



To analyze challenges in planning and implementing IT solutions by a Healthcare IT company

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Objectives

- To identify the key challenges faced while planning and implementation of a project in a Healthcare IT Company
- To assess the effectiveness of existing planning and implementation process for a project in the organization
- To categorize the various planning and implementation issues under broader organizational issues

Research Questions

- What are the most problematic issues faced by Healthcare IT Company during project planning?
- What are the most problematic issues faced by Healthcare IT Company during timely completion of a project?
- What are the most problematic issues faced by Healthcare IT Company during project implementation?



Research Methodology

- **Study Area**

A Multinational Healthcare IT Company in Hyderabad, India

- **Study Duration**

13 February, 2017 to 25 April, 2017

- **Study Design**

Mixed study which is qualitative and descriptive with quantitative data

- **Sample Size**

64

- **Sampling Technique**

Non-probability convenience sampling



Data Collection

- Primary data
- Personal interviews and research survey.
- [Interview questions](#)



Choice of Respondents

- The selected respondents belonged to four different departments in the company. The criteria for selection of these employees was that they had at least 1 year experience in the company and were active participants in a project.
- The four categories of respondents included: Business Analysts (BA), Developers, Testers and Customer Support and Services (CSS).
- 16 employees from each category were selected



Data Analysis

- The quantitative data was initially grouped into five different issues namely:
 - Leadership issue
 - Management process issue
 - Organization environment issue
 - Technical system issues
 - Personnel issues
 - [response sheet.xlsx](#)



Results and Analysis

- The issues were separated based on their presence during planning, timely completion, or actual implementation of a project. Many of the issues influenced two or even all three of these areas.

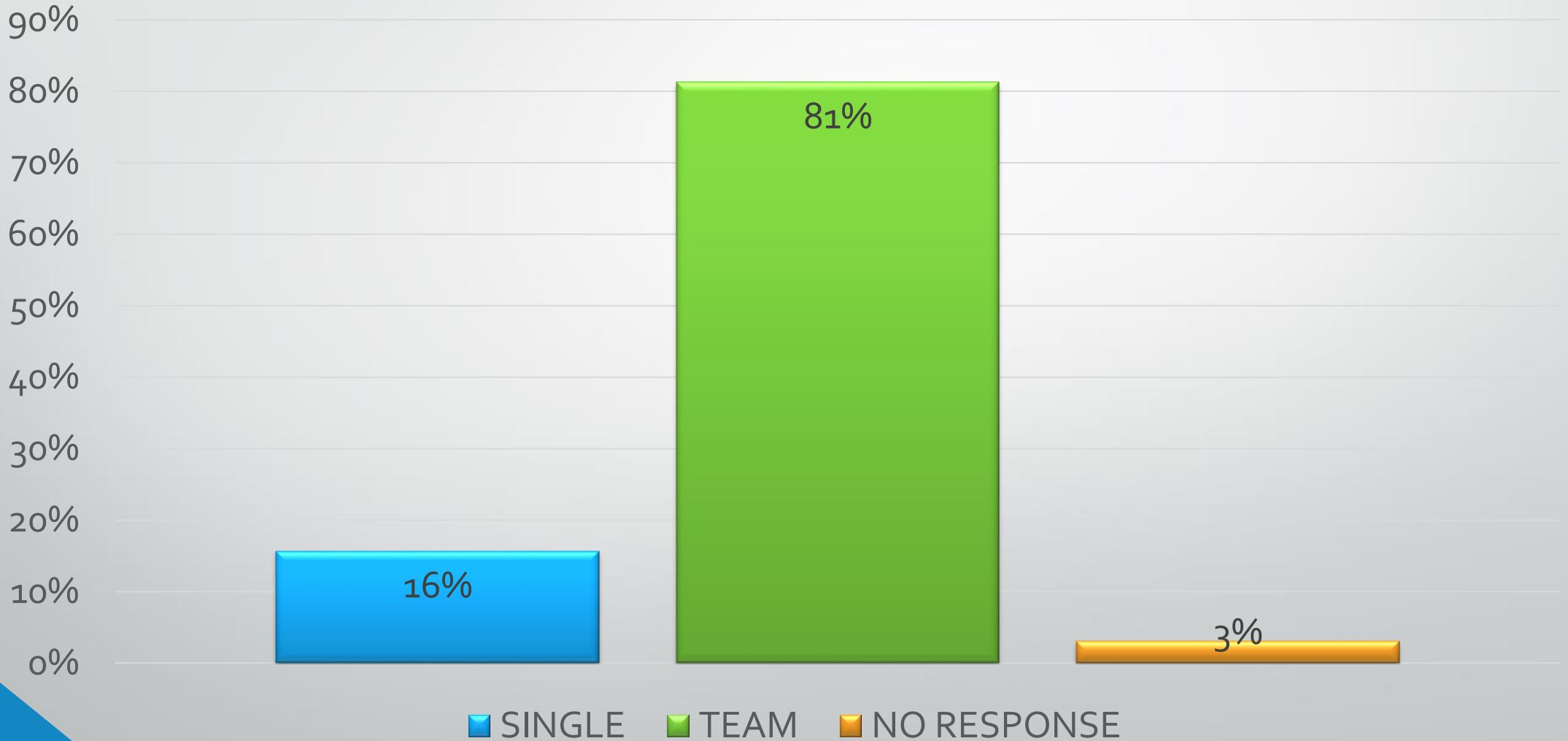
Major issues during planning, timely completion and implementation of a project

Issue Type	Project Planning	Timely Completion	Project Implementation
LEADERSHIP ISSUES	Inter-departmental coordination	Inter-departmental coordination	Inter-departmental coordination
	Organisational support	Organisational support	Organisational support
	Timeframes & schedulings	Timeframes & schedulings	Timeframes & schedulings
MANAGEMENT PROCESS ISSUES	Strategic planning	Strategic planning	Strategic planning
	Budgeting	Budgeting	Budgeting
	Organisational directives	Organisational directives	Organisational directives
	Written guidelines	Written guidelines	Written guidelines
ORGANISATION ENVIRONMENT ISSUES	Organisational culture	Organisational culture	Organisational culture
	internal and external politics	internal and external politics	internal and external politics
	Contracts	Contracts	Contracts
	Changing technology	Changing technology	Changing technology
	External consultants	External consultants	External consultants
TECHNICAL SYSTEM ISSUES	Existing system	Existing system	Existing system
	Standardisation	Standardisation	Standardisation
	Compatibility	Compatibility	Compatibility
PERSONNEL ISSUES	Staffing	Staffing	Staffing
	Resistance to change	Resistance to change	Resistance to change
	Training	Training	Training
	Personal issues	Personal issues	Personal issues

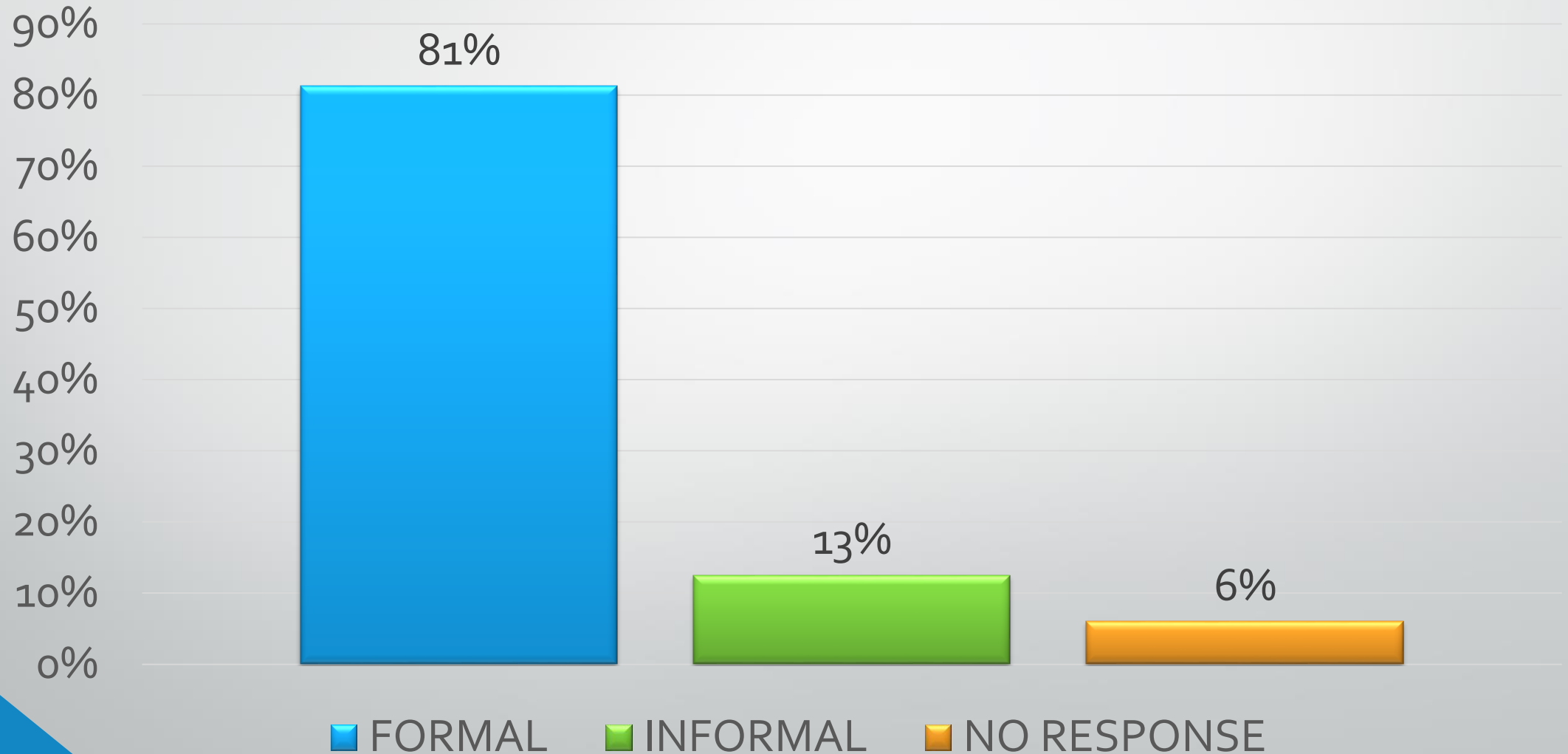
List of Issues and their Severity

ISSUE TYPE	NOT PROBLEMATIC	SOMEWHAT PROBLEMATIC	HIGHLY PROBLEMATIC	
	(0-3)	(4-6)	(7-10)	No Response
1. Inter departmental coordination	19%	41%	41%	0%
2. Organizational support	41%	38%	19%	3%
3. Proper timeframes and scheduling	3%	59%	38%	0%
4. Strategic planning	13%	50%	34%	3%
5. Budgeting	31%	22%	13%	34%
6. Organizational directives	34%	41%	19%	6%
7. Written guidelines for every process	9%	53%	38%	0%
8. Organizational culture	22%	50%	25%	3%
9. Internal/external politics	19%	47%	31%	3%
10. Contracts	16%	31%	22%	31%
11. Rapidly changing technology	38%	28%	28%	6%
12. Existing system	28%	53%	16%	3%
13. Standardization	13%	47%	38%	3%
14. Technological compatibility	22%	50%	16%	13%
15. Training	6%	38%	56%	0%
16. Adequate staffing	25%	50%	16%	9%
17. Resistance to change	22%	44%	34%	0%
18. Personal issues	41%	34%	19%	6%

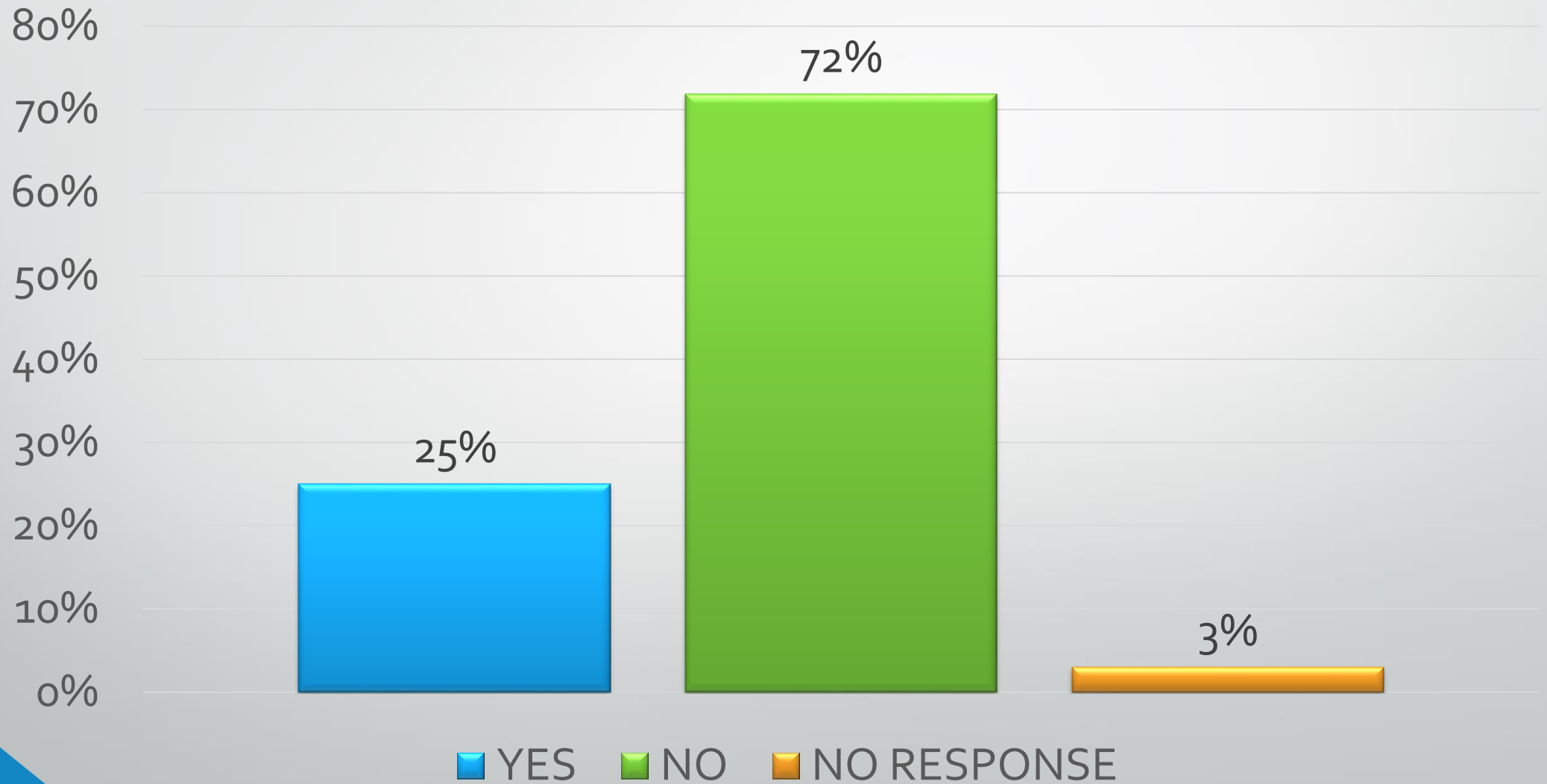
Percentage response of planning process



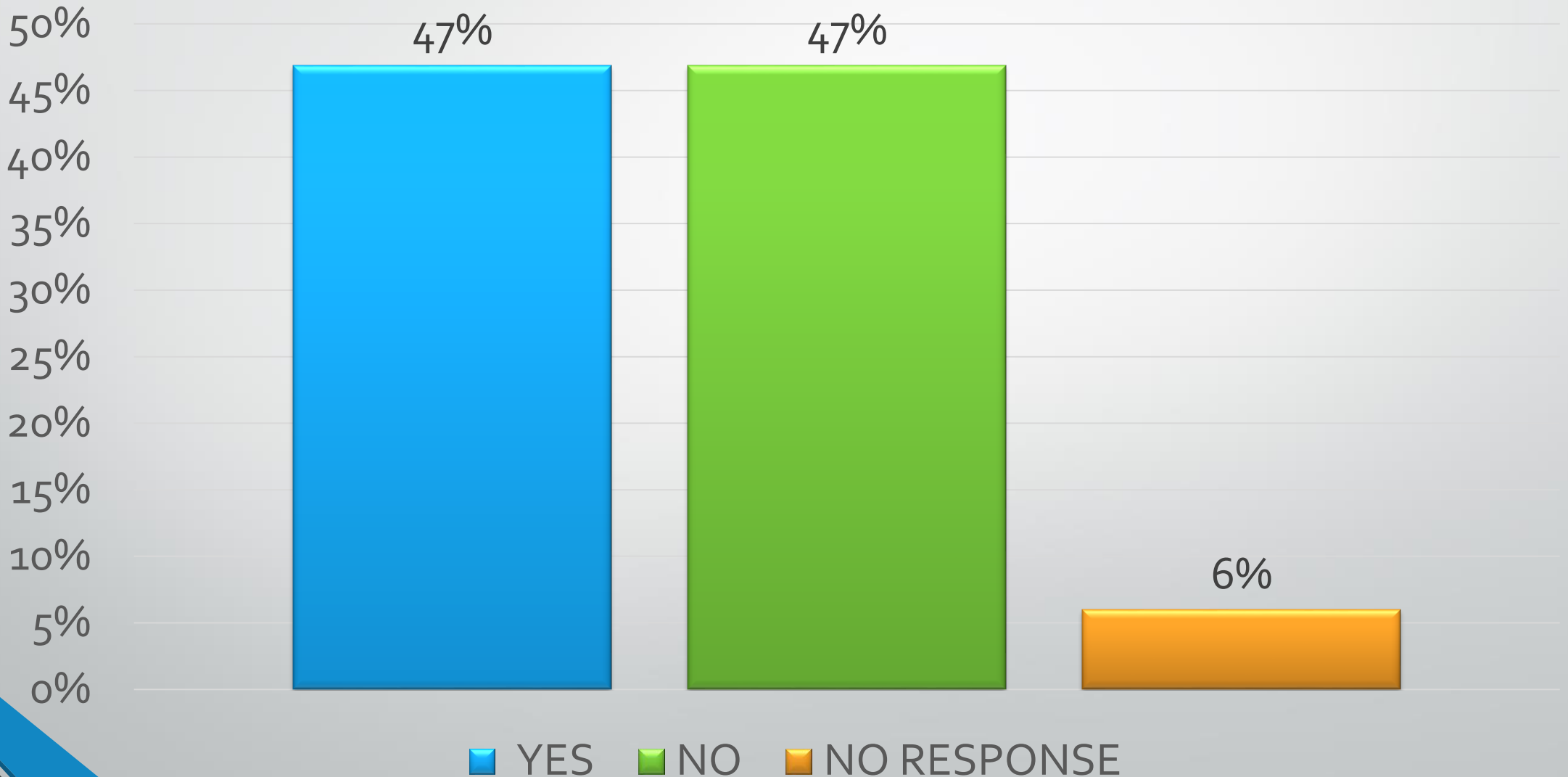
Percentage response of Planning type



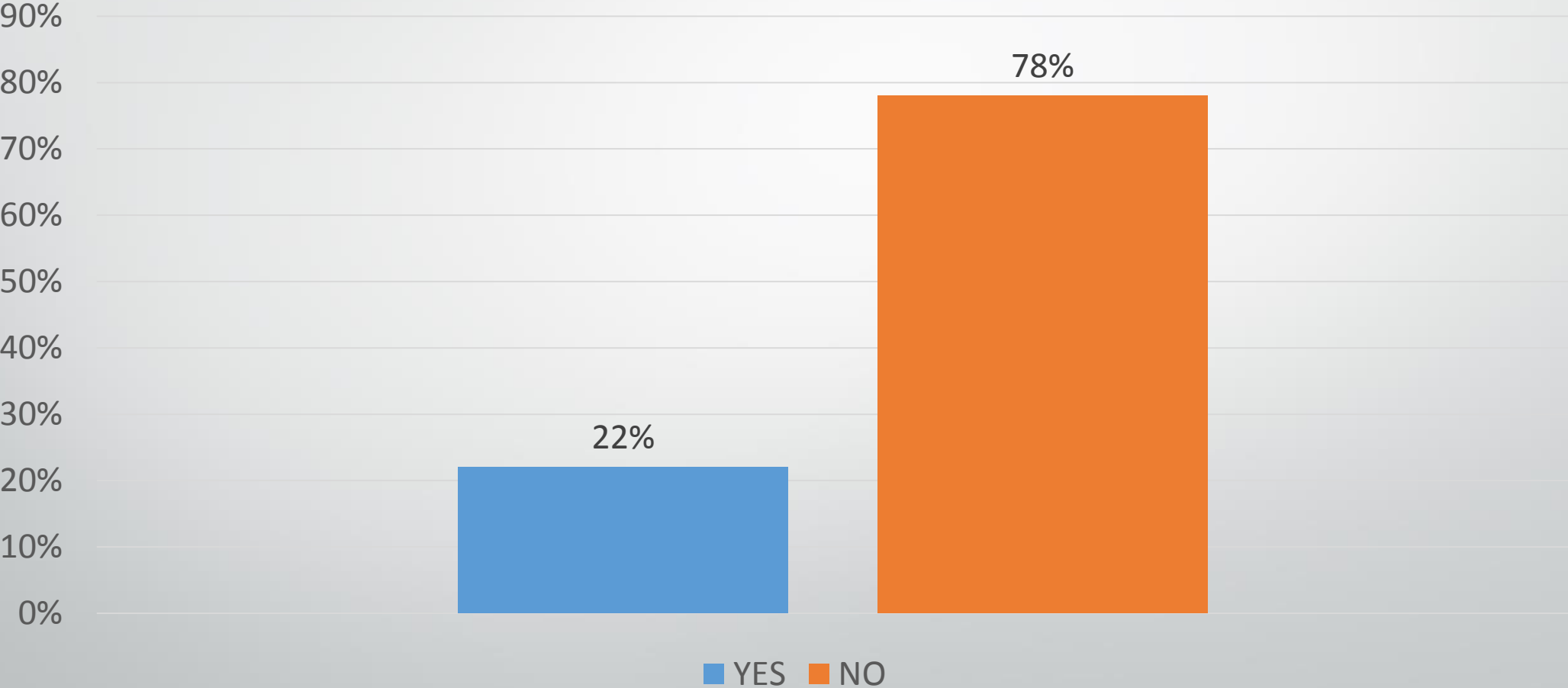
Percentage response of use of formal Models while project planning



Percentage response of availability of user Manuals



Percentage response of provision of training



Planning Effectiveness

60%

50%

40%

30%

20%

10%

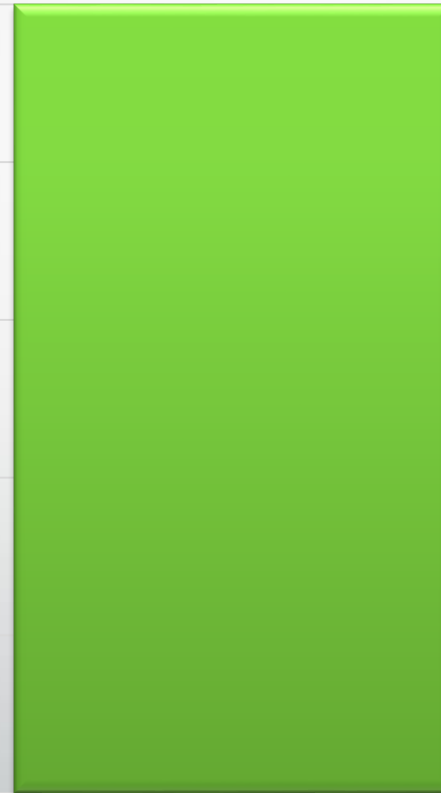
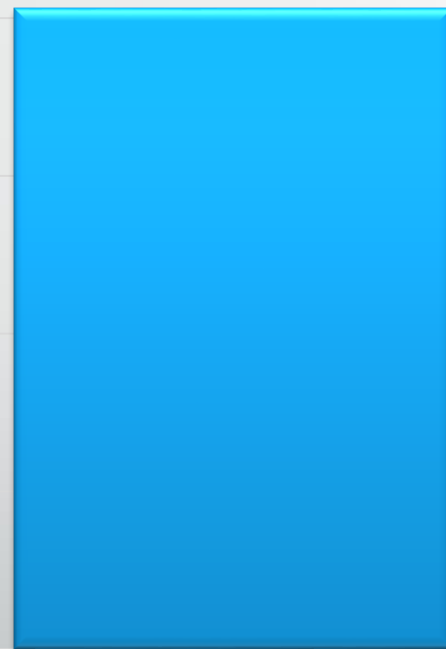
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41%

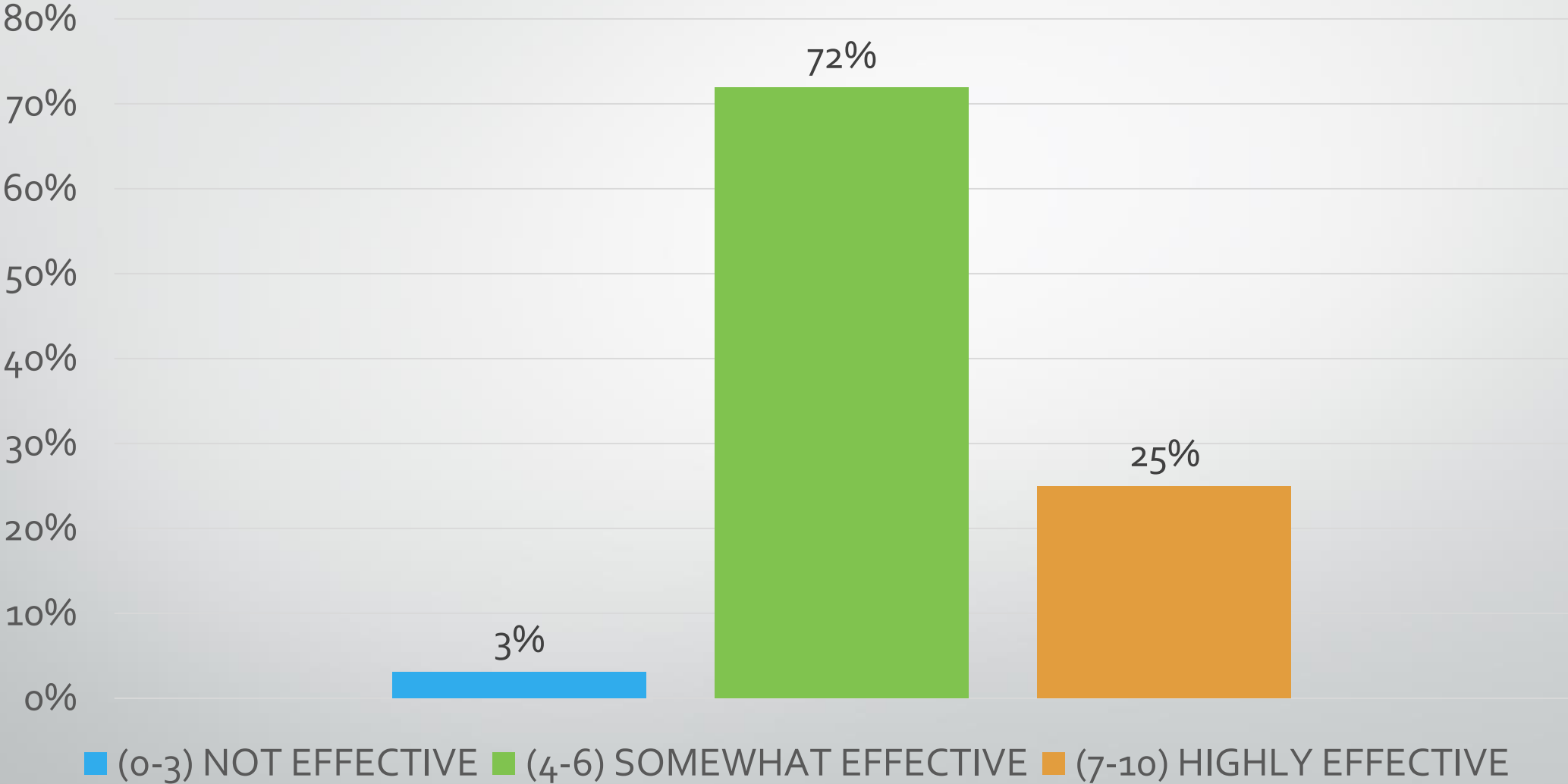
50%

9%

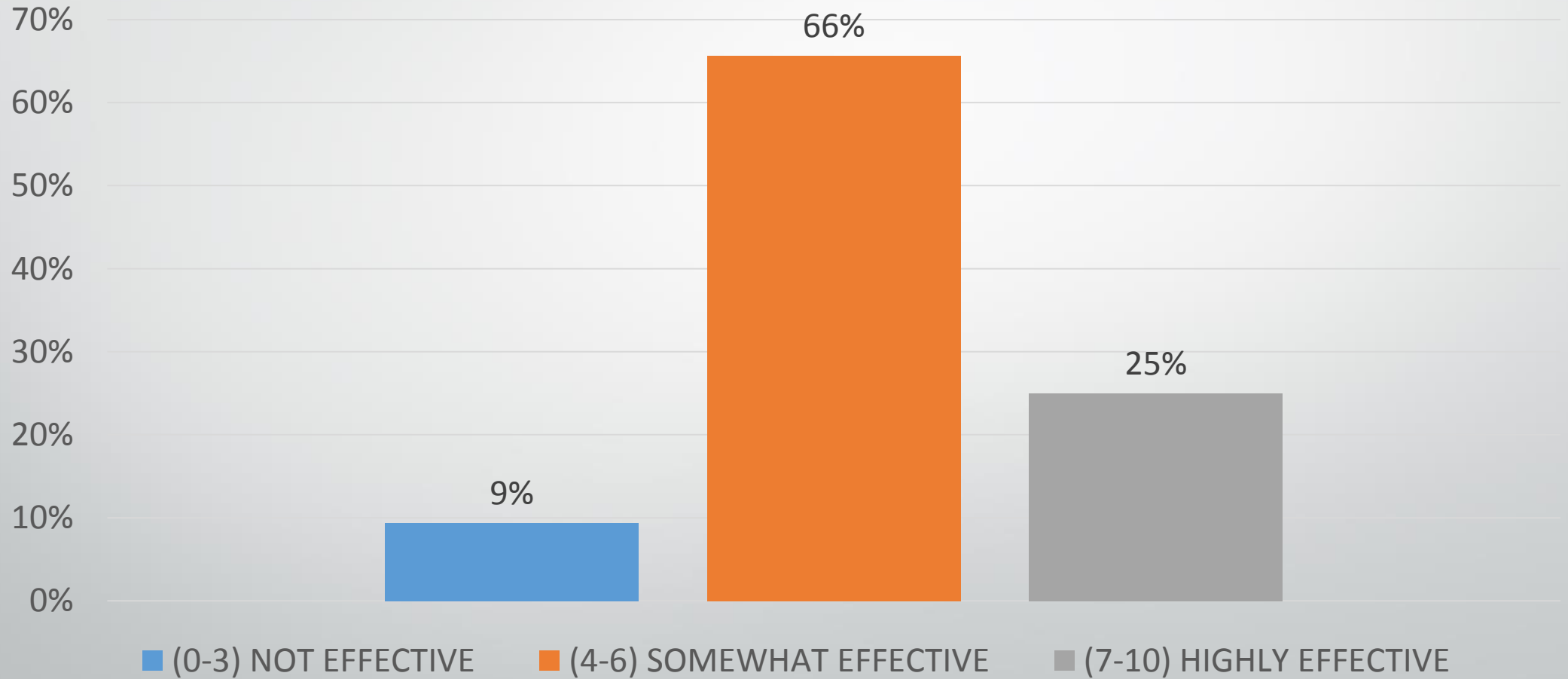
■ YES ■ NO ■ NO RESPONSE



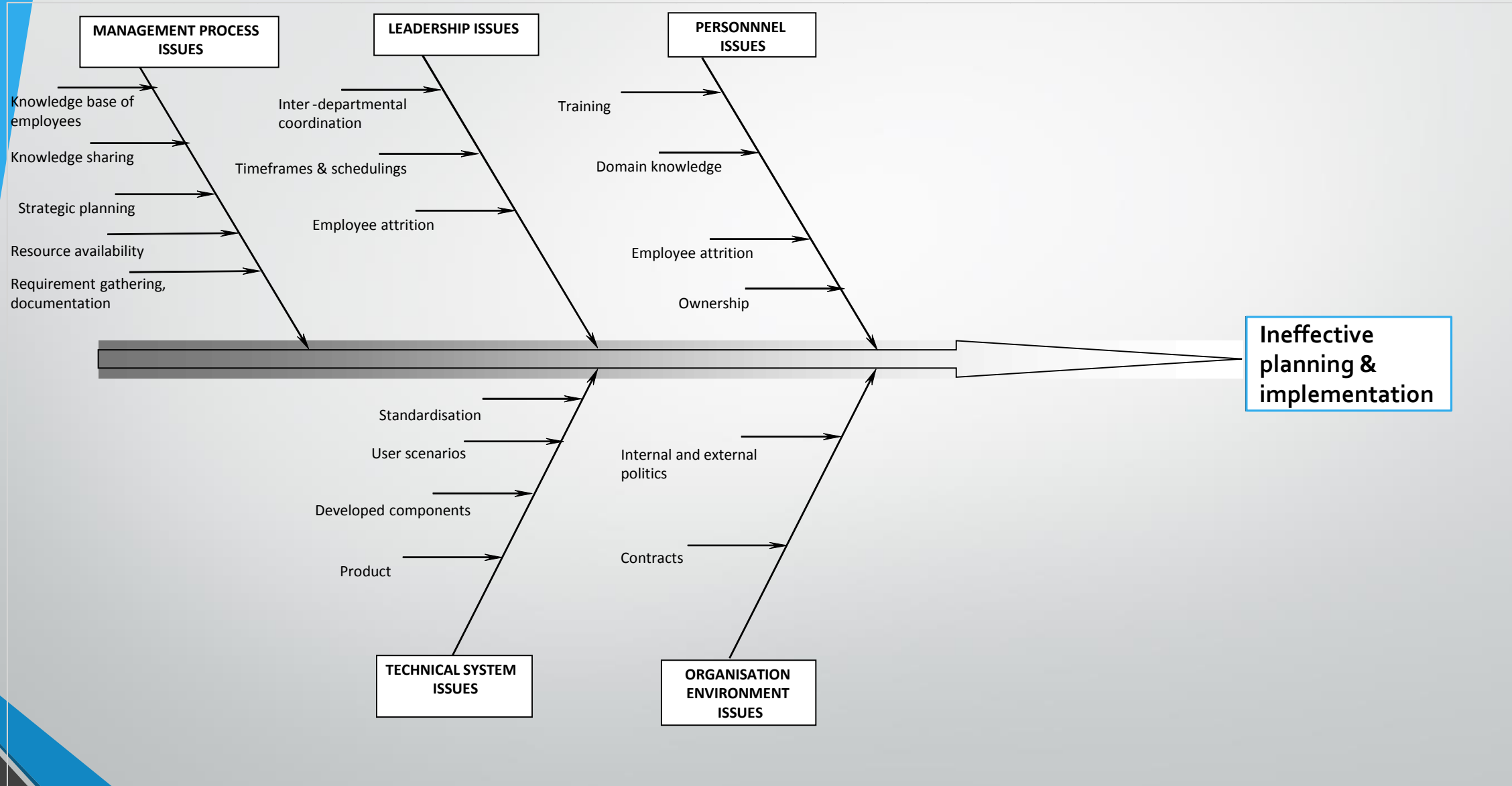
Percentage response of existing Planning Effectiveness



Implementation effectiveness



Root cause analysis



Empirical Findings

Recurrent gaps in project management :

- inter and intra departmental coordination
- effort estimation
- changing framework
- no continuity of same set of resources for a given project
- WBS is not provided by the manager themselves
- requirement changes



Conclusion and Recommendation

The most problematic issues with regard to planning of project observed:

- Inter-departmental coordination
- Time-frames and scheduling
- Strategic planning
- Standardization

Most problematic issues with regard to timely completion of project:

Strategic planning (84%)

Most problematic issues with regard to implementation of project:

Inter-departmental coordination (69%)

Time-frames and scheduling (66%)

Strategic planning (66%)

Training (60%)

What can be done?

Interdepartmental coordination

- Improving the communication between different departments
- Brainstorming sessions

Timeframes and Scheduling

- Time estimates need to be as realistic as possible.
- Time estimating is a best-guess using the available information, and establishing the right climate for estimates is essential to ensure accuracy.
- Scheduling and time estimates should be done after careful understanding requirements and existing capacity and competency.

Strategic planning

Strategic planning for project management, combined with a good project management methodology, can compress the gaps on time, cost, and quality. Strategic planning for excellence in project management needs to consider all aspects of the company: from the working relationships among employees and managers and between staff and management, to the company's corporate structure and culture.





Standardization

- Standardization in project management can greatly reduce the errors in planning and execution.
- The process should be reviewed, analyzed and improved as needed
- The teams should be armed with the best strategy available at the time, and leverage tried and true best practices and lessons already learnt.

Training

- Respondents also said that some training is provided by the company, they can't attend it because they are not allowed to go by their seniors as they want their task to be completed first.
- This approach should be corrected as we should realize that with proper training only can we achieve an overall success in our project and build a strong team as well.
- This issue can be solved by video recording the training sessions so that each employee can view it whenever they are free from work. This would allow them to complete their tasks as well as benefit from the training sessions.



Requirement Changes

- When we start writing the specification, we start with the “nearest shore”, which includes the most obvious requirements, which were discussed before starting the project, already documented and which people think at early stages. As the project proceeds, all the people involved get more understanding of the situation in software and the company, revealing things with greater value for the system. This also results in reprioritizing and changing the requirements again.
- Earlier, stable requirements were seen as a pre-requisite for software development project. But with rapidly changing technologies and cutting edge competition, most of the IT companies have given up looking for the holy grail of stable requirement.
- Changing requirements is now an accepted facts for software development. In fact, there are now books and literature available on “embracing changes”.

What can we do ?

- Change the approach
- Stop taking requirement changes as a problem and take it as an opportunity
- Live requirement document
- Analyse and prioritise requirement changes
- Written guideline and proper process
- Written communication

Existing System & Technological Compatibility

- Existing system and technological compatibility are problematic issues according to 53% and 50% of respondents respectively.
- According to them, various products were not compatible with each other in the company and their components cannot be used as such.
- The software is not tested in the end user's environment and again compatibility issue arises.
- To overcome this, all new projects and processes should be based on a single framework and platform.



Adequate Staffing

- 50% of the respondents said that the staffing was not adequate in the organization. Many of them lack proper domain knowledge and hence the efficiency is reduced.
- The study also revealed that contract employees do not take the ownership and accountability for a given task. They spend their initial time in understanding the processes and then start with the work. And when the actual work gets started they are about to leave. This causes uncertainty in the team and as a result the efficiency reduces.
- This issue can be solved by hiring people with proper domain knowledge and providing them with proper training.





**THANK
YOU**

for being a patient listener. . . .