Aligning aims in innovation management

A participatory approach to defining mission and vision statements

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Abstract

The problem of ensuring management and employees have clearly defined goals to work towards is one which has engaged management practitioners for some time. It is a challenge which engages organisations across industry sectors and business types (Prahalad 1999; O'Gorman 1999). This article describes the development of a framework for the identification of guiding goals for organisations using the principles of participatory design. The framework described involves internal and external stakeholders in the development of mission and vision statements.

A pilot study using the initial stages of this framework was implemented with academic staff of an undergraduate academic programme in a Dublin higher education college. The need to foster an innovative culture among the multiple stakeholder groups involved in any academic programme make it an appropriate setting to pilot this activity. In the study, the initial phases of the framework were implemented and draft mission and vision statements were generated. The process of generating these statements is described and generic recommendations made for the implementation of this process in other settings.

Key Words: innovation and knowledge management; multidisciplinary; stakeholders; ethos; mission statements

1. Introduction

1.1 Background and Overview

Tidd & Bessant (2009) stated that "the majority of failures (in technological innovation) are due to a weakness in the way the process is managed". How business is conducted in any organisation is usually defined by the sum of the internal structures, management system

and culture within the organisation. Levitt and March (1988) observed that specific activity patterns which evolve with the culture of the organisation become norms, and become key differences between companies operating in the same field and within similar parameters. It follows that the definition of overarching goals to guide these activity patterns is a key task in developing a culture of innovation.

The primary aim of the research described in this article was to generate a structure to harness feedback from the various stakeholders of an organisation to formulate a philosophy for the organisation's management and future development. These stakeholders include internal interests such as staff, owners and management, and external interests such as vendors, clients, government and society at large. The initial aim was to identify a method of capturing the ethos of an organisation in a manner which can be accessible to all stakeholders, both internal and external.

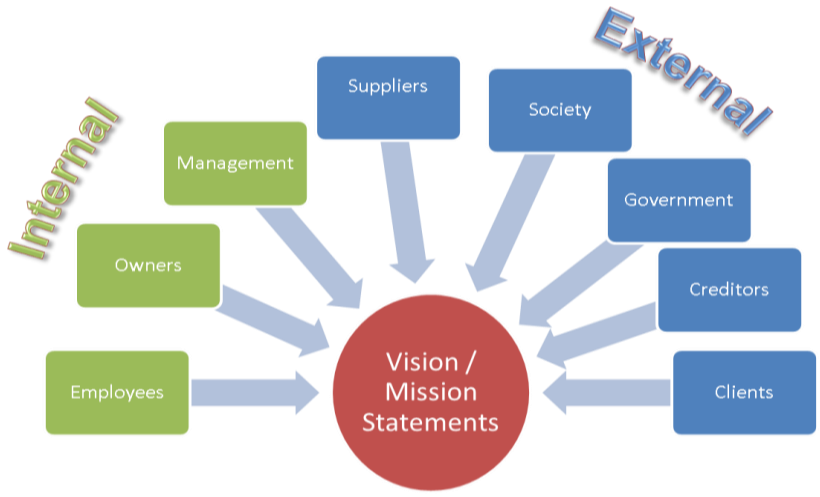

Figure 1-1 Stakeholders in Statement Development

1.2 Mission and Vision Statements

> *"I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to Earth"*
>
> John Fitzgerald Kennedy, 25th May 1961 (Gilruth, 1975)

The statement above is widely credited with giving focus and meaning to the US space programme and paving the way for the efforts which culminated in Apollo 11 commander Neil Armstrong stepping off the Lunar Module's ladder and onto the Moon's surface on July 20, 1969. It is considered an excellent example of an effective mission statement.

In the corporate world, the aims and objectives of companies or individual business units are commonly communicated using the mission statement. Mission statements have also, however, been employed in academia (Virginia Tech, 2013, University of Central Florida, 2005) and in not-for profit ventures (Hofstrand, 2009). Furthermore, Searight et al (2011) stressed the importance of individual undergraduates developing their own mission statements, and Lloyd-Jones et al (1998) demonstrated the potential that exists to use multidisciplinary groups to plan curricula in an educational environment.

The Sony Company had a clear mission stated at the outset by Masaru Ibuka, its founder (Davila et al, 2012). He described the mission in terms of three complementary aims:

1. *Establishing a place of work where engineers can feel the joy of technological innovation, be aware of their mission to society, and work to their hearts content.*
2. *Pursuing dynamic activities in technology and production for the reconstruction of Japan and the elevation of the nation's culture.*
3. *Applying advanced technology to the life of the general public*.

These clear, unambiguous directions captured the essence of the company and provided guidance for key decision makers within the organisation from the outset.

Collins (1996) distinguished *purpose* (here, vision) from specific *goals* in terms of timeframes: "*Purpose (which should last at least 100 years) should not be confused with specific goals or business strategies (which should change many times in 100 years)*".

A good mission statement aims to define a task clearly and concisely and inspire subsequent efforts. Radke (1998) asserted that an effective mission statement should address three questions:

- What are the opportunities or needs that we seek to address? (purpose of the programme)
- What are we doing to address these needs? (activities of the programme)
- What principles or beliefs guide this work? (values the programme should instil in staff / students)

Perkins (2008) felt that a mission statement should perform a number of tasks. It should send a message clearly and concisely, inspire, drive transformation, differentiate your market position, pull the organisation into the future, enable trade-offs (establish priorities), and guide daily behaviour. Jenkinson (2012) offered a useful distinction between mission statements which define "what's wrong with the world and how you intend to fix it" and vision statements which define "how the world looks after you've fixed it".

It was determined that the key output of this project would be a framework for collaborative development of vision and mission statements for an organisation, generated by a combination of internal and external stakeholders.

1.3 Participatory Design

The research described in this article used a participatory design approach (PD). PD was developed in 1970s Scandinavia, where researchers collaborated directly with workers in trade unions to design technology applications they would be using (Ehn, 1992). The aim was to align views and to empower workers rather than making them feel disenfranchised or replaced by new technologies. PD has since spread to many different industries, including medical device and service design (Kristensen et al, 2006; Gao et al, 2007.) and to social and political policy making.

At its core, PD is not a defined method but a philosophy for democratically making decisions that affect a variety of stakeholders. It affords organisations and communities the

opportunity to build systems, products, work structures - or in this case, aligned aims - from people's own experiences. Multi-stakeholder participation is crucial to PD and ensures that individuals and teams are equipped with the resources that enable them to act in their current work context.

2. Proposed Structure for Statement Development

An overall structure for stakeholder-centred statement development was developed for this study among academic staff of a higher education degree programme (Figure 1-2). This structure consists of the development of draft mission and vision statements on the basis of staff inputs, followed by evaluation of these statements by the various external stakeholders. The reasoning behind the order of these phases is that initial staff consultation can, at reasonably low cost, yield draft statements which act as a starting point for consultation with external stakeholders.

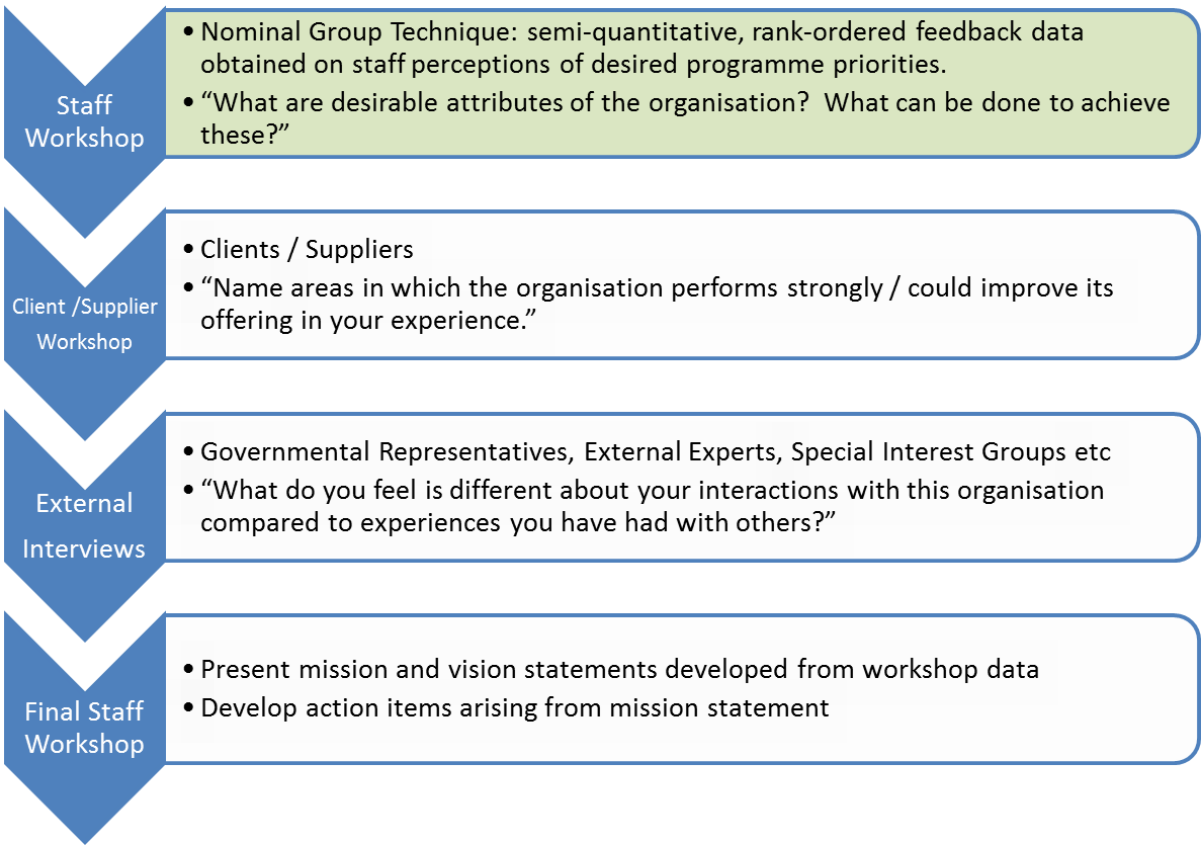

Figure 2-1 Proposed Programme Development Structure

2.1 Staff Workshop – Initial Vision and Mission Statement Generation

The Nominal Group Technique (NGT) is considered an appropriate information-gathering tool for staff workshops. NGT is a weighted ranking method which enables a group to generate and prioritize a large number of issues within a structure that gives everyone an equal voice. It been found to be useful in situations where individual ideas need to be elicited and ranked, but where group consensus is required. In this situation, using NGT neutralizes the domination of the loudest person, or the person with the most authority over the decision-making process.

The NGT process consists of seven distinct steps:

1. Presentation of evaluation questions to the group
2. Silent idea generation phase
3. Round-robin feedback phase
4. Discussion/item clarification
5. Voting and ranking phase
6. Group data gathering
7. Suggestions for action items arising from the strengths / weaknesses.

Part 1: Vision& Mission Statement generation

In the first part of the workshop, participants are asked to write five desirable attributes of the organisation. From these attributes will be defined themes for the next stage of the workshop. In the next stage of the analysis, the attributes defined by the participants will be gathered under common headings. The participants will then be asked to give points ranking from 5 to 1 to what they feel are the most important of the vision statement items. These points will be added for each item, giving a ranking of the various attributes (Table 1).

Part 2: Action Items

Participants will then be asked to choose one vision or mission statement item from each of the five themes. For these items, they will be required to state how the organisation currently addresses this attribute, and make a suggestion as to how the organisation could address it in future. This should result in the identification of action items for the organisation which are aligned with the mission and vision statement items.

2.2 Client /Vendor Workshop – Feedback on Draft Statements

Subsequent interactions with external stakeholders progress from similar focus group-type discussions with direct clients and suppliers of the organisation to individual conversations with external experts. The draft statements produced previously feed into these discussions, which are also run using the NGT technique.

2.3 Client /Vendor Workshop – Feedback on Draft Statements

The methodology chosen for contacting external experts was interviews, either in person or by telephone. Time and logistical pressures were thought to rule out the running of a group workshop with these individuals, and it is also felt that more candid feedback would be forthcoming in a one-on-one setting.

2.4 Final Staff Workshop –Closing the Loop

The final stage of the process is to feed back the modified mission and vision statements to the staff group, and to work with this group to develop action items which would facilitate the programme in aligning itself more appropriately to the statements.

3. Pilot Study

3.1 Academic programme context

The report of Ireland's Higher Education & Skills Strategy Group (Hunt, 2011) states that "more emphasis should be placed on the development of students' generic skills within Higher Education, especially those required for the workplace and for active citizenship." Leathwood & Phillips (2000) identified the drive in the Higher Education sector for "quality assurance, accountability for outcomes and capability of graduates". Combined, these observations suggest that a holistic approach to formulating a philosophy for individual programmes is appropriate in the current context. Our study proposed the development of a framework for identification of guiding principles for individual undergraduate programmes across the College.

The programme chosen to act as a pilot study in applying the initial phases of this framework is the Product Design bachelor degree programme. It was an appropriate choice for several reasons. Much attention has been given recently to the importance of undergraduate engineering programmes producing graduates who are comfortable operating at a high level in innovative organisations, working in a wide range of environments and in cross-disciplinary teams. The product design programme under study was an example of this type of multidisciplinary programme. Since its inception in 2005, it has been extremely successful, with students winning national and international awards and graduates moving on to successful careers in a variety of roles and sectors. Initially, this was the only Irish programme to address the intersection of Design Engineering and Industrial Design in this way. In the intervening time, however, several competing programmes have emerged in other technological institutes and universities. External evaluation of the programme raised the issue of its unique identity and the need to establish, foster and focus upon this, both in terms of student recruitment and also as a guiding principle for the programme's future development. Differentiating it from other offering had thus become a key aim for the programme.

3.1.1 Staff Workshop - Vision and Mission Statement Generation

Using the NGT technique described previously, participants were asked to write five desirable attributes of a product design graduate. They were given five broad themes for their contributions: Technical, Creative, Business, Social and Miscellaneous. The first three of these reflect the three broad subject areas covered in the programme, the latter two reflect generic graduate attributes which could be applied to other programmes (Figure 1-4). In the next stage of the analysis, the attributes defined by the participants were gathered under common headings. This resulted in 21 overall headings of graduate attributes. The participants were then asked to give points ranking from 5 to 1 to what they felt were the most important of the vision statement items. These points were added for each item, giving a ranking of the various attributes (Table 1).

Participants were then asked to choose one vision or mission statement item from each of the five themes. For these items, they were required to state how the programme currently addresses this graduate attribute, and make a suggestion as to how the programme could address it in future. This resulted in 63 suggestions for action items addressing 19 of the 21 vision items.

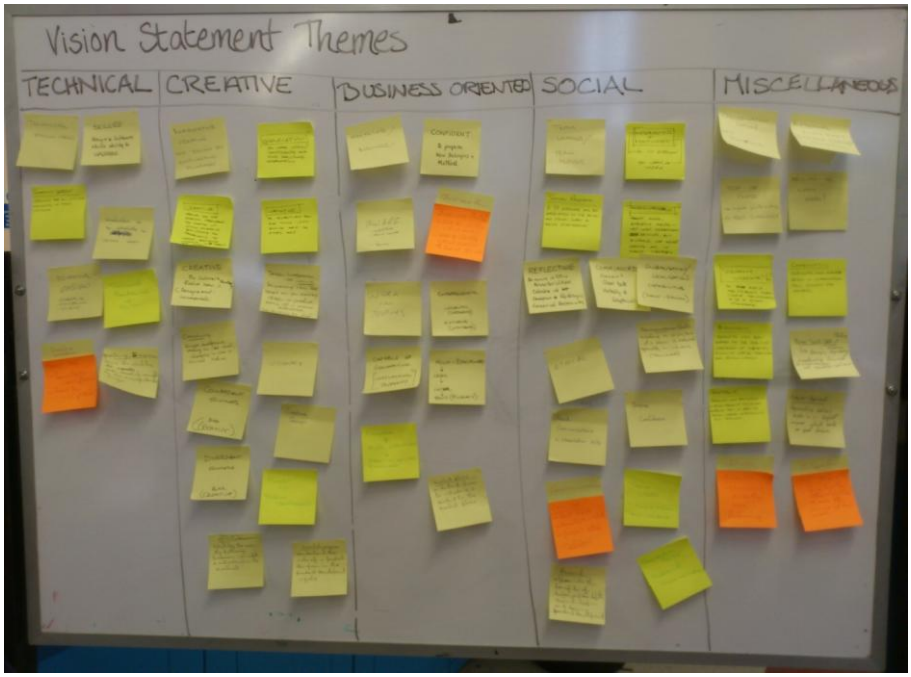

Figure 3-1 Contributions to Vision Statement Themes

3.2 Pilot Study Results

3.2.1 Ranked Attributes

Rank	Theme	Attribute	Importance
1	Technical	Technical Knowledge	37
2	Creative	Imaginative & Creative	34
3	Technical	Practical Skills	14
4	Technical	Integrated Approach	11
5	Miscellaneous	Motivated & Visionary	9
6	Miscellaneous	Presentation Skills	8
7	Creative	Problem Solving	7
8	Miscellaneous	Logical	7
9	Miscellaneous	External Experience	7
10	Creative	Look at big picture	6
11	Creative	Resourceful	5
12	Social	Flexible	5
13	Miscellaneous	Communication Skills	5
14	Business	Entrepreneurial	4
15	Social	Team Player	4
16	Business	Current & Relevant Knowledge	3
17	Business	Commercial Nous	3
18	Business	Business Plan Drafting	2
19	Social	Interested & Reflective	2
20	Social	Ethically Aware & Responsible	2
21	Social	Research Ability	2

Table 3-1 Graduate Attributes ranked by importance

3.2.1 Draft Vision & Mission Statements

Figure 2-4 shows the vision and mission statements generated for the Product Design programme. Text items which are drawn directly from the list of mission and vision items generated in the workshop are shown in bold.

DT001 B.Sc. Product Design

Vision Statement

Product design is a process which aims to create improved solutions to old, new and predicted problems. The development of successful products requires designers who can firstly work to understand an identified problem, and can then **imagine, develop and communicate** many diverse solutions before selecting one which is most appropriate. Designers also generate physical and virtual prototypes in order to **test, evaluate and improve** their designs. Effective product design involves the **integration** of **creative design thinking**, **technical skills** and **engineering knowledge**, **appropriate business practices** and **ethical & social considerations**.

Mission Statement

The DIT Product Design programme uses an **integrated approach** to teach mechanical, electronic, manufacturing and materials **engineering principles**, **creative thinking practices** and **entrepreneurial skills**. This **multidisciplinary** education fosters the development of **motivated, visionary** graduates who can apply **problem solving techniques** in a wide range of fields. The programme provides students with the **contemporary academic knowledge** and **relevant practical skills** that are needed to become leaders in the field of product design.

Strategies

- The programme is centred in **three distinct Colleges** within DIT: the College of Engineering & Built Environment, the College of Applied Arts & Tourism and the College of Business. This means that students divide their time between design studios, lecture theatres, computer and prototyping laboratories and meeting rooms. This rich environment produces **resourceful, flexible** graduates who understand the importance of products having **value to the user and society** as well as being **appropriate from materials, production and business standpoints.**
- From the outset of the programme, students are given open-ended briefs. These projects drive the development of their **critical thinking** skills, their ability to **look at the big picture** and their use of **logical** work processes to produce **creative solutions**.
- **Team** projects which focus on design for the community ensure that **ethical awareness** is engendered in the student, and that the programme produces **engaged and reflective** designers.
- Projects in which students are required to formulate **business plans** alongside developing their product ensure that **commercial considerations** remain a key factor in their **design thinking**.

Figure 3-2 Product Design Vision & Mission Statements

4. Discussion and Conclusion

Disparate teams or individual actors in an organisation do not always have the time or pressing requirement to come together to reflect on the larger meaning of their work and where it fits within the organisation. The participatory process outlined in this article not only attempts to align organisational aims among stakeholders, it also creates a temporary space for them to reflect on current practice, evaluate it together and develop possible future directions. One would hope that participants would leave having looked at the organisation through a wider lens than previously.

While the Product Design programme will be the first implementation of this approach, the framework developed will be equally applicable to organisations and programmes within a wide variety of settings.

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