



***~~C~~omplexity of Interconnections
and the Selection of Project
Team Members in Construction***

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Currently doing a part time PhD in Project Management at Loughborough University, with over 20 years experience in Construction Project and Programme Management. Worked, at various management levels, for Clients, Contractors, and a Consultancy before going back to a Contractor.



Why this subject

The selection of this subject has not been accidental.

This is a subject for which we - practitioners and academia - require to innovate and deliver much more if we are to develop further Project Management as a profession.



The background - 1

Construction projects are considered a temporary endeavour in a dynamic environment. Therefore project management can be defined as:

The management of transient, dynamic and complex adaptive systems/agents, so as to deliver the expected change within certain parameters that are established by seemingly ordered and stable environments.



The background - 2

Knowns	Unknowns
<ul style="list-style-type: none">•Lack of Implementation of processes•Project management is a non-linear process•Interfaces / interconnections•Boundaries•Importance of Soft issues	<ul style="list-style-type: none">• Definition of Complexity• Effects of Complexity• Tools to manage Complexity• Complexity of interconnections• Characteristics mirrored in project management



Methodology and Responses

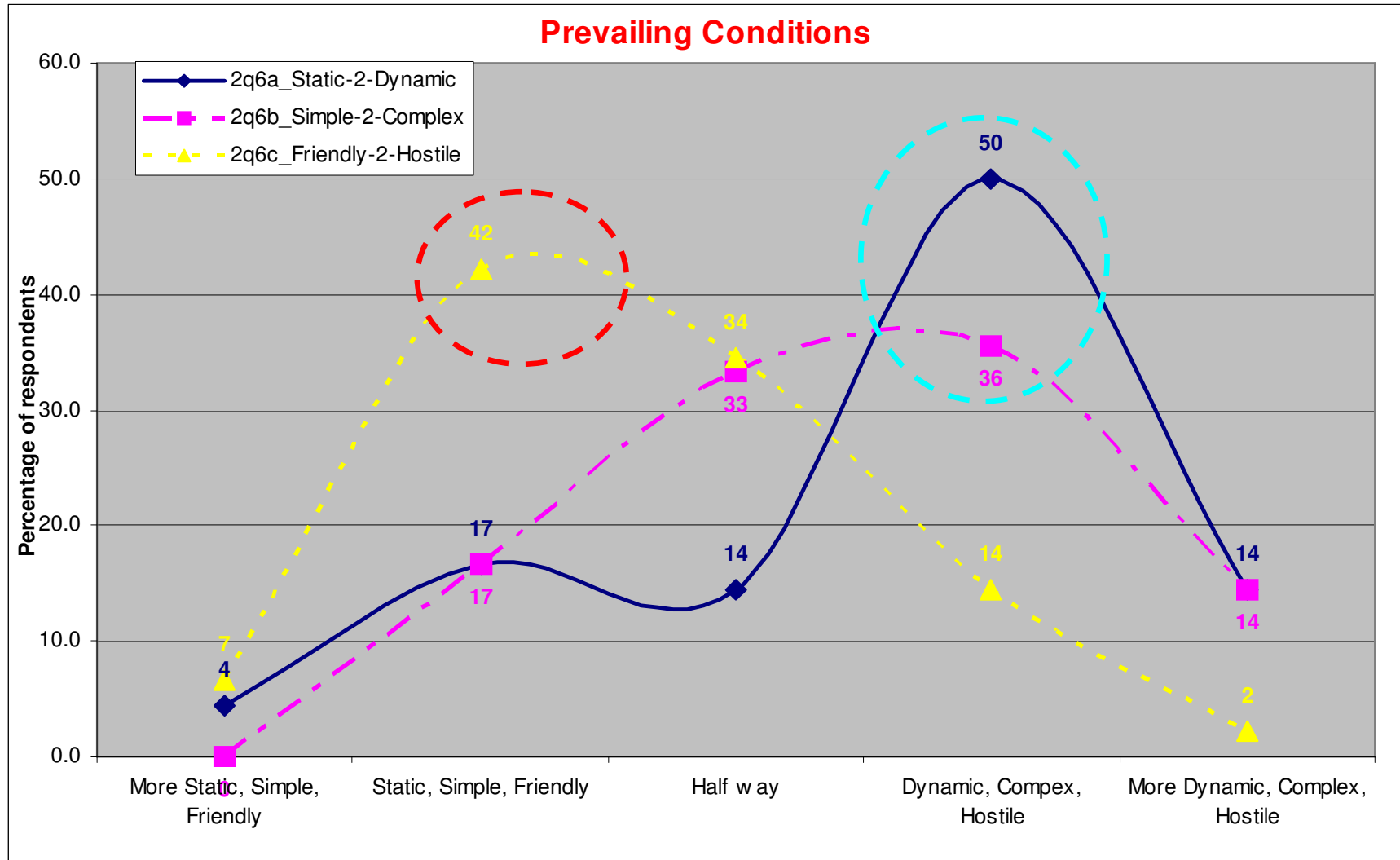
A quantitative and a qualitative approach was employed in a stratified sample.

From 180 randomly selected PM practitioners received 91 valid responses to the survey.

Conducted 31 closed interviews with PM practitioners from Director to Site Manager level.

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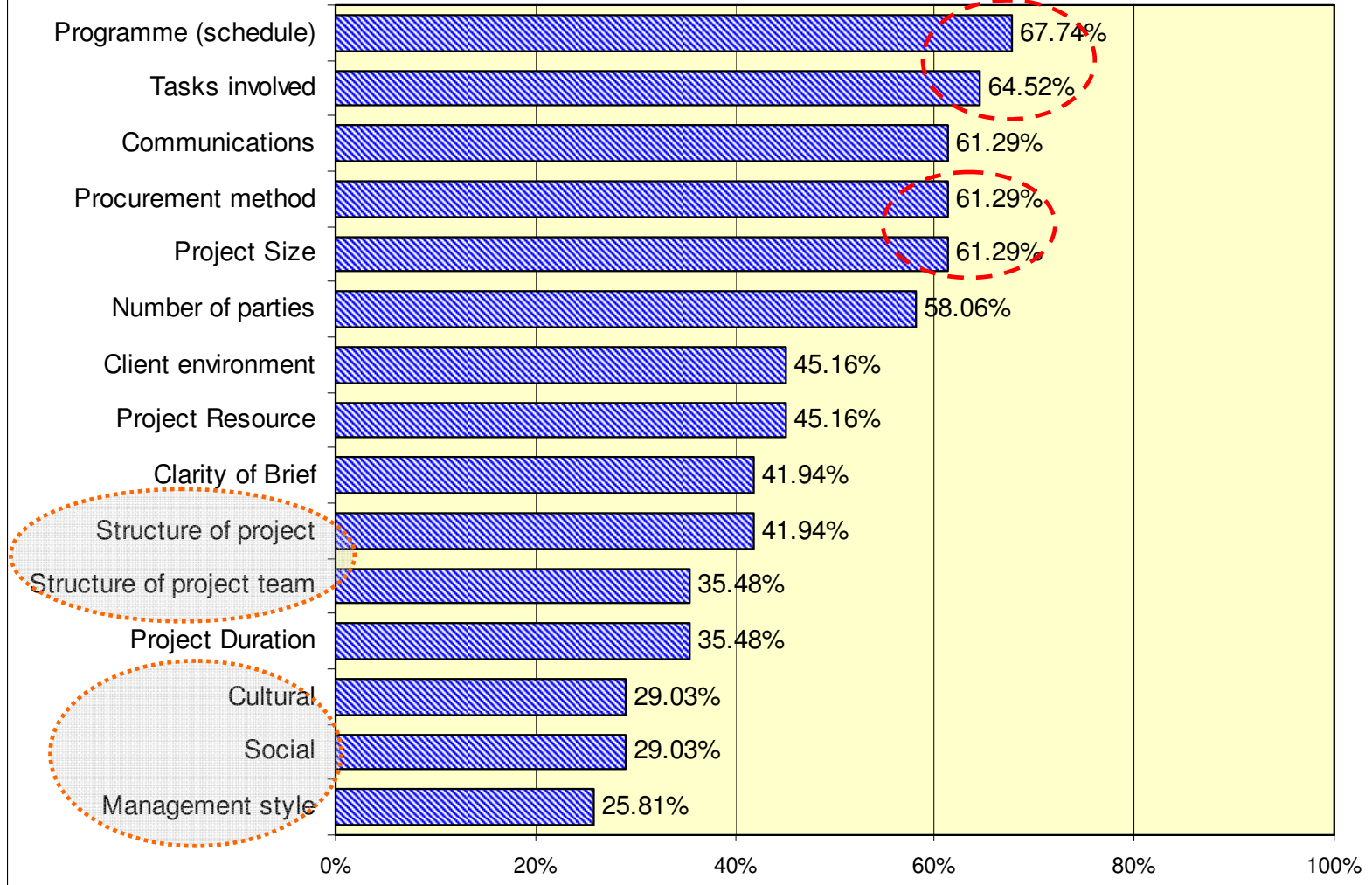




Response regarding levels of knowledge, implementation of personal profiling techniques and selecting team members techniques used

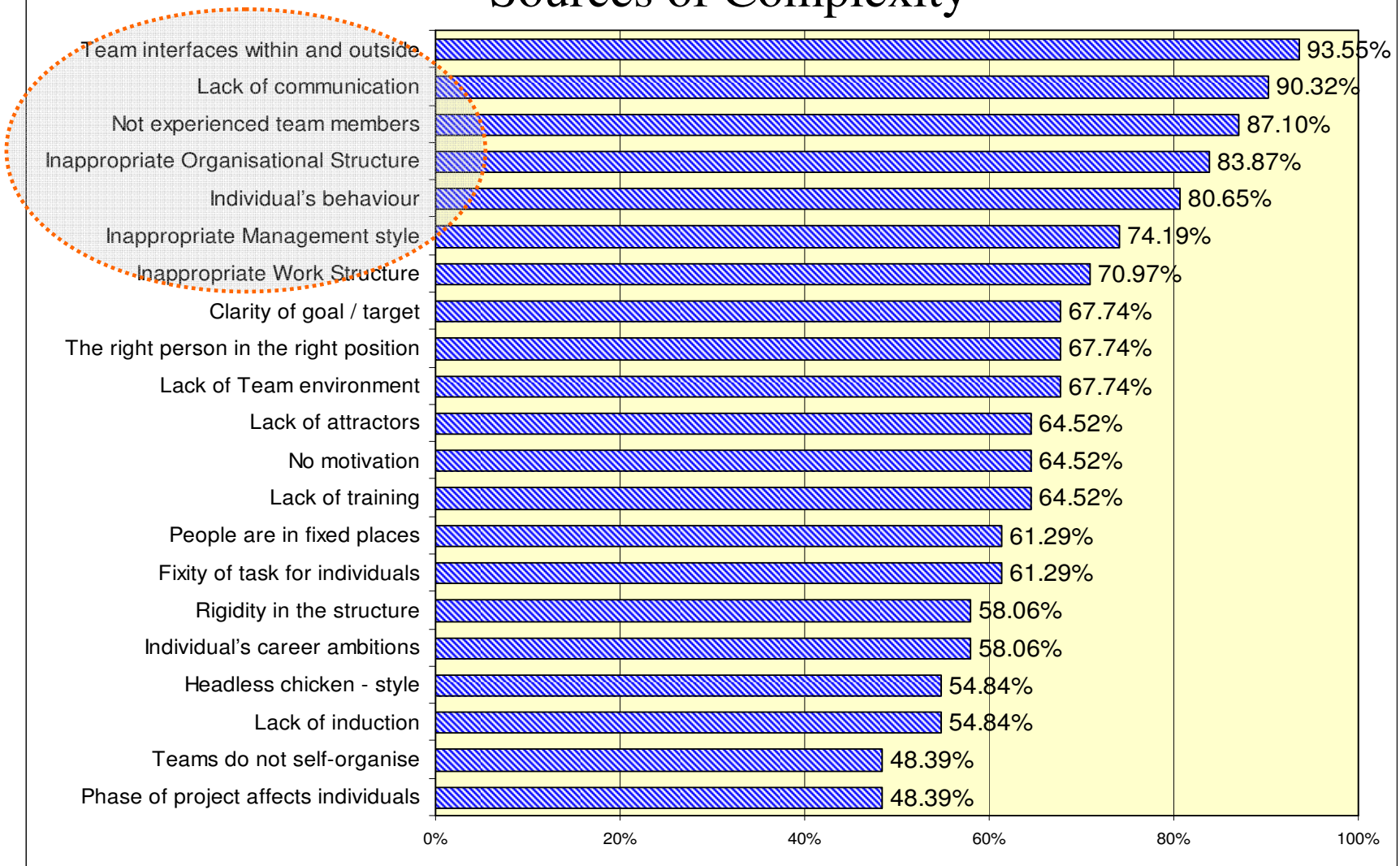
Question	Reply
2q1: Does your organisation offer you guidance in selecting project team members?	Yes
2q2: Are you aware of any known techniques/methods of personal profiling?	Yes
2q4: Please indicate for which project team members personal profiling has been carried out, within your company.	None
2q5: In your company, is personal profiling considered, as part of the selection process, when appointing Project Managers to a project?	No
2q10: Do the site supervisors use any selection process techniques?	No
2q11: Indicate which of the following techniques/methods your supervisors use/consider for selecting team members	None

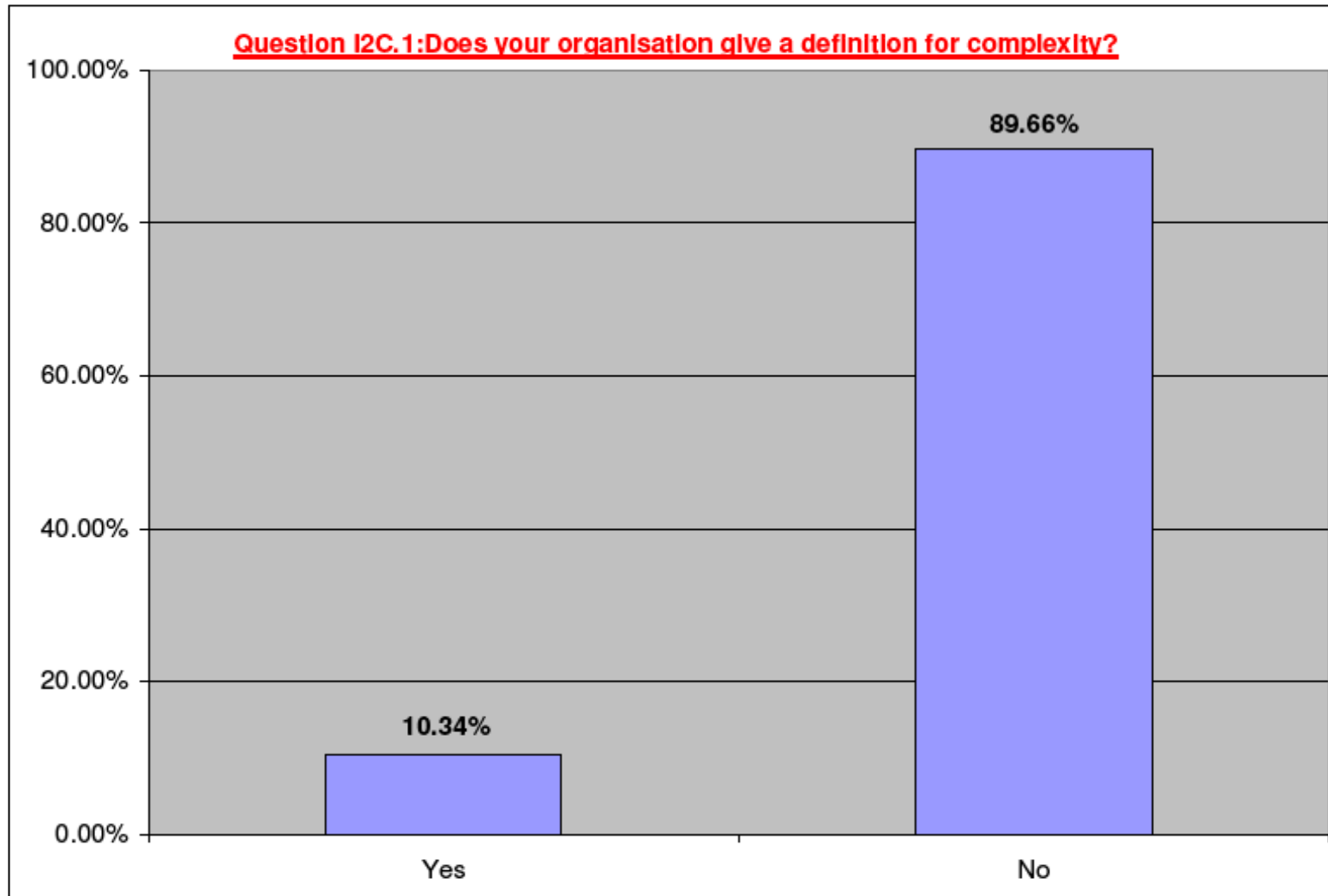
Criteria used to identify complexity

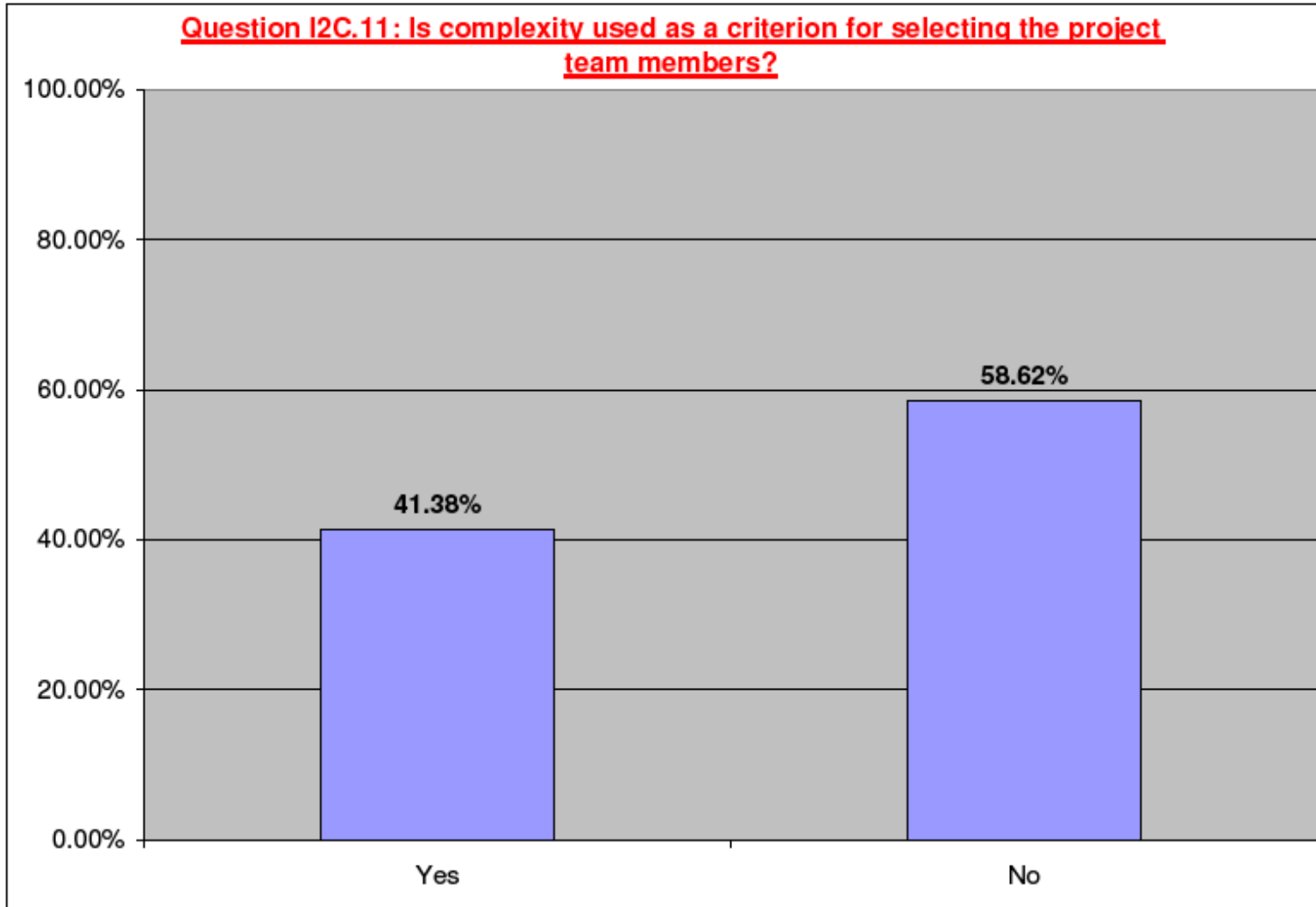




Sources of Complexity

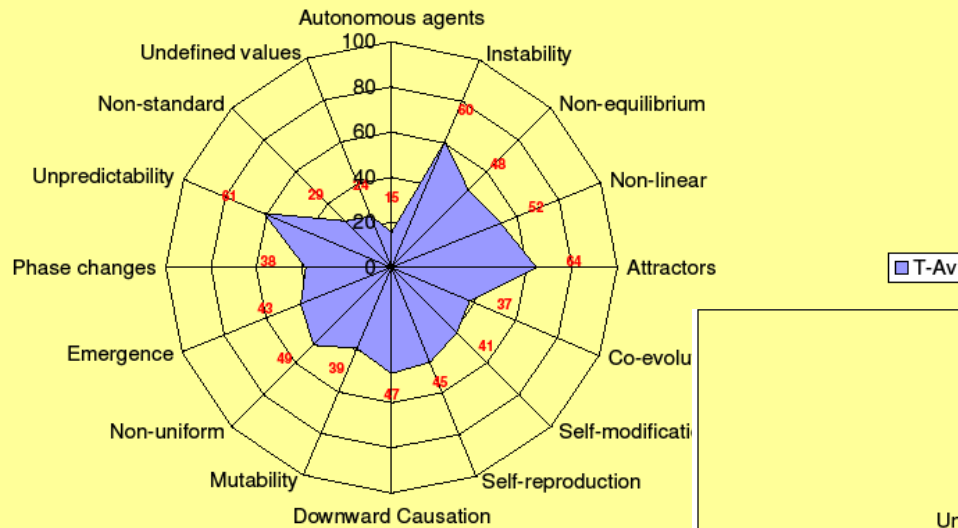




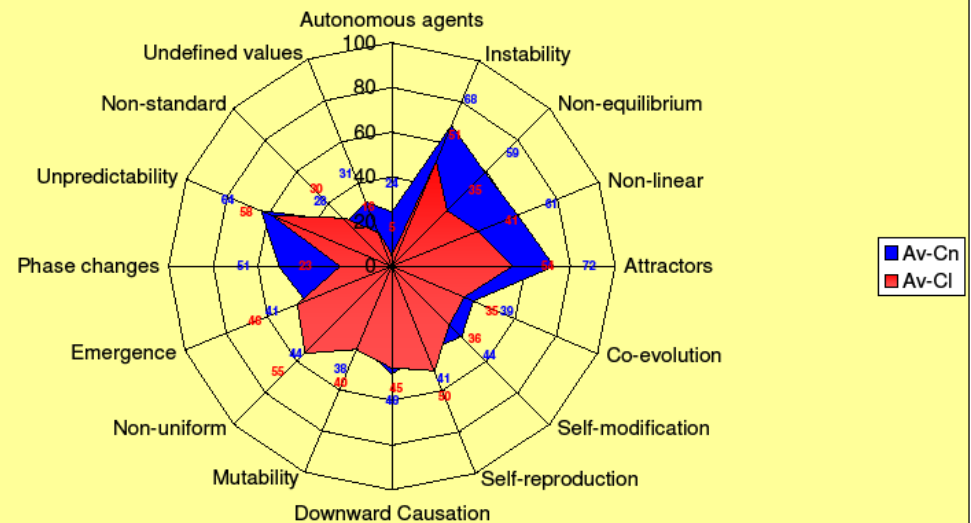




Conditional, Developmental & Behavioural Complexity Characteristics
Selecting Team members - Overall Results



Conditional, Developmental & Behavioural Complexity Characteristics
Selecting Team members





Outcome

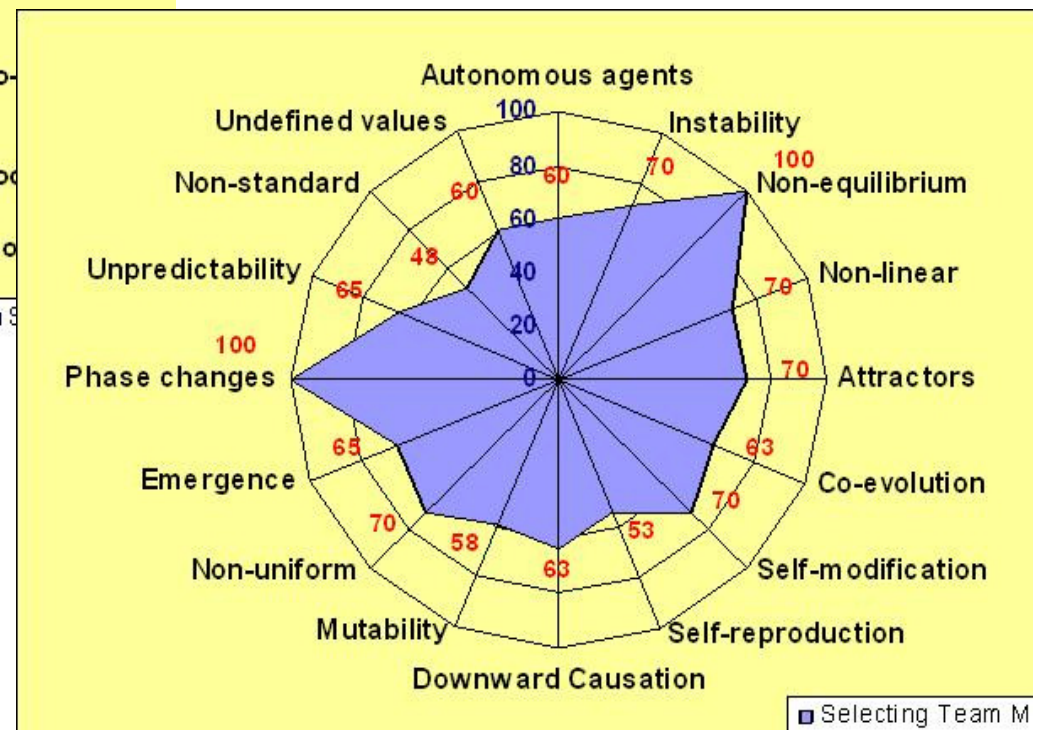
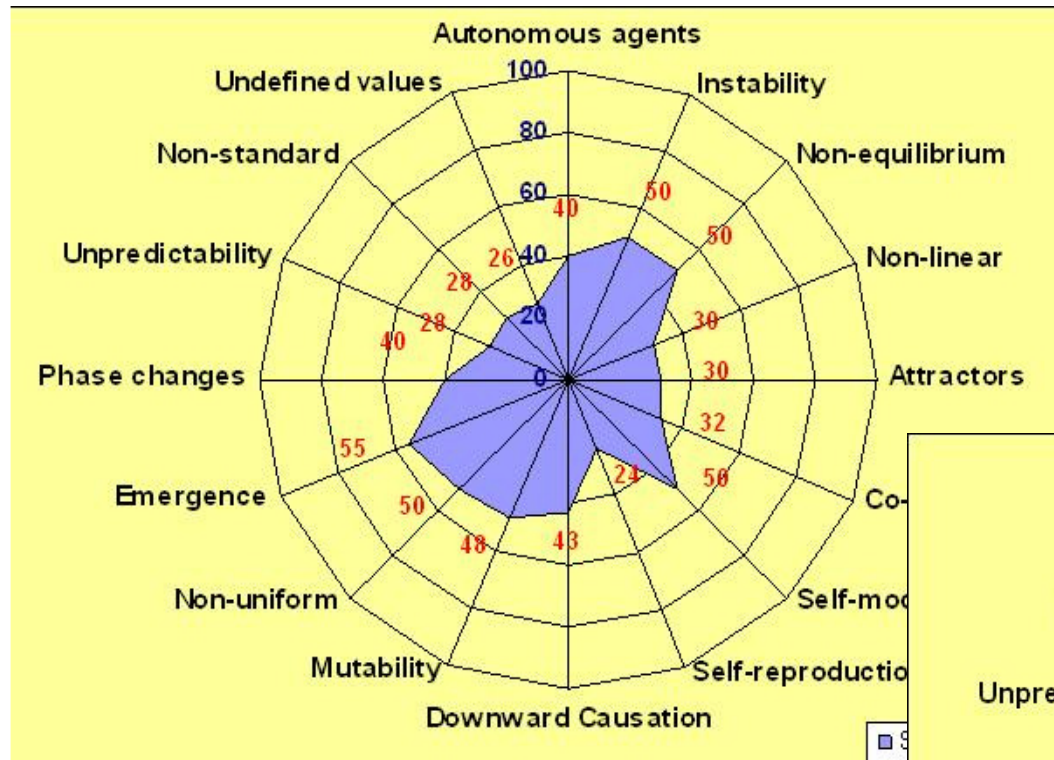
Clarity on the definition and the types of ~~x~~ complexity PMs are up against.

The framework developed, to manage ~~x~~ complexity of interconnections, is used to:

- Provide a set of required actions,
- Plan the implementation of actions,
- Provides a feedback mechanism by reporting the status of ~~x~~ complexity by the actions taken,
- Set continuous improvement targets,
- It is flexible, simple and cascadable,

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Conclusions

Determination and management of ~~x~~ complexity remains within various mechanistic tools.

Very few actions are taken to manage the effects of ~~x~~ complexity of interconnections

A complex environment requires implementation of a framework for the management of the effects of ~~x~~ complexity



Thank you

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