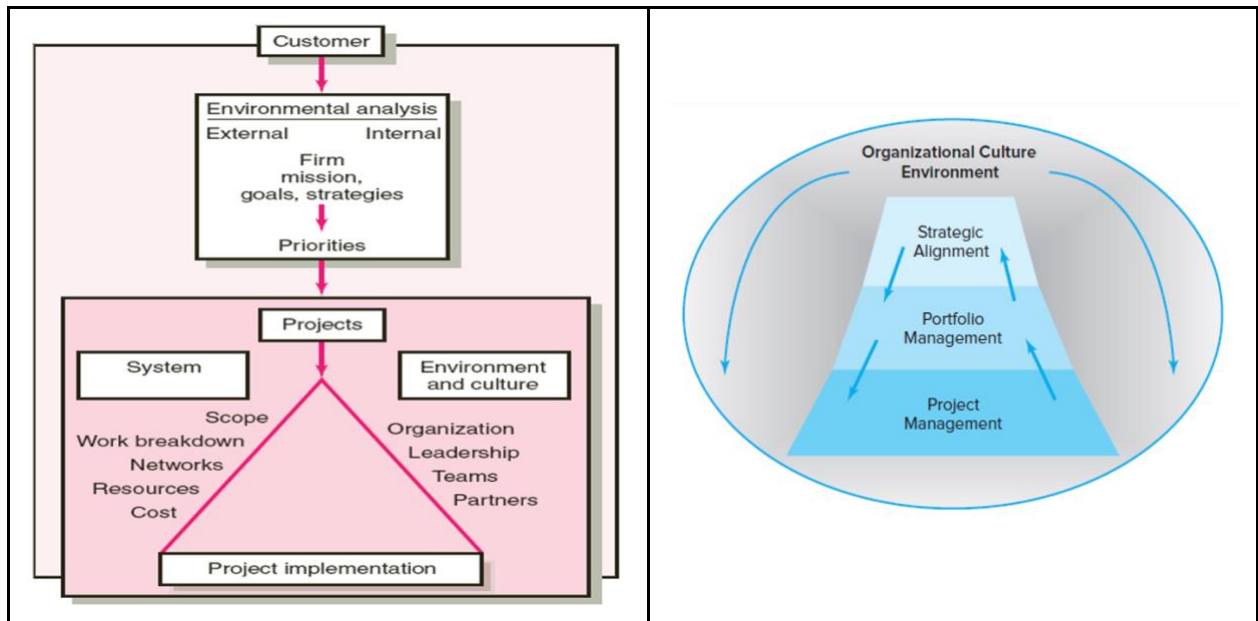


1 (a)

Project Governance



Project Governance involves applying a set of knowledge, skills, tools, and techniques to centralise and integrate a collection of projects and move the organization toward its strategic goals.

- It always begins with the **Customers**, understanding their needs and frustrations.
- Then management will do an **Environmental Analysis** on internal strength and weakness, external threats and opportunities.
- Next, management will review if the project is aligned with **Firm mission, goals, strategies** and **Prioritize** projects accordingly.
- The **Projects** will then be selected and formed through **Systems, Environment and Culture**.
- System consists of *scope, work breakdown, networks, resources and cost*.
- Environment and Culture consists of *organization, leadership, teams, partners*.
- Project will be **implemented**.

1 (b)

Characteristics of a strong PM culture

1. **Member Identity**
the degree to which employees identify with the organisation as a whole rather than with their type of job or field of professional expertise
2. **Team Emphasis**
the degree to which work activities are organised around groups rather than individuals
3. **Management focus**
the degree to which management decisions take into account the effect of outcomes on people within the organisation
4. **Unit Integration**
the degree to which units within the organisation are encouraged to operate in a coordinated or interdependent manner
5. **Control**
the degree to which rules, policies, and direct supervision are used to oversee and control employee behaviour
6. **Risk Tolerance**
the degree to which employees are encouraged to be aggressive, innovative, and risk seeking
7. **Reward Criteria**
the degree to which rewards such as promotion and salary increases are allocated according to employee performance rather than seniority, favouritism, or other non-performance factors
8. **Conflict Tolerance**
the degree to which employees are encouraged to air conflicts and criticisms openly
9. **Means Vs Ends Orientation**
the degree to which management focuses on outcomes rather than on techniques and processes used to achieve those results
10. **Open-systems focus**
the degree to which the organisation monitors and responds to changes in the external environment

Methods of Maintaining Organisational Culture

1. Formal statement of principles
2. Top management behaviour
3. Reaction to organisation crisis
4. Allocation of rewards & status
5. Rituals, stories & symbols

2

Types of Project Closure

1. **Normal**
Project is completed as planned and the objectives are achieved. The client accepts the project.
2. **Premature**
Completed early with some parts of project eliminated (due to time/cost).
3. **Perpetual**
Project never seem to end, there is constant "add-ons". The project keeps getting extended primarily because of changes in the constraints.
4. **Failed**
Project is cancelled or completed but was considered a failure because it didn't perform as expected.
5. **Changed Priority**
Company shifts focus from making money to cost saving during recession

3 (a)

Challenges

1. **Establishing trust**
 1. Difficult to trust someone whom you have met only one or two times.
 2. Geographical separation prohibits informal social interactions.
 3. If it is impossible to hold a face-to-face meeting, managers need to orchestrate the exchange of social information, i.e., who everyone is and some personal background during the initial electronic exchange.
 4. Set clear roles for each team member > specific tasks assigned to each member > make immediate contribution
2. **Developing patterns of effective communication**
 1. when to use email: to distribute important information and news in a one-to-one or one-to-many frame of reference.
 2. when to use electronic bulletin boards: to encourage discussion and flush out diversity of opinion on issues.
 3. when to videoconference: need to see each other's face and expressions > early phases of project and when working on critical decisions and/or contentious issues.
 4. When to use conference calls: people in different locations working with common documents, presentations, sketches and models.

When to fly: to build or repair trust

3 (b)

Enhancing Performance

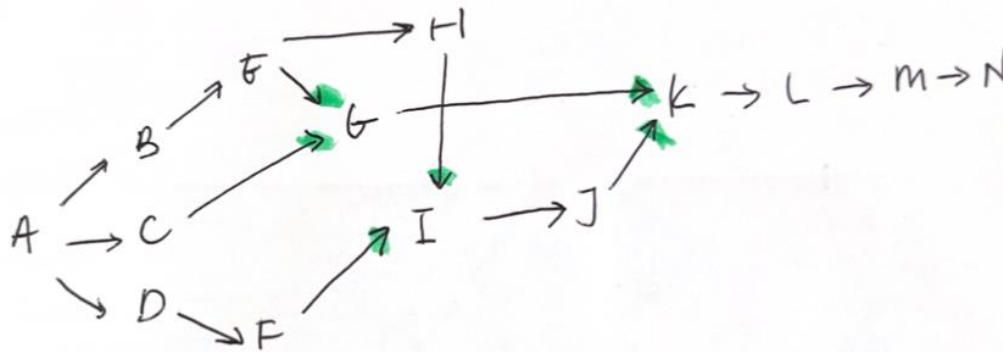
- **Keep team members informed**
 - develop a central access point to provide members with updated project schedules.
 - team members need to know where they fit in the big picture.
- **Don't let team members vanish**
 - often experience problems getting in touch with each other.
 - Use internet scheduling software to store members' calendars.
- **Establish a code of conduct to avoid delays**
 - agree not only on what, when, and how information will be shared but also how and when they will respond to it.
 - develop a priority system to distinguish messages that require immediate response from those with longer time frames.
- **Establish clear norms and protocols for surfacing assumptions and conflicts**
 - need to probe deeper when communicating to force members to explain their viewpoints, actions and concerns more clearly.
- **Share the pain**
 - do not require everyone to conform to your time zone and preferences.
 - rotate meeting times so that all team members have a turn working according to their clock.
- **Using electronic video technology to verify work**
 - have members' "show" work that has been done via internet video.
 - provide useful feedback.

3 (c)

Discourage Dysfunctional

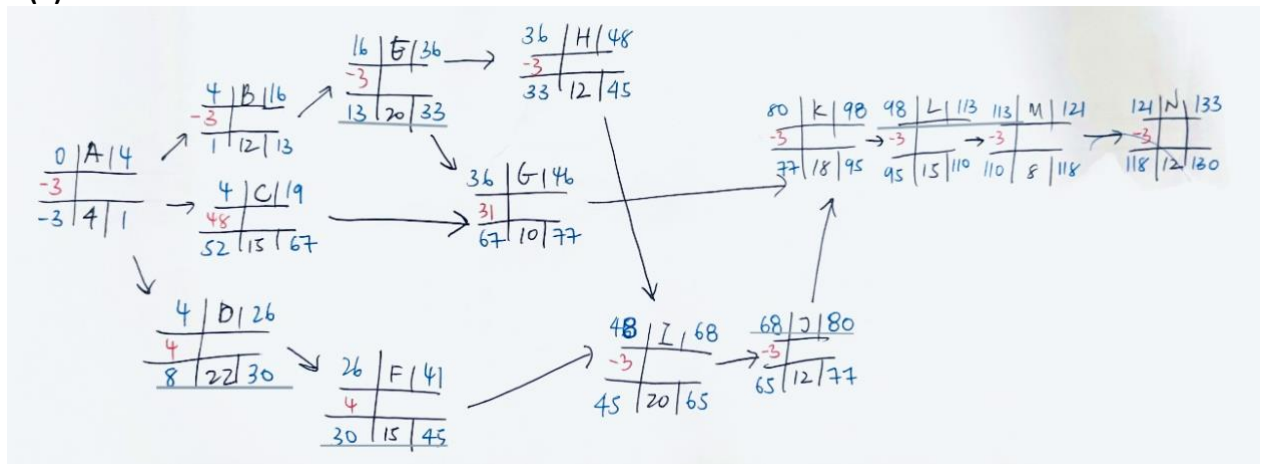
- **Mediate:**
manager intervenes and tries to negotiate a resolution by using reasoning and persuasion, suggesting alternatives.
- **Arbitrate:**
imposes a solution to the conflict after listening to each party.
- **Control:**
reducing the intensity of conflict by smoothing differences or injecting humour.
- **Accept:**
in some cases conflict will outlive the project.
- **Eliminate:**
if there is a clear villain, then only he/she should be removed: gives clear signals to others.

4 (a)



Burst Activity: A and E
 Merge Activity: G, I and K

4 (b)



Critical Path: A > B > E > H > I > J > K > L > M > N

It cannot be completed in 130 weeks, instead the project is delayed by 3 weeks and will only be completed in 133 weeks.

ID	DUR	ES	EF	LS	LF	TS
A	4	0	4	-3	1	-3
B	12	4	16	1	13	-3
C	15	4	19	52	67	48
D	22	4	26	8	30	4
E	20	16	36	13	33	-3
F	15	26	41	30	45	4
G	10	36	46	67	77	31
H	12	36	48	33	45	-3
I	20	48	68	45	65	-3
J	12	68	80	65	77	-3
K	18	80	98	77	95	-3
L	15	98	113	95	110	-3
M	8	113	121	110	118	-3
N	12	121	133	118	130	-3

4 (c)

Bottom-up Approaches

1. Template Method

- a. If the present project is **similar to the past project**, then template methods can be used as a starting point.
- b. Templates created based on costs of previous, similar projects.
E.g., shipbuilding, ship repair
- c. Enables firms to develop a potential schedule, estimate costs and develop a budget in a very short time span.
- d. Quickly reduce estimate errors

2. Parametric Procedures applied to specific task
(*Similar to ratio method in top-down method.*)

3. Range Estimating

- a. Works best when work packages have **significant uncertainty associated with time or cost** to complete.
- b. Prudent policy to require three-time estimates - **low, average and high**.

Template Method is the most suitable for this project as company has experience of constructing for previous customer that is like this project.