival. Restructuring refers to how an organisation rearranges its functioning components, and the employee relationships between them, and the influence on organisational culture. Traditionally, restructuring was used for planned change, but recently it has been used to help facilitate strategic changes, also known as change management.

[23] and [24] reveal that change usually takes place as a result of an adjustment to the environment; workplace, customers, and worker relationships. Issues that necessitate change management could be 'first order' or 'second order' change. A first order change is when a change in a given state takes place, for example, when delivery dates for a product change from five days to three days. First order changes are typically small and cause minimal disruption. A second order change is when a change of a given state takes place and something that previously did not exist is introduced, which constitutes a fundamental change. Second order change is therefore radical and often disruptive; it is difficult for managers to prepare for and management must innovate to deal with it successfully. A 'third order' change is possible. A third order change empowers organisational members to identify and recognise the existence of their current schema (management philosophy) and effect change to this schema as they see fit.

## VI. ANALYSIS OF THE RESULTS

### A. Case Study

This case study examines the design phase of a technically demanding urban State Highway upgrade project, located within the Central North Island of New Zealand. The project is examined within the context of the consulting engineering firm's commission to provide professional services, including project management, associated with the design and implementation of the project. The researcher was the Project Manager on this project and was involved in the bidding of the professional services contract to secure the contract.

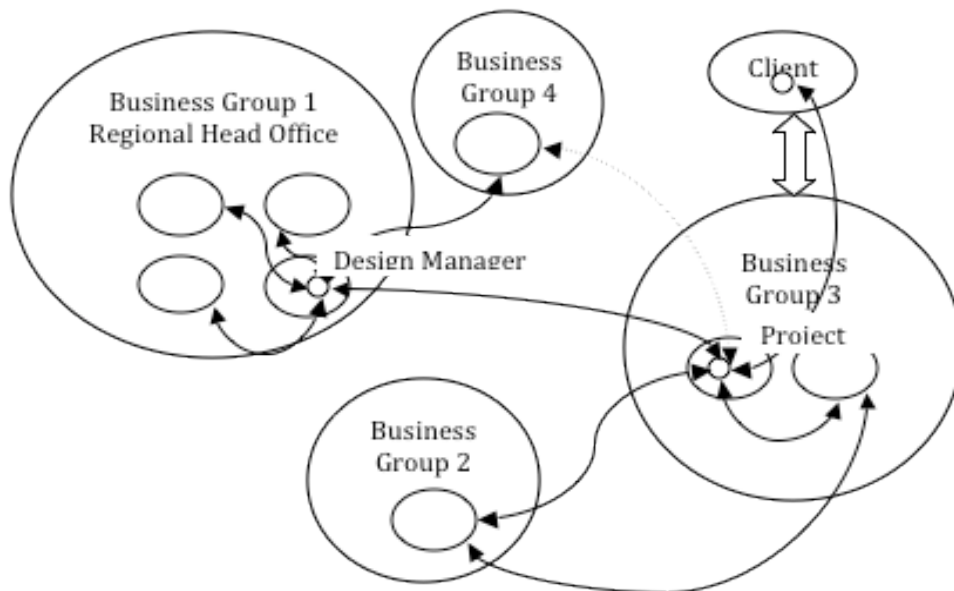
This contract was won through competitive tender by a small local branch office of the consulting firm. Significant specialist input was required from a range of professional



disciplines including geotechnical engineers, civil and structural engineers, and design draught people from beyond the local office. In fact the large majority of the project work (approximately 75%) was completed outside the local branch office that secured the contract.

The project itself presented a number of significant technical and design challenges with the project involving the upgrade of a primary arterial route into a provincial city. In addition to the technical challenges the multi-disciplinary requirements of the project, as well as the management of interfaces between different functional groups, presented a number of complex project management challenges.

So the performance of various departments is interrelated and therefore performance management of assets is a key aspect requiring the measures used to be a unifying and focus mechanism to ensure all members are singing the same tune at the same time.



Case Study project team distribution (developed by researchers from information sourced from Project Audit Report)

The above figure shows that this project is also characterised by a large number of interfaces within the project team. The project team was distributed across 7 functional Work Groups located with 4 Business Groups. However in comparison to the previous case the number of interfaces was significantly reduced by the introduction of a Design Manager that coordinated activities between the different Work Groups located in the regional head office.

## **B. Project Issues**

The execution of this project within this research was influenced by a number of events that arose both internal and external to the project organisation and changes had to be made.

- One such influence external to the project, was the competing demands of other projects committing the necessary resource, particularly the project management

team, elsewhere during the early stages of the project. This is emphasised by the late completion of the Project Quality Plan, delivered 4 months late.

- It is apparent that a significant pricing error may have been made at the time of tendering. Not only was the project strategically priced, it is evident from the very low tender price relative to other tenderers that it was under-scoped.
- The project also suffered from internal resource issues. The key design draughts person originally assigned to the project took extended leave of absence midway through the project. This meant the work was handed over to a less experienced person and took considerably longer than planned to complete.
- Internally the project was well supported by a core of key people who were sufficiently skilled and experienced to complete the technical requirements of the project despite the early project management shortcomings.

The link with asset management is the conflict in resource allocation, a problem with project definition, reassignment of resources during the project and the sharing of resources to increase performance of the entire organisation.

### **C. Resource Availability**

Ensuring sufficient appropriately skilled resources was widely acknowledged as being crucial to the success of projects in the multi-project environment. It was evident that this case study project experienced resource availability problems that contributed in some part to poor project outcomes. The respondent's comments provide further evidence that resource availability is an important determinant of project success, or conversely the lack of sufficient and skilled resource is a contributing factor to poor project outcomes. It is difficult to quantify exactly how much the three case study projects suffered in terms of profitability and schedule variance as a result of staff turn-over and resource unavailability. However participant feedback confirmed that resource shortages had a negative effect impact on all three projects.

It is rare for multi-project managers to have sufficient human and other resources; the lack of resources and contention for shared resources are the primary reasons for project failure [10][6][14]. Due to resource shortages, available resources are forced to work in a reactive multi-tasking manner, which the comments, confirm is detrimental to production utilisation of resources.

### **D. Resource Allocation**

From the case study analysis and participant's comments it can be deduced that the study group experienced the typical resourcing problems that [9] argue are characteristic of multi-project environments. The participant responses illustrate that availability of sufficient skilled human resources is a problem; that resources were often unavailable when required; that there was competition for the best resources. It was also evident from the case study project that significant interdependency between projects was created by sharing resources between projects. As a result of these interdependencies, cause and affect cycles of resource reallocation were created in the manner that [9] suggest is typical of multi-project

environments.

### **E. Resource Utilisation**

In order to maximise resource utilisation the organisation must assign resources to multiple concurrent projects. Consistent with the views of [27] and [6] this appears to be a function of project size. The structure of the case study project could be described as isomorphic [28] as team members constantly changed as the project progressed. The firm's approach to portfolio management based around constantly competing for more work than the firm was potentially capable of doing, means that resource allocation is often reactive. This is consistent with the view of [11] who contend that the allocation of resources to simultaneous projects is generally overwhelmed with the redistribution of resources from one project to another and the constant search for slack resources. Resources 'earmarked' at bid time may be tied up on an existing project and no longer available as planned. From the case study analysis, along with the participant responses, it can be deduced that resource shortages were often overcome by simply delaying the start of the next project, i.e. utilising the 'earmarked' resources when they finally came available. This provides for effective resource utilisation but comes at the expense of project delivery.

Poor recruitment was also seen as an impediment to effective and productive utilisation of resources. Project managers were clearly reluctant to utilise people they were not confident in. Project managers preferred to wait until the best resources became available rather than using less suitable resources even though they may be available.

## **VII. RECOMMENDATIONS FOR CHANGES**

The lessons for change management, come from the careful planning, the proper definition of the scope of the project, and the careful alignments of scheduling of resources both people and tangible. Strategies are not separate and independent of other organisational processes, but are intertwined with organisational development, organisational change, organisational transformation, and the learning organisation.

- Organisational development (another aspect of tuning our choir) poses the following questions:

Where are we? [what are our current performance measures?]

Where do we want to be? [what measures do we need to have?]

What must we do to get there? [How do we plan for the change, what must change, what must be eliminated, what must be created or purchased?]

- Organisational change is more constant than stability. Change occurs because of external and internal forces impacting on the organisation. Change is constant, or organisations atrophy.
- Organisational transformation is not simply a search for a new organisational identity, but rather a positioning of the organisation in response to new forces so as to stave off obsolescence.

- Learning organisation. An organisation that does not learn cannot renew itself. Self-renewal of an organisation demands the learning of new approaches, new understandings, and new alignments.

To implement a change intervention, the type of change required largely dictates the management style that needs to be applied. Frame-bending change (first order and small incremental change) requires collaborative effort from managers. The alternative is frame-breaking change (second order and large scale or urgent change), which requires directive, coercive, or even dictatorial intervention by managers. Use could be made of a model to reflect and be indicative of the approach, which needs to be executed as the form of change and the style that needs to be applied by a manager. However, the approach could differ from organisation to organisation. The model illustrates the difficulty in choosing change strategy to enable leaders to implement change management in organisations. It should be clear that the actions that are needed could entail a deliberate mix of change management styles, which could range from a developmental transition to a turnaround action, which could therefore entail frame bending or frame breaking.

The change management model below guides the user through the whole process of decision making, from environmental scanning and determining the organisation's direction, to the diagnosis through a SWOT analysis and so on, as well as how change could be approached. It also indicates how the change process could be executed via, for example, the model of Kurt Lewin by using an unfreezing changing and refreezing approach. This would entail preparing for change, planning change, implementing change, reinforcing change, and monitoring and controlling the change process. Ultimately the evaluation of the change initiatives needs to be executed by the management acting as change agents in an organisation. By employing the process outlined in this model, organisational renewal can be easily embarked upon [27 p458].

The change model presented on the next page comprises a model of change that starts with organisational strategy and moves through to measuring performance to ensure the changes are in place and result in the desired improvements. For our choir the process starts with careful consideration of the nature of change needed. This is because it is assumed that the strategic aspects of this model have been dealt with prior to the determination of the asset management regime changes to be implemented.

Project-based organisations are reliant on the effective deployment of their organisational resources to successfully deliver projects and achieve organisational objectives.

Procedures should be established to:

- ensure that priority is given to urgent / important projects and give those projects the resources they require.
- ensure sufficient and suitably skilled resources are available to meet the needs of the projects, and in turn the organisational objectives,
- do planning in the multi-project environment as it has a widespread effect therefore there needs to be:

- willingness to adopt changes in resources on a very short notice because it can have a serious impact on resource utilisation at project level
- short term, medium term and long term plans in place and it should be communicated to all staff members involved
- a good recruitment policy and practice in place so that the right person is on the right project at the right time.

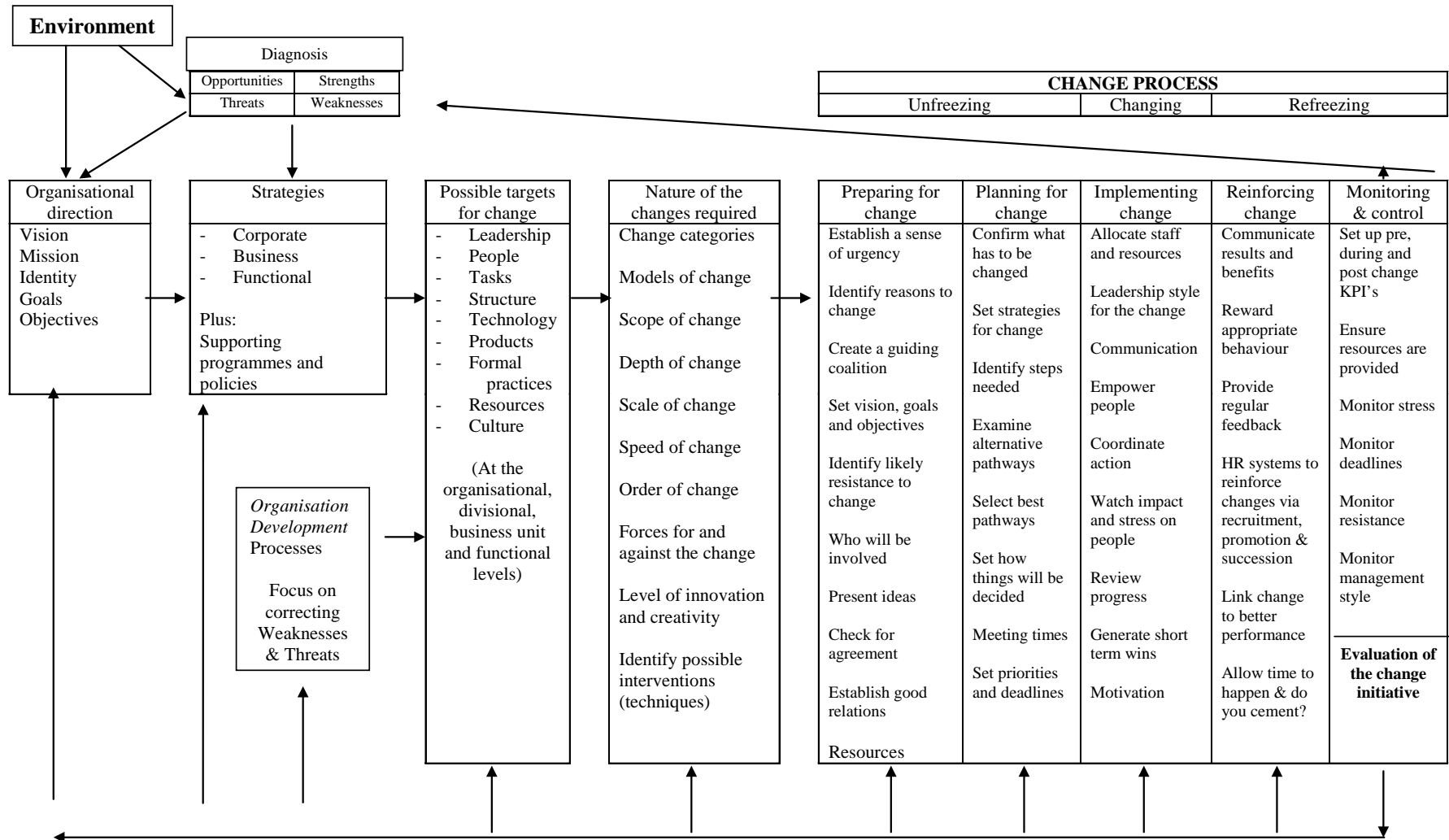
## VIII. CONCLUSIONS

It can be deduced that in order to facilitate effective utilisation of resources a project-based organisation must address the complexity associated with the allocation and scheduling of resources (especially human resources) across many functional groups to multiple projects. A structured method of assessing the complex trade-offs is required. These findings provide a case for the use of programme management processes in order that projects can be managed in a coordinated way to obtain benefits and to control resources sometimes difficult to get because they are not available on the site.

The most significant result is the need to carefully manage staff attrition, training and management and to ensure that staff is available for future projects. Therefore the organisation can expect to be successful in the future and adding sustainable value.

Recommendations include procedures of a change management model to be followed to ensure proper changes at the right time and as per required steps for the ultimate utilisation of resources.

**A CHANGE MANAGEMENT PROCESS MODEL FOR DECISION MAKING**



The Change Management model (Nel, Werner, Du Plessis, Fazey, Erwee, Pillay, Hearn Mackinnon, Millett and Wordsworth, 2012 p 458)

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