

Developing Individual Willingness to Participate in Organisational Development: A Malaysian Case Study

MOHAMAD HISYAM SELAMAT
MUHAMMAD SYAHIR ABD. WAHAB
MOHD. AMIR MAT SAMSUDIN
*College of Business
Universiti Utara Malaysia*

ABSTRACT

Research has highlighted that organisational development (OD) is a complex issue as it requires the input of employees at all levels of an organisation. However, to obtain this is a challenge for organisations as the basic training and education offered by the organisations and experiences of the individuals on their own, and other factors such as fear and ignorance prevent such actions. For this purpose, other elements are also required. This research aims to identify and explain the usage of the elements that can encourage employees to contribute inputs necessary for OD. To achieve the aim, this research developed a conceptual framework based on the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse. To illustrate the application of the framework in a real life setting, a case study approach that involved a large manufacturing organisation in Malaysia was employed. From this research, it was concluded that the future focus for the OD should be toward the development of staff members and creating suitable organisational culture and infrastructure so that knowledge sharing is promoted.

Keywords: *Organisational development; tacit knowledge externalisation and sharing; conceptual framework; case study*

ABSTRAK

Kajian lepas mendapati pembangunan organisasi adalah satu isu yang kompleks kerana ia memerlukan input daripada semua peringkat pekerja. Input tersebut sukar diperolehi disebabkan oleh faktor-faktor seperti latihan yang disediakan oleh organisasi, pengalaman sendiri individu, perasaan takut dan sikap tidak ambil peduli pekerja. Oleh kerana itu, elemen-elemen pendorong amat diperlukan. Matlamat kajian ini adalah untuk mengenal pasti dan menghuraikan elemen-elemen yang boleh mendorong pekerja memberi input bagi tujuan proses pembangunan organisasi. Bagi mencapai matlamat ini, satu rangka kerja konseptual dibina berdasarkan kepada beberapa elemen iaitu memahami tugas organisasi, kekuatan dalaman, perbincangan formal dan tidak formal dan perbincangan rasional. Bagi menentukan sama ada rangka kerja tersebut sesuai untuk diamalkan ataupun tidak, satu kajian kes telah dijalankan dalam sebuah organisasi di Malaysia. Daripada penyelidikan tersebut didapati bahawa pembangunan organisasi pada masa hadapan perlu bermula daripada pembangunan individu dan pengwujudan budaya dan infrastruktur yang sesuai bagi proses perkongsian pengetahuan.

INTRODUCTION

In order for organisations to maintain a competitive edge, they must be capable of promoting continuous development (Senge, 1990). To achieve this, organisations must have well-developed core competencies, show continuous improvement, and have the ability to fundamentally renew or revitalise themselves. Many authors and researchers are coming forward to describe roles, skills, and tools necessary for a continuous development of organisations (Huber, 1991; DiBella, 1995; Nevis, DiBella, & Gould, 1995; Slater & Narver, 1995; Courtney, Croasdell, & Paradice, 1998; Malhotra, 2004).

It has been found that the human aspects of knowledge creation are critical for sustaining OD in order to facilitate inquiries based on divergence of meanings and perspectives (Courtney *et al.*, 1998). This is because an organisation's knowledge comes in part from the organisation's employees (Von Krogh, Ichijo, & Nonaka, 2000). To ensure the organisation is capable of promoting continuous development, the current knowledge that resides in an employee's brain needs to be externalised, documented, and adopted in daily organisational activities (Karhu, 2002; Beveren, 2002). However this process requires an individual's confidence and willingness to externalise, share, and document tacit knowledge because it is transparent and subjective in nature (Haldin-Herrgard, 2000).

To develop staff members' confidence and willingness to externalise and share tacit knowledge, this research proposes the elements of understanding organisational roles (DiBella, 1995), internal strengths (Schroder, 1989; Goleman, 1995; Butcher, Harvey, & Atkinson, 1997; Haldin-Herrgard, 2000), formal and informal discussions (Earl & Hopwood, 1980; Pedler, Burgoyne, & Boydell, 1994), and rational discourse (Klein & Hirschheim, 1996). These elements were selected as they consist of competencies that underpin and determine how and when knowledge will be practised within the organisation (Butcher *et al.*, 1997). These elements are combined in a manner such that a novel framework is formed, which is then applied in a real life setting using a case study approach.

To better understand the purpose of this research, research questions have been developed: "How do we include individuals in the organisation developmental process? Why use the elements of understanding organisational roles, internal strengths, formal and informal discussions, and rational discourse in order to include individuals in the organisation developmental process?"

When research is undertaken there are also benefits associated with it. For the industry, this research is beneficial as it will provide it with a guideline that explains how to embed staff members' knowledge and skills within the OD processes. For academia, the conceptual framework provides a theoretical and practical understanding of the integration of staff members into the OD process.

To familiarise the reader with this paper, a description of its structure is provided. The paper begins by offering an examination of the elements of understanding organisational roles, internal strengths, formal and informal discussions, and rational discourse in the OD and management literature. The management and OD literature are then surveyed for specific guidance in relation to tacit knowledge externalisation and sharing, and a framework synthesising the prior research is developed and presented. Following this, the research approach is outlined, which then leads to a description of the case study. The theoretical concepts and the conceptual framework are then studied in the context of an organisational setting. The paper then finishes with conclusions and suggestions for further research.

LITERATURE REVIEW

To understand how the externalisation and sharing of tacit knowledge and the elements of understanding organisational roles, internal strengths, formal and informal discussions, and rational discourse can be used to support individual-based OD, it is useful to have a fundamental understanding of the underpinning concepts. This is provided in the following subsections.

Organisational Development has to Start with the Individual

In practice, the primacy of individual impact has been increasingly recognised in organisational life. For instance, human resource systems have been developed to reward individual performance and initiative, and to tailor employment contracts to individual circumstances (Butcher *et al.*, 1997). In addition, individual managers are being asked to take responsibility for their own career management whilst the organisation provides them with opportunities to improve their employability (Butcher *et al.*, 1997). The advent of new and more accessible technology, the delayering of organisations and the painful process of empowerment has led to the expansion of discretion and responsibility (Butcher *et al.*, 1997). However, this growing significance of individual contribution to organisations has had little impact on OD (Butcher *et al.*, 1997). This research argues that this issue is primarily due to lack of willingness and a sense of responsibility amongst staff members to externalise, share, and document their tacit knowledge.

Tacit knowledge is an individual's intuition, beliefs, assumptions, and values, formed as a result of experience (Saint-Onge, 1996). Augier and Vendelo (1999) argued that due to its transparent and subjective nature, tacit knowledge is not easily externalised. Difficulties appear when expressing or documenting knowledge that appears obvious and natural to one (Haldin-Herrgard, 2000). Furthermore, the difficulties in externalising and sharing of tacit knowledge are also linked to language, time, value, and distance (Haldin-Herrgard, 2000). Alternatively, there are factors that prevent individuals from sharing their tacit knowledge or seeking clarification from colleagues and peers, including the lack of confidence, anxiety, unwillingness, confusion, and being carried away by strong feelings (Harvey & Butcher, 1998).

Generally, the above discussion identifies the main factors requiring consideration when attempting to continuously develop an organisation. Therefore, in order to obtain inputs from employees an understanding of how to encourage individuals to externalise, share, and

document their tacit knowledge is imperative. To achieve this, this research proposes the elements of understanding organisational roles, internal strengths, formal and informal discussions, and rational discourse in OD, which is discussed further in the next section.

Developing Individuals for Developing Organisations

Understanding the ability to externalise, share, and document tacit knowledge enables an organisation to undertake continuous development and consequently disseminate new insights for learning (Malhotra, 2004). This section presents an overview of the elements of understanding organisational roles, internal strengths, formal and informal discussions, and rational discourse that would be used as a means for developing employees' abilities to externalise, share, and document tacit knowledge.

To develop an organisation, it had been suggested that competencies should be generic rather than organisation specific (Butcher *et al.*, 1997). In this case, competencies are defined as individual characteristics which allow staff members to create and adapt specific knowledge and skills for specific situations (Butcher *et al.*, 1997). Additionally, competencies cannot be usefully specified in terms of neatly identifiable, observable, or measurable behaviours (Butcher *et al.*, 1997). In short, competencies should involve increasing self-knowledge and improving abilities which underpin and determine how and when knowledge and skills will be used.

This research has proposed the following elements that are required to develop the above competencies: (a) understanding organisational roles, (b) internal strengths, (c) formal and informal discussion, and (d) rational discourse. These elements were selected as they are more focused upon developing the employees' communication skills, assertiveness, and dealing with conflict, persuading others, and managing organisational politics, which are relevant to achieve the objective of this research. To acquaint the reader with the elements, the definitions, descriptions, and justifications of each element are provided in the following paragraphs.

This research asserted that employees need to understand three fundamental aspects when working in organisations: (a) personal responsibility, (b) task priority, and (c) personal targets (Choudrie & Selamat, 2005). This understanding is essential as it promotes the judicious use of accumulated experience and is beneficial when developing business. Therefore, this understanding should be emphasised when developing effective OD frameworks.

Furthermore, we proposed that eight internal strengths should be instilled within employees in order to develop abilities to effectively use knowledge and skills, and thus establish an environment conducive for continuous OD. These eight internal strengths were chosen as they enable the use of knowledge and skills in an effective manner.

The first internal strength that was proposed in this research is personal confidence. Personal confidence is a self-belief in undertaking and accomplishing organisational tasks (Harvey & Butcher, 1998). As one of the elements that prevents staff members from externalising and sharing their tacit knowledge is lack of confidence (Harvey & Butcher, 1998), this element should be emphasised when understanding an OD framework. The second internal strength proposed in this research is observing accepted organisational approaches. By observing accepted organisational approaches, staff members can undertake tasks based upon “the right approach for the right situation” (Srikantaiah & Koenig, 2000). As this internal strength promotes sharing information with, and obtaining clarification from, other parties, it needs to be emphasised in developing business (Karhu, 2002). Therefore, this understanding should be emphasised when developing effective OD frameworks.

The third internal strength was identified as undertaking tasks with commitment and self-discipline. The most important thing that every staff member has to bear in mind in the workplace is that “we must do the job”. Without these values, employees tend to undertake a job hastily and carelessly. This in turn would badly affect the quality of organisational operations. In short, this internal strength is the backbone of enabling knowledge and skills utilisation amongst

staff members. Therefore, this internal strength has the potential to enable a learning process thriving within the organisations and in turn, should be emphasised when developing effective OD frameworks.

The fourth internal strength was recognised to be self-awareness. Self-awareness is defined as “an ability to determine the tasks that need to be accomplished at the current time and accomplish the determined tasks according to an accepted organisational approach” (Butcher *et al.*, 1997). In other words, it is related to the phrase “do the right thing at the right time”. These processes involve actively sharing and externalising knowledge, and obtaining a clarification process from others. Therefore, self-awareness is a relevant consideration when establishing an effective OD framework.

The fifth identified internal strength was self-remembrance. For the purpose of this research, self-remembrance is defined as “the value that requires staff members to mind their actions when undertaking a task so that it can be accomplished effectively and to remember that through their effective actions the company can achieve a good profit and consequently give them a good salary and bonus” (Choudrie & Selamat, 2005). The combination of these two values can motivate a person and others to work hard and smart. From this description, it can be seen that self-remembrance enables staff members to actively utilise their knowledge and skills in the process of decision making. Therefore, this internal strength is applicable in the process of developing business and in turn an appropriate OD framework.

Compassion was viewed to be the sixth internal strength. In this research, compassion is defined as having “a feeling that the whole organisation is like a family” (Choudrie & Selamat, 2005). Each staff member should appreciate the other members’ efforts since all of them have the same aim and objective in terms of job security. Being equipped with this value, staff members can then trust each other and consequently neutralise the feeling that prevents them from sharing information with other members. This situation is critical in developing the business entity and therefore needs to be considered in this research.

To ensure that every employee has a feeling that he/she works for the sake of the company and for fulfilling his/her responsibility to the company, sincerity is considered pertinent. This is the seventh internal strength of this research. Sincerity can motivate employees to work collectively and harmoniously in the workplace. This scenario is critical in creating a learning environment within the organisation and therefore should be emphasised in this research.

Finally, employees must have the willingness to change whenever the need arises. This is due to rapid changes in the organisational life and business environment. This process is a continuous improvement in an organisation so that its competitiveness does not deteriorate. As willingness to change is related closely to OD, this value needs to be considered in this research.

Another element that was proposed by this research regarding staff member development is the ability to conduct formal and informal discussions within the organisation. This is because staff members face various tasks in daily activities – routine, non-routine, official, and unofficial (Earl & Hopwood, 1980; Malhotra, 2004). Formal approaches are procedures such as meetings, progress reports, and performance evaluation reports. Within organisations there are also instances of “chats around the water fountains” or “in the corridors”, which are also known as informal discussions. Other forms of informal approaches include, dialogue, face-to-face interaction, corridor meeting, lunch table chats, and coffee/tea table chats. Through good communication, learning and teaching activities can be undertaken actively amongst staff members. Therefore, this value should be emphasised in order to create an effective OD framework.

When considering the establishment of a platform in an individual’s mindset, particularly when developing an organisation, the presence of another element is required, which is rational discourse. A rational discourse can legitimise the selection of a design ideal because it ensures that the arguments of all interested parties are heard, that the choice results in an informed consensus about the design ideal, and the formal value choice is made only by the force of the better argument (Klein & Hirschheim, 1996).

These values are critical for developing the above competencies. In addition, they are able to promote active tacit knowledge externalisation and sharing amongst staff members, especially in meetings and dialogue. Therefore, rational discourse should be considered for establishing a platform in an individual’s mindset for developing an organisation.

From the previous discussion, it is declared that individuals are developed based upon the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse. This is something that prior research such as that by Butcher *et al.* (1997) had not undertaken. Additionally, the concept of individual development in this research is utilised for developing an effective OD framework. Therefore, for the first element of this research conceptual framework, an understanding of organisational roles, internal strengths, formal and informal discussion, and rational discourse is required.

Enabling Tacit Knowledge Externalisation

Based on the aforementioned discussion, it can be learnt that the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse can assist in building a confident and responsible individual (Choudrie & Selamat, 2005). These values, in turn, would create three important competencies, which are (a) influencing skills, (b) sharing attitudes, and (c) inquisitive tendencies (Choudrie & Selamat, 2005). In other words, influencing skills, sharing attitudes, and inquisitive tendencies are the second element of this research conceptual framework.

It was also found in the earlier sections that there are problems when developing the organisation, which is the need to develop an individual’s ability when externalising and sharing tacit knowledge. In such an instance, understanding organisational roles, internal strengths, formal and informal discussion, rational discourse, influencing skills, sharing attitudes, and inquisitive tendencies are the humanistic elements that should be considered when considering means of overcoming the difficulties in externalising

and sharing tacit knowledge. This is because by practising the above influencing skills, sharing attitudes, and inquisitive tendencies, individuals can generate creative ideas (I), actions (A), reactions (R), and reflections (R) (Choudrie & Selamat, 2005). The terms ideas, actions, reactions, and reflections represent forms of activities within an organisation. These activities then allow the externalising and sharing of tacit knowledge that can provide synergistic inputs for continuous development of organisations. Therefore, the I-A-R-R continuum is the third element of this research conceptual framework.

However, for this the tacit knowledge must be initially documented. This can be achieved by the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse (Choudrie & Selamat, 2005). The development of these elements results in the willingness to question implicit assumptions, explore new possibilities, and direct energies toward higher standards, and in turn enable the staff members to be well prepared, using good documented progress reports or working papers. In the long-term, this then ensures that there is a tangible means of the verification and validation of tacit knowledge. Therefore, tacit knowledge documentation is the fourth element of this research conceptual framework.

Reflecting on the above discussion, it can be determined that individual development is the starting point of an OD framework. Additionally, it can be learnt from the previous discussion that understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse should become the starting point for the individual development.

Developing Organisations

As earlier explained tacit knowledge must be documented. This knowledge is then transformed into explicit knowledge (e.g. through business reports, written descriptions or instructions). All self-documentation is then given to the system officers, such as information system manager, system analyst, system designer, or programmer. At this stage, the system officers study the documented inputs provided by staff members and codify them. By the time the inputs are

transformed into codified domains within the systems, they become information that assist staff members in fulfilling their responsibility. This is the fifth element of this research conceptual framework.

A Conceptual Framework

To understand the relationship between the earlier mentioned five elements, a diagrammatic representation has been developed, which is illustrated in Figure 1. As shown in the diagram, individual development is initially fostered by the elements of understanding organisational roles, internal strengths, formality and informality, and rational discourse. In this case, the first element of the framework is represented by Stage A in the diagram. The element of understanding organisational roles increases the motivation to work diligently and thoroughly in the organisation amongst the employees (DiBella, 1995; Choudrie & Selamat, 2005). This, in turn, increases the employees' concern with the relevancy of the provided information in order to accomplish organisational tasks. Therefore, the element of understanding organisational roles should be included in the organisation developmental framework.

The internal strengths earlier proposed by this research, personal confidence, observing accepted organisational approaches, undertaking tasks with commitment and self-discipline, self-awareness, self-remembrance, compassion, sincerity, and willingness to change were selected as employees equipped with these elements to determine how and when knowledge will be practised within the organisation, which is critical to the developmental process (Schroder, 1989; Goleman, 1995; Butcher *et al.*, 1997; Haldin-Herrgard, 2000; Choudrie & Selamat, 2005). These characteristics, in turn, increase the applicability of the proposed eight internal strengths in developing organisations.

Another element that was proposed by this research when developing individuals is the ability to conduct formal and informal discussions within the organisation. When equipped with the ability to conduct formal and informal discussions, it has been argued that staff members can read situations, understand and resolve problems, and consider a

range of options in a collective manner (Earl & Hopwood, 1980; Pedler *et al.*, 1994; Malhotra, 2004; Choudrie & Selamat, 2005). These values can highlight the need to continuously re-examine and modify the operations of the organisations. Therefore, the element of formal and informal discussions is beneficial to be included in the organisation developmental framework.

The final individual developmental element that was proposed by this research is rational discourse. Rational discourse was selected as whenever an OD is applied, it serves some human interests; therefore, the developmental approaches are made to serve some interests at the expense of others and involve moral value judgments (Klein & Hirschheim, 1996). This means that practical advice concerning the development of an organisation must not be limited only to the technical aspects, but also address moral issues, such as what is good or bad, or what is right or wrong in any particular application. Therefore, there is a need to establish a platform to approach such value judgments in a rational way.

As the elements of understanding organisational roles, internal strengths, formal and informal discussions, and rational discourse enable the use of knowledge and skills in an effective manner, they are pertinent for the development of influencing skills (Stage B), sharing attitudes (Stage C), and inquisitive tendencies (Stage D) (Butcher *et al.*, 1997; Choudrie & Selamat, 2005). These three stages represent the second element of the aforementioned theoretical framework. Being equipped with these competencies, staff members can face the difficulties in the externalisation and sharing of tacit knowledge, and in obtaining information from colleagues. Consequently this can provide externalised tacit knowledge for OD.

When undertaking influencing, sharing and inquiring activities, an individual implicitly expresses tacit knowledge. This expression is either in physical form (actions and reactions) or verbal form (ideas and reflection) (Choudrie & Selamat, 2005) (Stage E). This Ideas-Actions-Reactions-Reflections continuum provides externalised tacit knowledge for OD (Choudrie & Selamat, 2005). Stage E of the diagram represents the third element of the framework (as noted above).

However, the externalised ideas, actions, reactions, and reflections must initially be documented. This process is undertaken at Stage F and it represents the fourth element of the above theoretical framework. At this stage, the externalised tacit knowledge is documented and transformed into explicit knowledge (e.g. through business reports, written descriptions, or instructions). Knowledge documentation can be achieved by the value of self-documentation, which is also developed by the elements of understanding organisational roles, internal strengths, formal and informal discussions, and rational discourse (Choudrie & Selamat, 2005). This is due to the willingness to question implicit assumptions, explore new possibilities, and direct energies toward higher standards that enables the staff members to be well prepared, using good documented progress reports or working papers. All these self-documented facts in turn provide inputs for a continuous development of an organisation.

The documented inputs provided by staff members can be transformed into codified domains within the systems (system database) or compiled in files (Stage G). In turn these databases or files can be utilised to refine decision and develop strategies for future development. This is because the documented inputs enable the organisations to identify operational progress, to access new operational approaches, and to improve action through better inputs and ideas. Through this process, an individual's understanding of the organisation's activities (tacit knowledge) is also enriched. This new understanding in turn becomes a platform for continuous OD processes. In the diagram, this process is represented by Stage H. Stages G and H represent the fifth element of the aforementioned theoretical framework.

In this section, the framework for OD represents a framework for developing an organisation and was also used to guide the research process. The framework illustrates the elements that should be considered in order to create continuous development of an organisation. By developing and explaining this framework, this research answers the questions: "How do we include individuals in the organisation developmental process? Why use the elements

of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse in order to include individuals in the organisation developmental process?" What was also learnt from this research is that

the cooperation between individuals, the systems officer, and the organisation is also an important attribute to include in the process of developing the organisation.

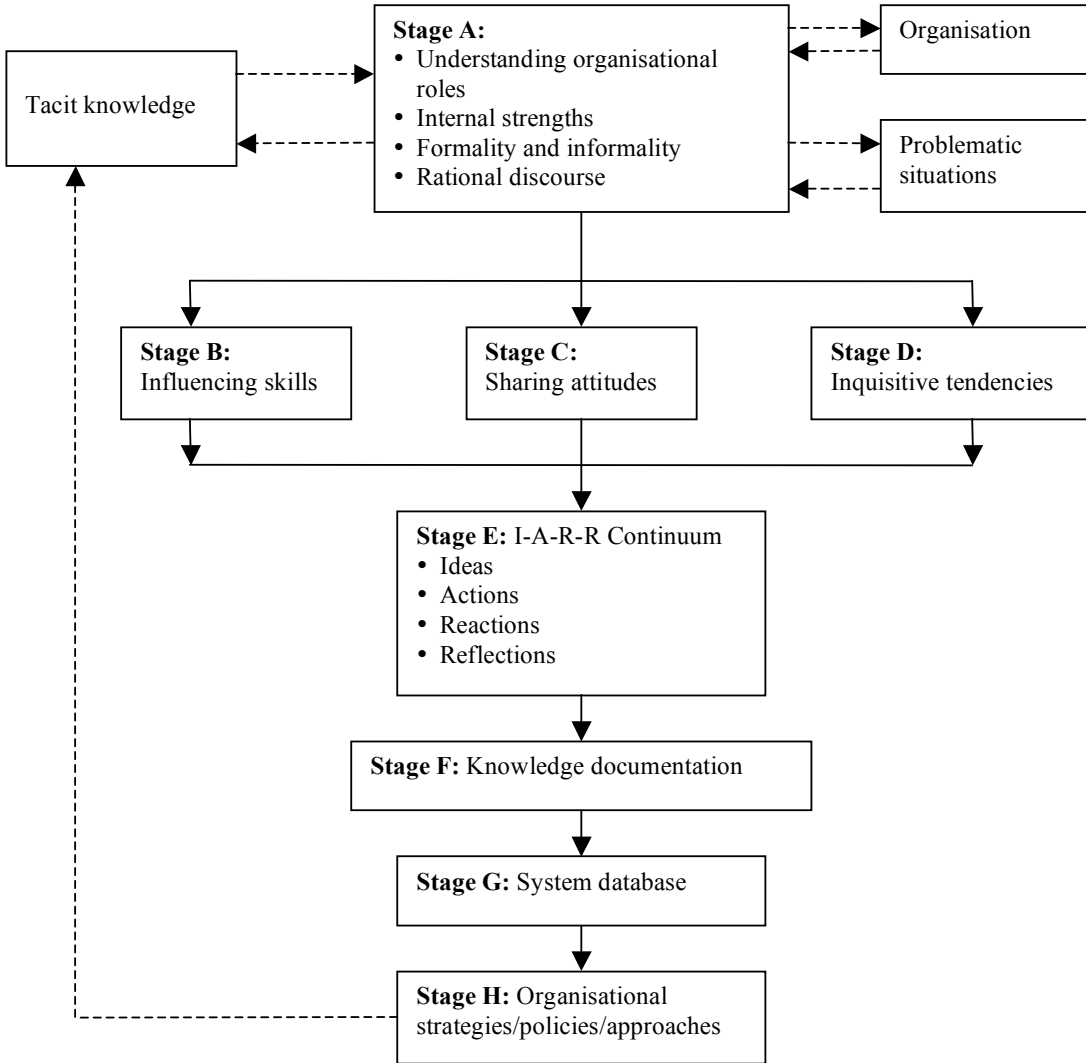


Figure 1
Framework for continuous organisational development

RESEARCH APPROACH

Although the aim of this research was clear, the novelty of the topic under study for the OD discipline meant that many of the questions were

unknown and would evolve over the duration of this project. This presented many challenges for the research process as the questions had to be grounded to the *real world*. Furthermore, as this research involved studying the behaviours

of employees, a deep understanding of the humanistic elements (Myers & Avison, 2002) was required. For this, a qualitative approach that involved data focusing more upon words (Miles & Huberman, 1994), rather than numbers was undertaken (Myers & Avison, 2002). An in-depth case study process was used and involved employing a large Malaysian organisation that was committed to the project; that is, full access and participation was offered to the researcher.

The research activities consisted of preparing a training module, conducting the training programme, and collecting data within a duration of approximately a year. In other words, this research was longitudinal in nature whereby data are collected in a time sequence that clarifies the direction as well as the magnitude of change among variables. The module contained descriptions of the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse, and was related to the concepts of OD amongst the respondents during the training programme.

The participants used in this research consisted of 31 engineers and 8 system officers. The engineers were selected as they were the critical group in ensuring the smooth operation of the plant; therefore their contribution to the organisation is of paramount importance. Alternatively, the system officers were selected because they were the critical group for information processing; therefore it was relevant to study the impact of the framework in information processing and consequently OD. The participants used the Centralised Maintenance Management System (CMMS). The engineers utilise CMMS to plan, organise, monitor, and update their maintenance activities, whereas system officers assist the engineer (in their department) in operating the CMMS. In other words, 39 (31+8) immediate stakeholders of the CMMS represented the population of this study.

Two months after the training session, face-to-face interviews were conducted. A two-month period was allocated to enable the progress review process, and the participants to understand and utilise the elements that were discussed in the programme. A face-to-face interview approach was utilised as it provided flexibility in the questioning

process, control of the interview situation, and provided the opportunity to obtain additional information, such as background information or natural reactions of the participants (Nachmias & Frankfort-Nachmias, 1996). The interviews were tape-recorded and transcribed on the same day. This approach was utilised to ensure that all the information and any further details that were imperative for this research were recorded and not missed out (Nachmias & Frankfort-Nachmias, 1996). The data were analysed by using a manual analysis process due to the small number of participants. In this case, the stories or texts were interpreted by eliciting the significant statements that could be detected in them.

DESCRIBING THE CASE STUDY

As stated earlier the research had identified several elements that are necessary for OD. However, they still lacked effectiveness, thus necessitating the need to incorporate the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse. This section of the paper describes the application of the framework in a real life setting. A large manufacturing organisation in Malaysia agreed to and was used for this research. The organisation has two plants with the headquarters being based in Kuala Lumpur. As a manufacturing company, one of the main activities of interest is establishing effective and efficient maintenance operations. The maintenance operations in Plant A are undertaken by six different departments: (a) instrumentation, (b) mechanical services, (c) water, (d) electrical, (e) crane, and (f) maintenance planning. Plant B, on the other hand, has two maintenance departments: (a) maintenance solutions and (b) utilities. Due to the increasing utilisation of machinery, any delays in repairing any machinery breakdown affects the production and consequently, product output.

To assist the management of the maintenance activity, the company developed CMMS. Instead of recording and processing maintenance data, CMMS is also utilised to perform maintenance planning. Therefore, in

every maintenance department, there is a system officer responsible for CMMS and accountable to the IS department.

An interview with the management personnel of the organisation revealed that there was a gap between the production, maintenance, and materials departments. The production department blamed the maintenance department for any delays in production due to machine breakdown or ineffective maintenance operations. Contrastingly, the maintenance department members attributed delays to the ineffective materials management that subsequently caused the unavailability of spare parts. The materials department, as predicted, blamed the vendor and last-minute details of orders being provided, for its incapability to provide the spare parts on time. Such instances have resulted in creating havoc in the plant's operations. From the analysis, it was found that the main factors that contributed to this phenomena are the lack of communicating effectively amongst the employees and the sense of responsibility during the decision making process.

After identifying the causes of the problems, a discussion was held with the human resource director to determine a solution to the above issues. This was also undertaken bearing in mind the research question and aim of this research. During the meeting, the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse were shared and described. The employees were also emphasised on the importance of those elements within the organisation, and tacit knowledge sharing and externalisation. The impact of that process for organisational development was also highlighted. After the meeting, the director agreed to participate in a research training programme. For this purpose, the above 39 immediate stakeholders of the CMMS were selected. The following section explains more of the training programme's details.

The Training Programme

The training programme was undertaken after understanding the background of the research site. Before the training programme could commence preparation was conducted for the

following: (a) programme materials such as the modules, presentation slides, and programme outline; (b) undertaking the programme and (c) undertaking the progress review.

To prepare the module, the researcher undertook an intensive library research at Universiti Utara Malaysia and referred to some materials from the Cranfield University General Management Programme, and Butcher *et al.*'s (1997) developing businesses through developing individuals' research reports. These sources were referred to because they provided basic descriptions and definitions of developing individuals, which were essential in determining the elements that were relevant in developing organisations. The module was based on the acquisition of understanding organisational roles, internal strengths, ability to handle formal and informal discussion, and the ability to conduct rational discourse. Based on the completed module, the presentation slides and programme outline were then prepared.

The training programme was underpinned by seven competency sets: (a) understanding organisational roles, (b) internal strengths, (c) formal and informal discussion, (d) rational discourse, (e) influencing skills, (f) sharing attitudes, and (g) inquisitive tendencies. The first four sets were groupings of specific competencies that were pertinent for developing the ability to determine how and when knowledge would be practised within the organisation. The remaining three sets were groupings of specific competencies that were pertinent for the externalisation and sharing of tacit knowledge. In short, the programme was based on the acquisition of knowledge about an individual's competencies to deal with conflict within an organisation. The number of training days for each plant was limited to six days due to the policy of the company on industrial training.

The programme incorporated a variety of features and activities to enhance the learning experience and maximise the personal benefits. These included: (a) interactive lectures, (b) syndicate group work, (c) work on live business and IS issues, (d) profiling questionnaires, (e) case studies, (f) one-to-one tutorials or coaching, (g) individual work, and (h) a one-day follow up.

On the final day of the programme, the participants constructed a comprehensive one-month action plan, such as the targeted number of machinery breakdowns and the targeted length of repairing services. This formed the basis of the progress review. Generally, for the progress review, the researcher met the research participants individually in order to further develop the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse by discussing their achievements on the targeted actions. The implication of the training programme was that it developed individuals' motivation, and willingness to externalise and share their tacit knowledge effectively. It has been suggested that being equipped with these elements enables staff members to provide ideas or views (inputs) for a continuous re-examination and modification of CMMS (Choudrie & Selamat, 2005). Being continuously updated, it has been argued that CMMS can promote OD because staff members can gain new insights in performing tasks (Choudrie & Selamat, 2005). This is due to the current information or contents that the system has. This relationship, in turn, could answer the research questions of this research, which are as follows: "How do we include individuals in the organisation developmental process? Why use the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse in order to include individuals in the organisation developmental process?"

Two months after the training programme, the data collection assessing the value of the conceptual framework in practice commenced. The next section describes the findings.

Discussion of the Data

From the aforementioned discussions, the researcher wanted to investigate whether the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse can develop influencing skills, sharing attitudes, and inquisitive tendencies in the research participants' mindsets. In addition, the researcher wanted to investigate the impact of influencing skills, sharing attitudes,

and inquisitive tendencies on tacit knowledge externalisation and OD. The answers for these research questions are offered in the following subsections. The discussion of the following subsections will follow the functioning of the framework illustrated in Figure 1.

Influencing Skills, Sharing Attitudes, and Inquisitive Tendencies

From the received responses there was an indication that there was an occurrence of change across all the seven competency sets of the individual development process. With regard to the influencing skills, the interviewed participants indicated improvements. For example:

After the course, I was able to improve my influencing skills. I lead one team in my department and I want it to be the best. To achieve this goal, every unit member should also appreciate it. Before this, teamwork in my unit was not so good. After the programme, I started playing an important role in instilling this understanding amongst my staff. All the problems were settled in the meeting. Thank God, it was a most fruitful strategy. Everybody has started to work together now.

Mr. A

The main thing I learnt from the course was the importance of having a good relationship between staff members. Before this, I was sceptical about doing a job together and communicating with others. Maybe they have political reasons for doing such things. However, I managed to gradually overcome this feeling.

Mr. B

From the above statements it can be learnt that Mr. A and Mr. B experienced a significant development of communication skills and a willingness to persuade others. These values helped them to effectively utilise knowledge and skills in order to influence others in the organisation. In other words, they experienced a significant

development of influencing skills (Butcher *et al.*, 1997). This development illustrated that the training programme had successfully developed the research participants' influencing skills.

As well as this, the research participants significantly commented on the development of sharing attitudes. For example:

On returning from the programme, I felt that all the staff members were like one big family. It is my responsibility to help others, share the information that I possess and establish a good relationship with others.

Mr. C

The programme not only developed myself but also my unit members. After the programme, I had the strength to explain the right way in undertaking the designated jobs to all my staff. Before this, they just followed their gut feeling in undertaking tasks, which normally ended with a low level of quality. At the moment, the situation is improving day by day.

Mr. D

From the above statements, Mr. C and Mr. D highlighted the ability to inform others about the need for changes or improvement. This ability helped them to explain everything that needs to be undertaken during the operations to others. All these abilities, in turn, develop their sharing attitudes (Choudrie & Selamat, 2005). This development illustrated that the training programme had successfully developed the research participants' sharing attitudes.

With regards to the inquisitive tendencies, the research participants indicated improvements as a result of the program. For example:

From an active communication programme that I promoted in my unit after the programme, my staff were not hesitant to meet me for any technical or non-technical assistance. I tried my best to assist them and, if I thought that it was not under my expertise, I referred them

to the right person, but still under my supervision. So... yeah... through asking activities, the work could be undertaken smoothly. Furthermore, we should learn from many experts, not only ones specific to the nature of the problem.

Mr. E

The course has changed my behaviour from timid to friendly. Before this I was not very sociable. After delegating the tasks to my subordinates, I would concentrate on my own work. But after the course I always meet my subordinates to ask about work progress, problems and internal feeling due to heavy work burdens. In addition, I became confident in facing my colleagues in the meeting and expressed my views if necessary.

Mr. F

The aforementioned empirical results demonstrate a significant development of Mr. E and Mr. Fs' ability to ask others more effectively. This ability helped them to undertake tasks according to the accepted procedures. In other words, they experienced a profound development of inquisitive tendencies (Butcher *et al.*, 1997). Therefore, it can be learnt that the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse are capable of developing inquisitive tendencies in this research.

To recapitulate, the aforementioned empirical results demonstrate a significant development of influencing skills, sharing attitudes, and inquisitive tendencies. This verified that the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse are capable of developing influencing skills, sharing attitudes, and inquisitive tendencies. These findings illustrate that stages A, B, C, and D of the research conceptual framework (as illustrated in Figure 1) have been achieved. In other words, the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse had successfully developed influencing skills, sharing

attitudes, and inquisitive tendencies in the research participants' mindsets.

At this point, the impact of the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse on the development of influencing skills, sharing attitudes, and inquisitive tendencies have been discussed. However, the externalisation of tacit knowledge has not yet been investigated. For this, the next subsection will describe the externalisation of tacit knowledge through the medium of ideas, actions, reactions, and reflections.

Externalised Tacit Knowledge: Ideas, Actions, Reactions, and Reflections

One of the greatest issues of concern in this research was improving the research participants' ability to externalise their ideas. The following example offers an overview of the improvements described by the research participants:

After the programme, expressing ideas has become a norm in my daily activities. However, I will also encourage others to do the same. If the ideas come from only one source, it is risky, because every idea has its weakness. So, before making a decision, I will listen to and understand other people's ideas so that a comparison could be made. This strategy is much safer than relying on one source of ideas.

Mr. G

By influencing, sharing and asking, I was able to get feedback from my colleagues for the sake of work improvements. Although I know exactly how to do it, by practising such things indirectly I was able to create synergy in my unit because everyone contributes to ideas in order to achieve unit's goals.

Mr. H

Mr. G and Mr. H highlighted the ability to externalise ideas. In this case, they mentioned the importance of sharing their ideas with others in the workplace. Therefore, it can be seen learnt

that the training programme had successfully developed the research participants' ability to externalise ideas.

With regard to the actions and reactions, the following is the example that illustrated the participants' ability to externalise and express them:

By observing what I seen from the programme, I was able to rationalise my working style and consequently improve its effectiveness and efficiency. Having an idea of the work of 10 people is much better when improving our actions and reactions.

Mr. I

When I know that my worker is behaving in a particular way, I will approach him according to that personal value. By practising this, I am able to tackle problems in the site smoothly. In addition, I know how to delegate work appropriately, based on my staff's abilities and constraints. This program was really helpful in creating this culture and I started to spread it gradually in my unit.

Mr. J

The above empirical results revealed that Mr. I and Mr. J described changes in an ability to perform ideal actions and to change their perceptions or working techniques in order to cope with changes in the environment (reaction process). From the responses, it can be learnt that they were able to delegate, empower their staff, contribute to cross-functional decisions, and improve important working relationships. This value, in turn, enabled an active re-examination and revaluation process of the needed information. In turn, this development illustrated that the training programme had successfully developed the research participants' ability to generate actions and reactions in the workplace.

As a result of the training programme, the participants described changes in their ability to reflect upon problems and, in turn, determine a suitable solution. These changes were the result of the participants' responsibility and awareness

to improve their organisation. They reported being able to sift and prioritise information, evaluate problems from multiple points of view, and determine “the right thing at the right time.” For example, one of the participants stated that he never consulted his subordinates. If there was any issue, it remained in his mind and therefore all he did was convey instructions to subordinates so that customers’ order could be delivered on time. However, after the programme he began to interact with his staff and discussed the problems in the plant using face-to-face meetings. As a result, many personal conflicts in the plant were resolved and the teamwork was improved. In other words, the research participants are better equipped to navigate the dynamic organisational environments and influence effectively within them. The examples are as follows:

By asking somebody, I knew how to solve problems effectively and knew the correct contact person. I faced so many types of problems before including human-related problems. All of these needed acute responses, and communication was the safest approach to be utilised. This was what the programme had significantly helped me with.

Mr. K

Influencing, sharing and inquiring activities are like an early warning system. Through all these activities, I was able to detect working problems earlier and thereafter seek preventions or accordingly corrected the plan. As a result, my unit recently received appreciation from the bosses.

Mr. L

From the above statements it can be learnt that Mr. K and Mr. L experienced a significant development of the ability to reflect upon problems and, in turn, determine a suitable solution. This ability helped them to effectively utilise knowledge and skills in order to reflect problems in the organisation. This development illustrated that the training programme had successfully developed the research participants’ ability to effectively reflect upon problems.

The above results illustrating the ideas, actions, reactions, and reflections formulation represent the ability of the participants to effectively externalise and sharing of their tacit knowledge. This was further supported by three findings. The first was that the participants were motivated to share their work progress with others. In this case they were not restricted to asking only the CMMS officers for any specific technical assistance. Secondly, the participants were actively involved in documenting their ideas, actions, reactions, and reflections. These documented inputs were then shared with the system officers for the purpose of updating the CMMS. This iterative link between the users and systems enabled synergistic inputs to be provided for continuous CMMS development. Thirdly, the CMMS officers described undertaking sole responsibility and an awareness for updating and utilising the contents of CMMS. Updating and utilising the CMMS’s contents, in many cases, involved having active communication and face-to-face meetings with the users. All these changes enabled CMMS to obtain new inputs and, as a result, to be able to provide current progress of the maintenance jobs to the users (stages E and F of Figure 1).

Implicit in the above findings was that the elements of understanding organisational roles, internal strengths, formal and informal discussions, rational discourse, influencing skills, sharing attitudes, and inquisitive tendencies did provide a platform to the participants for externalising their tacit knowledge in a creative and spontaneous manner. This was evident from the ideas, actions, reactions, and reflections that they documented and shared with other staff members. Therefore, it is declared that stages E and F of this research conceptual framework (as illustrated in Figure 1) have been substantiated.

When relating the above tacit knowledge externalisation issue to OD, all the participants agreed that there could be a basis for improving daily activities. In this case, there was a significant relationship between the documentation of the externalised tacit knowledge with the continuous development of an organisation. The statement made by the one of the engineers was the best example of this issue:

The course gave me guidance on how to build a good relationship with others in my department. Before this, when I got a complaint I always considered the others' views from the negative side, such as "they are trying to blame me or damage my reputation". But after the course, I had a positive outlook of them and was also willing to collectively solve the problem.

The aforementioned results supported stages G and H and tacit knowledge development of this research conceptual framework (as illustrated in Figure 1), which is that the externalised and shared tacit knowledge led to OD through daily task improvement.

From the above discussion it is clear that the development of the elements of understanding organisational roles, internal strengths, formal and informal discussion, rational discourse, influencing skills, sharing attitudes, and inquisitive tendencies can assist in developing an organisation. This is because they create a willingness amongst the staff members to provide knowledge-based inputs to the organisation. These inputs, in turn, enable a continuous development of an organisation, given the changing reality. Continuously challenging the current *company norm*, such scenarios are expected to prevent the core capabilities of yesterday from becoming the core rigidities of tomorrow (Malhotra, 1997). By obtaining access to that current company norm and internalising them, the staff members can improve their actions through better knowledge. Consequently, tasks can be undertaken effectively for organisational development. Therefore, at this point it has been declared that the conceptual framework used in this research can be applied to continuously develop an organisation.

CONCLUSIONS

There are many humanistic elements that prevent individuals from externalising, expressing, and sharing their tacit knowledge such as, lack of confidence, anxiety, unwillingness, confusion, and being carried away by strong feelings. This

problem is critical in the process of developing an organisation as the involvement and the participation from the staff members are of paramount importance. This research attempted to shed a light on this matter by focusing on the elements that can encourage individuals to participate in the process of developing the organisation. To undertake this, two research questions were proposed that are as follows: "How do we include individuals in the organisation developmental process? Why use the elements of understanding organisational roles, internal strengths, formal and informal discussions and rational discourse in order to include individuals in the organisation developmental process?" In other words, this research has attempted to recognise and capitalise on the critical role that individual development plays in OD.

To achieve the aim of studying the elements that can encourage staff members to contribute inputs for OD, this research developed a conceptual framework based on the concepts of tacit knowledge externalisation and sharing. Tacit knowledge externalisation and sharing, in turn, are enabled by using the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse. To enable validation of the above research issues, an in-depth, longitudinal case study was presented.

From the undertaken research, it was found that the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse enabled the development of influencing skills, sharing attitudes, and inquisitive tendencies. These abilities, in turn, improved the participants' responsibility and awareness to externalise and share their tacit knowledge effectively. By documenting the externalised and shared tacit knowledge, the research participants can provide inputs to the management for improving daily operations (Choudrie & Selamat, 2005). Continuously improving the current company norm, such approach is expected to prevent the core capabilities of yesterday from becoming the core rigidities of tomorrow. In short, an active involvement of staff members in contributing views or ideas enables organisational strategies, policies, and approaches subject to continual re-

examination and modification given a changing environment. These findings illustrate that the research questions of this research has been successfully answered. Therefore, the main focus of this research for OD should be toward individual development that develops a willingness to contribute ideas that further develop an organisation continuously.

The elements of understanding organisational roles, internal strengths, formal and informal discussion, rational discourse, influencing skills, sharing attitudes, and inquisitive tendencies can also be used to assist organisations to harness their staff members' expertise in the system. This is due to the fact that tacit knowledge remains the property of a human being (Tsoukas, 2002). Such knowledge is lost when staff members leave the organisation. It is suggested that being equipped with these elements enables staff members to provide ideas or views (inputs) for a continuous re-examination and modification of IS. Through this process, the organisations can establish an effective knowledge management system and can solve the problem of *reinventing the wheel*.

A limitation of this research is that it was undertaken in Malaysia, therefore it is restricted to a certain context associated with Malaysia. This includes the elements of culture, faith, perception, values and norms, which may be different in that country. Therefore, a future direction that this research can take is to examine the application of this framework in a different context and determine how much would be relevant in that instance. Another limitation of this research is that this research could only be undertaken in OD due to the time restrictions. This limitation can be overcome in the future by extending the contexts to other areas such as systems development, organisational planning, and control strategies. By doing so, there would be a benefit by obtaining an understanding of the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse. This is achieved by encouraging people to contribute inputs for developmental processes. All these areas have the potential to be introduced to the elements of understanding organisational roles, internal strengths, formal and informal discussion, and rational discourse, since they are bound to

a human being's awareness and willingness for successful implementation.

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