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ANNEXURE A

RESEARCH QUESTIONNAIRE

PROJECT MANAGEMENT SURVEY

PREFACE

I wish to thank you for your participation in this research project. The questionnaire you are about to complete forms part of the empirical research for a doctorate in business administration. This research is being done to determine if and how formalized project management could be implemented in departments or administrations of the public sector who are involved in construction activities by which building accommodation is provided.

SUGGESTIONS FOR COMPLETION OF QUESTIONNAIRE

1. Please note that your response is anonymous and will be treated in absolute confidentiality.
2. The questionnaire comprises four parts (PARTS A,B,C and D) and would take approximately 20 to 30 minutes to complete.
3. Where applicable, definitions of terms and specific assumptions are included to facilitate your response. Some general definitions have been included at the end of the questionnaire.
4. Should your department or administration wish to receive a copy of the final research report, you are welcome to write to Mr Louis P. Krüger at P.O. Box 35282, Menlo Park, 0102.

PLEASE NOTE THAT THE TERMS "DEPARTMENT" AND "ADMINISTRATION" ARE USED INTERCHANGEABLY THROUGHOUT THIS QUESTIONNAIRE



INDICATE YOUR ANSWER BY MARKING [X] IN THE APPROPRIATE BOX

PART A - GENERAL CLASSIFICATION

- 1.1 Please indicate the **managerial position** you currently hold in the department or administration:
- Top-level manager (directors and above) []
 - Middle manager (deputy and assistant directors) []
 - Functional manager (below assistant director) []
 - Other (please specify) ----- []
- 1.2 For **how many years** have you worked in a department of the public sector ? [] []
- 1.3 Please indicate your **professional status**:
- Architect []
 - Engineer []
 - Quantity surveyor []
 - Other (please specify) ----- []
- 1.4 Please indicate your **highest formal qualification**:
- Degree []
 - Diploma []
 - Other (please specify) ----- []

PART B - GENERAL ORIENTATION TO PROJECT MANAGEMENT

- 2.1 Is project management currently being **applied** in your department? [Yes] [No]



2.2 To **what extent** is project management being applied in your department?

- It is applied as an approved formal policy. []
- It is applied informally but not as a formal policy. []
- It is not applied either formally or informally. []

2.3 Indicate the **general attitude** towards project management of ...

	POSITIVE	NEUTRAL	NEGATIVE
Your department			
Your own attitude			

2.4 Indicate your **general knowledge** of project management with regard to its ...

	GOOD	AVERAGE	LIMITED
Concepts and philosophy			
Techniques - such as PERT/CPM			

PART C - MANAGEMENT OF CHANGE

WHEN ANSWERING THE QUESTIONS IN PART C - ASSUME THAT PROJECT MANAGEMENT IS CURRENTLY NOT BEING APPLIED IN YOUR DEPARTMENT OR ADMINISTRATION

3.1 What are the **chances of successfully** implementing project management if **no changes** were made in the way the department currently operates?

- A small chance of success (0 - 24 %). []
- A limited chance of success (25 - 49 %). []
- A reasonable chance of success (50 - 74 %). []
- A good chance of success (75 - 99 %). []



3.2 How would you judge the **past performance** of your department in terms of its ...

	GOOD	AVERAGE	POOR
Meeting the department's objectives.			
Efficiently utilizing department's resources.			

3.3 Are there **disrupting forces** (either from inside or outside your department) which you believe restrain its optimal performance? **[Yes] [No]**

3.4 Should such disrupting forces be present, are some **adjustments inside** the department necessary to maintain or improve its performance? **[Yes] [No]**

3.5 Which **one** of the following provides the **greatest stimulus** for change inside your department?

- External forces - political events, economic conditions.
- Internal forces - new policies, lack of resources.

3.6 What is the **general attitude** of your department towards change?

Changes are generally	[embraced]	[resisted]
Changes are initiated	[frequently]	[infrequently]

3.7 Would implementing project management **contribute** to a solution to deal with some of the disrupting forces which affect your department? **[Yes] [No]**

3.8 How **many changes or adjustments** would be needed in order to implement project management effectively and efficiently in your department?

- Many changes would be needed.
- Some changes would be needed.
- No changes would be needed.



3.9 Should project management be implemented in your department, which of the following statements would you consider to be **true**?

- Substantial time is needed. [True] [False]
- Extensive change would be indicated. [True] [False]
- General attitude of personnel is unfavourable. [True] [False]
- Outside consultant is best to manage implementation. [True] [False]

3.10 Which of the following would have the **greatest priority** for change in order to implement project management in your department? (Indicate the order with 1 = highest priority; 2 = second priority; 3 = third priority and 4 = lowest priority)

- Functions, tasks and responsibilities of personnel. []
- Control and decision procedures inside the department. []
- Overall direction and objectives of the department. []
- Attitudes of individuals and groups in the department. []

3.11 Which of the following methods would be **most appropriate** to implement project management in your department? (Indicate the order with 1 = most appropriate; 2 = second choice; 3 = third choice and 4 = least appropriate)

- | | |
|--|-----|
| ■ Technological method where implementation is achieved through new equipment and techniques. | [] |
| ■ Structural method where implementation is achieved through modification of organizational structure and reporting relationships. | [] |
| ■ Managerial method where implementation is achieved through changes in administrative systems such as remuneration systems. | [] |
| ■ Human-oriented method where implementation is achieved through education and training of personnel. | [] |



3.12 Which of the following change policies would be the **best suited** to implement project management?

- | | |
|--|-----|
| ■ A policy where some of the changes which are needed are gradually phased in over an extended period. | [] |
| ■ A policy where all the changes which are needed are immediately implemented in aggregate fashion. | [] |

3.13 Which of the following strategies would be **most appropriate** to implement project management in your department? (Indicate the order with 1 = most appropriate; 2 = second choice; 3 = third choice and 4 = least appropriate)

- | | |
|---|-----|
| ■ Facilitative strategy (is used where personnel generally accept the need for project management but additional resources may be needed to facilitate the implementation). | [] |
| ■ Informational strategy (is used where personnel do not understand why project management is necessary and information regarding the implementation needs to be conveyed to them first). | [] |
| ■ Attitudinal strategy (is used where personnel have a negative outlook towards project management and their attitudes will need to be changed before implementation). | [] |
| ■ Political strategy (is used where personnel will not readily accept project management and implementation will have to be forced upon them). | [] |

3.14 Which of the following activities are the **most critical** elements for implementing project management? (Indicate the order with 1 = most critical; 2 = second most critical; 3 = least critical)

- | | |
|--|-----|
| ■ Feasibility study prior to implementation of project management. | [] |
| ■ Actual implementation of project management. | [] |
| ■ Supporting the implementation of project management. | [] |

3.15 Which of the following people would be **best suited** to fulfil the listed role if project management was implemented? (Indicate the order with 1 = best suited; 2 = second choice; 3 = third choice and 4 = least suited).

	Change manager	Change agent	Change target
Top-level manager			
Middle-level manager			
Functional manager			
Project manager			

The following definitions apply to this question:

Change manager is the person who generally oversees the efforts to implement project management.

Change agent is the person who designs and conducts the strategy to implement project management.

Change targets are the people who will actually implement the changes needed for project management.

3.16 Which of the following sources of resistance are the **greatest barrier** to implementing project management in your department? (Indicate the order with 1 = greatest barrier; 2 = second greatest barrier; 3 = smallest barrier)

<ul style="list-style-type: none"> ■ Barrier to acceptance (where personnel do not believe that there is a need for project management and do not accept it being implemented). 	[]
<ul style="list-style-type: none"> ■ Barriers to acting (where personnel accept that there is a need for project management but do not possess the necessary skills or resources to actually implement it). 	[]
<ul style="list-style-type: none"> ■ Barriers to understanding (where personnel do not understand the need for or consequences of implementing project management). 	[]

3.17 Do you think that project management as a formal policy could **easily fit in** with "the way things are done in the department" and "the way people think and act"? **[Yes] [No]**



3.18 Will the existing organizational structure in the department need to be **modified or changed** in order to accommodate implementing project management? [Yes] [No]

3.19 Which of the following would be the **best means** to ensure that once project management is implemented, it remains effectively and efficiently applied? (Indicate the order with 1 = best means; 2 = second choice; 3 = third best means)

- Departmental structure accommodating project management. []
- Direction and support from managers in the department. []
- Positive attitude and actions of personnel. []

3.20 Which of the following managerial assignment positions would be the **most effective** to oversee the implementation project management? (Indicate the order with 1 = most effective; 2 = second choice; 3 = least effective)

- | | |
|---|-----|
| ■ Managers should be appointed from outside the department to oversee the implementation of project management. | [] |
| ■ Managers within the department are used to oversee the implementation of project management. | [] |
| ■ Managers within the department should be retained but new managers must be appointed to provide assistance with the implementation. | [] |

PART D - FORCE FIELD ANALYSIS OF PROJECT MANAGEMENT

WHEN ANSWERING THE QUESTIONS IN PART D - ASSUME THAT YOUR DEPARTMENT OR ADMINISTRATION HAS DECIDED TO IMPLEMENT PROJECT MANAGEMENT AS A FORMAL POLICY (OR HAS ALREADY DONE SO) IN DIVISIONS WHICH DEAL WITH PROJECTS

4.1 Indicate the **relative importance** of the following factors which may **contribute** to the implementation of project management.

CONSULT THE KEY AT THE TOP OF EACH PAGE WHEN INDICATING YOUR ANSWER



KEY: +++ very important ++ important + desirable = not important

PHILOSOPHICAL FACTORS	+++	++	+	=
The department, as part of its normal routine, should be responsible for managing projects.				
Projects should be divided into distinct phases of development to promote the management of the different portions of the project.				
The systems approach to management, whereby the emphasis is placed on managing the entire project rather than its individual parts, should be applied to projects.				
Realistic project objectives (budget, time and specifications) should be set and achieved through the use of a management-by-objective approach.				
Project success should be clearly defined as the achievement of the project objectives with widespread participant satisfaction.				
The key project management elements consisting of a project manager, a project team and a project management system, should exist.				
A project-oriented management information and control system should be developed and utilized in the department.				
Top-level management should accept the overall responsibility for successfully implementing project management in the department.				
Top-level management should demonstrate genuine commitment to and support for the project management concept.				
Personnel should be educated and trained prior to, during and after implementation in the concepts, methods and techniques of project management.				
The core (scope, quality, time, cost) and facilitating (risk, human resources, communication, procurement) project management functions should be applied in an integrated manner.				
Possible advantages of project management such as optimization of resources, improved control, better customer relations and improved integration, should be recognised.				
Integrative planning and control is needed between different sections in the department because the consequences of failure are high such as financial loss and damage to reputation of department.				



KEY: +++ very important ++ important + desirable = not important

PHILOSOPHICAL FACTORS (CONTINUED)	+++	++	+	=
The ability to perform trade-off analysis is required in order to attain the desired performance within the constraints of time and cost.				

SITUATIONAL FACTORS	+++	++	+	=
Projects should be clearly defined, skilfully planned and effectively controlled during execution.				
The department is involved with projects which are complex and have a high degree of uncertainty.				
The department deals with a large variety of labour-intensive projects where time and cost goals are considered critical.				
The department should be sensitive to environmental influences which may impact on the progress and success of the project.				
The interests of external stakeholders such as environmentalists should be considered and accommodated when projects are undertaken.				
The department should be able to deal with projects of a large magnitude where many interdisciplinary and interdependent activities are coordinated and integrated over different functional divisions.				
The department should be able to deal with complex tasks in both slow and fast changing external environments.				
The ability to increase the strength of the driving forces of project success such as team motivation, leadership, technical expertise, and client support, is required.				
The differences in project management practice between commercial and nonprofit or government environments should be recognised.				

ORGANIZATIONAL FACTORS	+++	++	+	=
An adaptable organizational form is needed with flexible management procedures and a greater degree of decentralized decision making.				
A dynamic organizational structure, capable of rapid restructuring when changes occur, should be utilized.				



KEY: +++ very important ++ important + desirable = not important

ORGANIZATIONAL FACTORS (CONTINUED)	+++	++	+	=
A project differentiated organization which incorporates formal horizontal relations for the integration of work efforts of multiple subunits is necessary.				
A focal point for the integration of work between subunits should be established.				
The responsibility for the management of a project should be separated from the controlling influence of functional units.				
A matrix organizational structure with a traditional vertical structure combined with formal horizontal project relations should be utilized.				
Effective transitional management which entails prior planning, employee involvement and conflict resolution is needed when converting to a new project organizational structure.				
A project-driven organization which uses a matrix structure is a prerequisite.				

JOB-DIMENSIONAL FACTORS	+++	++	+	=
The project manager should be able to perform a variety of roles such as that of integrator, communicator, decision maker and motivator.				
The project manager is held accountable for the success/failure of the projects assigned.				
The principal responsibility of the project manager is to deliver the project end-item within the constraints imposed by the project objectives.				
The interface role between the project manager and both top-level and functional management should be considered a priority.				
The influence of the project manager gained from knowledge, experience, and personal relationships should supplement the lack of formal authority.				
A cohesive project team which is dedicated to the achievement of the project objectives should be established.				
The project manager should be given the authority to make final decisions, control resources and enforce compliance with requirements.				

KEY: +++ very important ++ important + desirable = not important

JOB-DIMENSIONAL FACTORS (CONTINUED)	+++	++	+	=
The commitment, cooperation and participation of all key project participants should be acquired.				
Communication and information sharing between all key project participants is required.				
A director of projects should be appointed to oversee the management of multiple projects which are undertaken simultaneously.				

HUMAN-ORIENTED FACTORS	+++	++	+	=
The project manager should display managerial proficiency by the ability to plan, organize, lead/direct and control.				
The desired personal characteristics of the project manager are adaptability, initiative, confidence, persuasiveness, and enthusiasm.				
The project manager should possess behavioral (leadership), general business (administrative) and technical skills.				
The project manager should follow a relations or people-oriented rather than a task or work-oriented leadership style.				
The project manager should lead the project team primarily through participation and delegation.				
The project participant's enjoyment and personal satisfaction through all stages of the project should be sought and promoted.				
OTHER FACTORS YOU WOULD LIKE TO INCLUDE				

4.2 Indicate the relative importance of the following factors which may **restrain** the implementation of project management.

CONSULT THE KEY AT THE TOP OF EACH PAGE WHEN INDICATING YOUR ANSWER



KEY: +++ very restraining ++ restraining + undesirable = not important

COMBINED RESTRAINING FACTORS	+++	++	+	=
Traditional management approaches (ie. formal lines of authority, centralized control) which are applied to project-type work.				
Failures that occur through unsupportive top-level management and inappropriate selection of the project management approach.				
Possible disadvantages of project management such as more complex internal operations, lower utilization of personnel, and inconsistent application of organizational policies.				
The high tendency for conflict in project environments with regard to project schedules, priorities and resource allocations.				
The failures that occur when the user is not involved, termination is not planned, numerous changes are made, and insufficient resources are available.				
A large project office is established with too many non-sharing professional specialists assigned.				
A pure functional differentiated organization where integration is primarily achieved through formal rules, procedures and the formal chain of command.				
A traditional functional-oriented structure is used in a project environment.				
A separate, autonomous department is created for each large project.				
The organizational restructuring which is required to convert to a project-driven matrix structure.				
The staffing complexities with a project team such as performance evaluation and consistent application of personnel policies.				
The dual reporting relationship of project team members to both a functional head and a project manager.				
Failures that occur when an unsuitable project manager is selected, the systematic nature of projects are disregarded, and when the project management techniques are misused.				
OTHER FACTORS YOU WOULD LIKE TO INCLUDE				

4.3 With reference to the answers you have provided in questions 4.1 and 4.2 - should the contributing and restraining factors be present to the degree you have indicated - what do you believe the chances are of successfully implementing formalized project management in your department?

- | | | |
|--------------------------------|--------------|--------------------------|
| A small chance of success | (0 - 24 %). | <input type="checkbox"/> |
| A limited chance of success | (25 - 49 %). | <input type="checkbox"/> |
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GENERAL DEFINITIONS:

Project-type work is work that involves projects. Examples are the construction of schools, hospital and office buildings.

Project management is a formal approach to the management of projects which embodies three essential components namely a project manager, a project team and a project management system.

Contributing factor is a characteristic or condition which when present would positively contribute or facilitate the implementation of formalized project management.

Restraining factor is a characteristic or condition which when present would negatively contribute or restrain the implementation of formalized project management.



ANNEXURE B

RESEARCH QUESTIONNAIRE WITH THEORETICAL PROPOSITIONS INDICATED



PROJECT MANAGEMENT SURVEY

PREFACE

I wish to thank you for your participation in this research project. The questionnaire you are about to complete forms part of the empirical research for a doctorate in business administration. This research is being done to determine if and how formalized project management could be implemented in departments/administrations of the public sector who are involved in construction activities by which building accommodation is provided.

SUGGESTIONS FOR COMPLETION OF QUESTIONNAIRE

1. Please note that your response is anonymous and will be treated in absolute confidentiality.
2. The questionnaire comprises four parts (PARTS A,B,C and D) and would take approximately 20 to 30 minutes to complete.
3. Where applicable, definitions of terms and specific assumptions are included to facilitate your response. Some general definitions have been included at the end of the questionnaire.
4. Should your department or administration wish to receive a copy of the final research report, you are welcome to write to Mr Louis P. Krüger at P.O. Box 35282, Menlo Park, 0102.

PLEASE NOTE THAT THE TERMS "DEPARTMENT" AND "ADMINISTRATION" ARE USED INTERCHANGEABLY THROUGHOUT THIS QUESTIONNAIRE



INDICATE YOUR ANSWER BY MARKING [X] IN THE APPROPRIATE BOX

PART A - GENERAL CLASSIFICATION

NOTE: THE TERMS "DEPARTMENT" AND "ADMINISTRATION" ARE USED INTERCHANGEABLY

- 1.1 Please indicate the **managerial position** you currently hold in the department/administration:
- Top-level manager (directors and above)
 - Middle manager (deputy and assistant directors)
 - Functional manager (below assistant director)
 - Other (please specify) -----
- 1.2 For **how many years** have you worked in a department of the public sector?
- 1.3 Please indicate your **professional status**:
- Architect
 - Engineer
 - Quantity surveyor
 - Building manager
 - Other (please specify) -----
- 1.4 Please indicate your **highest formal qualification**:
- Degree
 - Diploma
 - Other (please specify) -----

PART B - GENERAL ORIENTATION TO PROJECT MANAGEMENT

2.1 Is project management currently being **applied** in your department? **[Yes] [No]**



2.2 To **what extent** is project management being applied in your department?

- It is applied as an accepted formal policy. []
- It is applied informally but not as a formal policy. []
- It is not applied either formally or informally. []

2.3 Indicate the **general attitude** to project management of ...

	POSITIVE	NEUTRAL	NEGATIVE
Your department			
Your own attitude			

2.4 Indicate your **general knowledge** of project management with regard to its ...

	GOOD	AVERAGE	LIMITED
Concepts and philosophy			
Techniques - such as PERT/CPM			

PART C - MANAGEMENT OF CHANGE

WHEN ANSWERING THE QUESTIONS IN PART C - ASSUME THAT PROJECT MANAGEMENT IS CURRENTLY NOT BEING APPLIED IN YOUR DEPARTMENT OR ADMINISTRATION

3.1 What are the **chances of successfully** implementing project management if **no changes** were made in the way the department currently operates?

- A small chance of success (0 - 24 %). []
- A limited chance of success (25 - 49 %). []
- A reasonable chance of success (50 - 74 %). []
- A good chance of success (75 - 99 %). []



(P74) 3.2 How would you judge the **past performance** of your department in terms of its....

	GOOD	AVERAGE	POOR
Meeting the department's objectives.			
Efficiently utilizing department's resources.			

(P62) 3.3 Are there **disrupting forces** (either from inside or outside your department) which you believe restrain its optimal performance? **[Yes] [No]**

(P62) 3.4 Should such disrupting forces be present, are **some adjustments inside** the department necessary to maintain or improve its performance? **[Yes] [No]**

(P62) 3.5 Which **one** of the following do you consider provide the **greatest stimulus** for change inside your department?

- External forces - political events, economic conditions. **[]**
- Internal forces - new policies, lack of resources. **[]**

(P63) 3.6 What is the **general attitude** of your department to change?

Changes are generally	[embraced]	[resisted]
Changes are initiated	[frequently]	[infrequently]

(P61) 3.7 Would implementing project management **contribute** to a solution to deal with some of the disrupting forces which affect your department? **[Yes] [No]**

(P74) 3.8 How **many changes or adjustments** would be needed in order to

(P75) implement project management effectively and efficiently in your department?

- Many changes would be needed. **[]**
- Some changes would be needed. **[]**
- No changes would be needed. **[]**



(P66) 3.9 Should project management be implemented in your department, which of the following statements would be true?

- Substantial time is needed. [True] [False]
- Extensive change would be indicated. [True] [False]
- General attitude of personnel is unfavourable. [True] [False]
- Outside consultant best to manage implementation. [True] [False]

(P64) 3.10 Which of the following would have the **greatest priority** for change in order to implement project management in your department? (Indicate the order of priority with 1 = highest priority; 2 = second priority; 3 = third priority and 4 = lowest priority)

- Functions, tasks and responsibilities of personnel. []
- Control and decision procedures in the department. []
- Overall direction and objectives of the department. []
- Attitudes of individuals and groups in the department. []

(P65) 3.11 Which of the following methods would be **most appropriate** to implement project management in your department? (Indicate your order of preference with 1 = most appropriate; 2 = second choice; 3 = third choice and 4 = least appropriate)

■ Technological method where implementation is achieved through new equipment and techniques.	[]
■ Structural method where implementation is achieved through modification of organizational structure and reporting relationships.	[]
■ Managerial method where implementation is achieved through changes in administrative systems such as remuneration systems.	[]
■ Human-oriented method where implementation is achieved through education and training of personnel.	[]

(P70) 3.12 Which of the following change policies would be the **best suited** to implement project management?

- | | |
|--|-----|
| <ul style="list-style-type: none"> ■ A policy where some of the changes which are needed are gradually phased in over an extended period. | [] |
| <ul style="list-style-type: none"> ■ A policy where all the changes which are needed are immediately implemented in aggregate fashion. | [] |

(P67) 3.13 Which of the following strategies would be **most appropriate** to implement project management in your department? (Indicate your order of preference with 1 = most appropriate; 2 = second choice; 3 = third choice and 4 = least appropriate)

- | | |
|---|-----|
| <ul style="list-style-type: none"> ■ Facilitative strategy (personnel generally accept the need for project management but additional resources may be needed to facilitate the implementation). | [] |
| <ul style="list-style-type: none"> ■ Informational strategy (personnel do not understand why project management is necessary and information regarding the implementation needs to be conveyed first). | [] |
| <ul style="list-style-type: none"> ■ Attitudinal strategy (personnel have a negative outlook to project management and their attitudes will need to be changed before implementation). | [] |
| <ul style="list-style-type: none"> ■ Political strategy (personnel will not readily accept project management and implementation will have to be forced upon them). | [] |

(P71) 3.14 Which of the following activities are the **most critical** elements for implementing project management? (Indicate the order of importance with 1 = most important; 2 = second choice; 3 = least important)

- Feasibility study prior to implementation of project management. []
- Actual implementation of project management. []
- Supporting the implementation of project management. []

(P68) 3.15 Which of the following people would be **best suited** to fulfil the listed role or position if project management was implemented? (Indicate your order of preference with 1 = best suited; 2 = second choice; 3 = third choice and 4 = least suited).

	Change manager	Change agent	Change target
Top-level manager			
Middle-level manager			
Functional manager			
Project manager			

The following definitions apply to this question:

Change manager is the person who generally oversees the efforts to implement project management.

Change agent is the person who designs and conducts the strategy to implement project management.

Change targets are the people who will actually implement the changes needed for project management.

(P69) 3.16 Which of the following sources of resistance are the **greatest barrier** to implementing project management in your department? (Indicate the order of importance with 1 = most important; 2 = second choice; 3 = least important)

<p>■ Barrier to acceptance (personnel do not believe that there is a need for project management and do not accept it being implemented).</p>	[]
<p>■ Barriers to acting (personnel accept that there is a need for project management but do not possess the necessary skills or resources to actually implement it).</p>	[]
<p>■ Barriers to understanding (personnel do not understand the need for or consequences of project management).</p>	[]

(P75) 3.17 Do you think that project management as a formal policy could easily fit in with **[Yes] [No]** "the way things are done in the department" and "the way people think and act"?

(P73) 3.18 Will the existing organizational structure in the department need to be **modified** [Yes] [No] **or changed** in order to accommodate implementing project management?

(P72) 3.19 Which of the following would be the **best means** to ensure that once project management is implemented, it remains effectively and efficiently applied? (Indicate the order of importance with 1 = most important; 2 = second choice; 3 = least important)

- Departmental structure accommodating project management. []
- Direction and support from managers in the department. []
- Positive attitude and actions of personnel. []

(P74) 3.20 Which of the following managerial assignment positions would be the **most effective** to oversee the implementation project management? (Indicate the order with 1 = most effective; 2 = second choice; 3 = least effective)

- | |
|--|
| <ul style="list-style-type: none"> ■ Managers should be appointed from outside the department to oversee the implementation of project management. [] |
| <ul style="list-style-type: none"> ■ Managers within the department are used to oversee the implementation of project management. [] |
| <ul style="list-style-type: none"> ■ Managers within the department should be retained but new managers must be appointed to provide assistance with the implementation. [] |

PART D - FORCE FIELD ANALYSIS OF PROJECT MANAGEMENT

WHEN ANSWERING THE QUESTIONS IN PART D - ASSUME THAT YOUR DEPARTMENT OR ADMINISTRATION HAS DECIDED TO IMPLEMENT PROJECT MANAGEMENT AS A FORMAL POLICY (OR HAS ALREADY DONE SO) IN DIVISIONS WHICH DEAL WITH PROJECTS

4.1 Indicate the **relative importance** of the following factors which may **contribute** to the implementation of project management.

CONSULT THE KEY AT THE TOP OF EACH PAGE



KEY: +++ very important ++ important + desirable = not important

PHILOSOPHICAL FACTORS	+++	++	+	=
The department, as part of its normal routine, should be responsible for managing projects (P1).				
Projects should be divided into distinct phases of development to promote the management of the different portions of the project (P3).				
The systems approach to management, whereby the emphasis is placed on managing the entire project rather than its individual parts, should be applied to projects (P6).				
Realistic project objectives (budget, time and specifications) should be set and achieved through the use of a management-by-objective approach (P8).				
Project success should be clearly defined as the achievement of the project objectives with widespread participant satisfaction (P47).				
The key project management elements consisting of a project manager, a project team and a project management system, should exist (P9).				
A project-oriented management information and control system should be developed and utilized in the department (P41).				
Top-level management should accept the overall responsibility for successfully implementing project management in the department (P25).				
Top-level management should demonstrate genuine commitment to and support for the project management concept (P39).				
Personnel should be educated and trained prior to, during and after implementation in the concepts, methods and techniques of project management (P36).				
The core (scope, quality, time, cost) and facilitating (risk, human resources, communication, procurement) project management functions should be applied in an integrated manner (P38).				
Possible advantages of project management such as optimization of resources, improved control, better customer relations and improved integration, should be recognised (P55).				
Integrative planning and control is needed between different sections in the department because the consequences of failure are high such as financial loss and damage to reputation of department (P58).				

KEY: +++ very important ++ important + desirable = not important

PHILOSOPHICAL FACTORS (CONTINUED)	+++	++	+	=
The ability to perform trade-off analysis is required in order to attain the desired performance within the constraints of time and cost (P46).				

SITUATIONAL FACTORS	+++	++	+	=
Projects should be clearly defined, skilfully planned and effectively controlled during execution (P53).				
The department is involved with projects which are complex and have a high degree of uncertainty (P2).				
The department deals with a large variety of labour-intensive projects where time and cost goals are considered critical (P34).				
The department should be sensitive to environmental influences which may impact on the progress and success of the project (P43).				
The interests of external stakeholders such as environmentalists should be considered and accommodated when projects are undertaken (P44).				
The department should be able to deal with projects of a large magnitude where many interdisciplinary and interdependent activities are coordinated and integrated over different functional divisions (P57).				
The department should be able to deal with complex tasks in both slow and fast changing external environments (P59).				
The ability to increase the strength of the driving forces of project success such as team motivation, leadership, technical expertise, and client support, is required (P54).				
The differences in project management practice between commercial and nonprofit or government environments should be recognised (P45).				

ORGANIZATIONAL FACTORS	+++	++	+	=
An adaptable organizational form is needed with flexible management procedures and a greater degree of decentralized decision making (P4).				
A dynamic organizational structure, capable of rapid restructuring when changes occur, should be utilized (P26).				

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ORGANIZATIONAL FACTORS (CONTINUED)	+++	++	+	=
A project differentiated organization which incorporates formal horizontal relations for the integration of work efforts of multiple subunits is necessary (P28).				
A focal point for the integration of work between subunits should be established (P30).				
The responsibility for the management of a project should be separated from the controlling influence of functional units (P31).				
A matrix organizational structure with a traditional vertical structure combined with formal horizontal project relations should be utilized (P33).				
Effective transitional management which entails prior planning, employee involvement and conflict resolution is needed when converting to a new project organizational structure (P37).				
A project-driven organization which uses a matrix structure is a prerequisite (P60).				

JOB-DIMENSIONAL FACTORS	+++	++	+	=
The project manager should be able to perform a variety of roles such as that of integrator, communicator, decision maker and motivator (P10).				
The project manager is held accountable for the success/failure of the projects assigned (P24).				
The principal responsibility of the project manager is to deliver the project end-item within the constraints imposed by the project objectives (P11).				
The interface role between the project manager and both top-level and functional management should be considered a priority (P12).				
The influence of the project manager gained from knowledge, experience, and personal relationships should supplement the lack of formal authority (P13).				
A cohesive project team which is dedicated to the achievement of the project objectives should be established (P19).				
The project manager should be given the authority to make final decisions, control resources and enforce compliance with requirements (P40).				

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JOB-DIMENSIONAL FACTORS (CONTINUED)	+++	++	+	=
The commitment, cooperation and participation of all key project participants should be acquired (P51).				
Communication and information sharing between all key project participants is required (P52).				
A director of projects should be appointed to oversee the management of multiple projects which are undertaken simultaneously (P23).				

HUMAN-ORIENTED FACTORS	+++	++	+	=
The project manager should display managerial proficiency by the ability to plan, organize, lead/direct and control (P7).				
The desired personal characteristics of the project manager are adaptability, initiative, confidence, persuasiveness, and enthusiasm (P14).				
The project manager should possess behavioral (leadership), general business (administrative) and technical skills (P15).				
The project manager should follow a relations or people-oriented rather than a task or work-oriented leadership style (P16).				
The project manager should lead the project team primarily through participation and delegation (P17).				
The project participant's enjoyment and personal satisfaction through all stages of the project should be sought and promoted (P42).				
OTHER FACTORS YOU WOULD LIKE TO INCLUDE				

4.2 Indicate the relative importance of the following factors which may **restrain** the implementation of project management.

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COMBINED RESTRAINING FACTORS	++ +	++	+	=
Traditional management approaches (ie. formal lines of authority, centralized control) which are applied to project-type work (P5).				
Failures that occur through unsupportive top-level management and inappropriate selection of the project management approach (P48).				
Possible disadvantages of project management such as more complex internal operations, lower utilization of personnel, and inconsistent application of organizational policies (P56).				
The high tendency for conflict in project environments with regard to project schedules, priorities and resource allocations (P18).				
The failures that occur when the user is not involved, termination is not planned, numerous changes are made, and insufficient resources are available (P50).				
A large project office is established with too many non-sharing professional specialists assigned (P20).				
A purely functionally differentiated organization where integration is primarily achieved through formal rules, procedures and the formal chain of command (P27).				
A traditional functional-oriented structure is used in a project environment (P29).				
A separate, autonomous department is created for each large project (P32).				
The organizational restructuring which is required to convert to a project-driven matrix structure (P35).				
The staffing complexities with a project team such as performance evaluation and consistent application of personnel policies (P21).				
The dual reporting relationship of project team members to both a functional head and a project manager (P22).				
Failures that occur when an unsuitable project manager is selected, the systematic nature of projects are disregarded, and when the project management techniques are misused (P49).				
OTHER FACTORS YOU WOULD LIKE TO INCLUDE				

4.3 With reference to the answers you have provided in questions 4.1 and 4.2 - should the contributing and restraining factors be present to the degree you have indicated - what do you believe the chances are of successfully implementing formalized project management in your department?

- | | | |
|--------------------------------|--------------|--------------------------|
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