

STRATUS: a questionnaire for strategic usability assessment

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Introduction

Strategic usability helps organizations to achieve their business goals by improving the usability of their computer systems, and the way those systems are developed [1]. Its implementation remains a challenge as it requires the migration from traditional software development to user-driven processes. This translates into changes on:

- Organizational culture
- Expertise and staffing
- Development model

Problem

Usability maturity models (UMMs) were introduced to move from ad-hoc to strategic usability [2, 3, 4]. This is not trivial as there is no related empirical research and the level of documentation of UMMs is inappropriate.

STRATUS

Maturity	Initial	Tactical	Strategical
Usability of products	Poor	Measured	Predictable
Usability awareness	Misunderstood	Underestimated	Fully understood at any level
Usability staff	External consultant	Poor ratio designer-developer	Key usability functions filled
Usability resources	None to limited	Allocated to a few projects only	Allocated to any ongoing project
Usability processes	Ad hoc (reactive, amateur)	“Discount usability” (fragmented)	Integrated with current development model
Attitude toward usability	Not a concerned	Lack of support from decision makers	Perceived as competitive advantage
Attitude toward users	I-know-the-user syndrome	Difficult and sporadic access to users	User research
Company	Product-driven	User-centered	User-driven

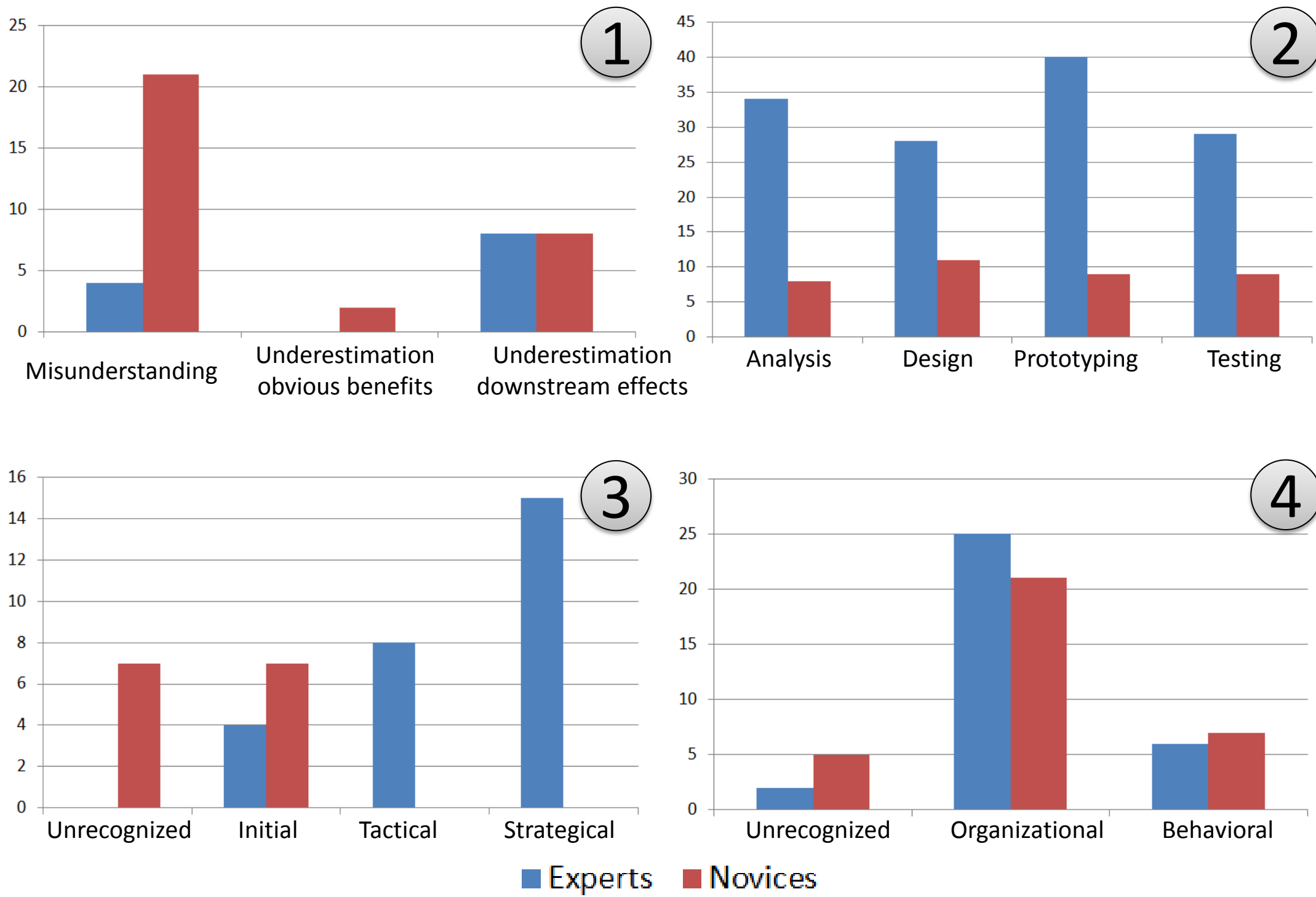
	Item	Scope	Level
Awareness	1.1	Disregard for users	Initial
	1.2-5	Misunderstanding of usability	Initial
	1.6-7	Underestimation of obvious effects	Tactical
	1.8-11	Underestimation of other effects	Strategical
Expertise	2.1-14	Usability techniques and methods Other techniques	
	2.15		
Resources	3.1	Usability staff	
	3.2	Usability lab	
	3.3	Usability rooms	
	3.4	Usability tools	
Processes	4.1	Unrecognized usability	Initial
	4.2-3	Ad hoc usability	Initial
	4.4-5	Proactive usability	Tactical
	4.6	Continuous usability	Strategical
	4.7-9	Usability culture	Strategical
Culture	5.1	Unrecognized usability	Initial
	5.2-4	General statements	Initial
	5.5-6	Organizational problems	Initial
	5.7-9	Behavioral problems	Tactical
	5.10	Other problems	

Pilot study

Case-control study design was adopted to compare the responses to a STRATUS survey between novices and experts in usability. STRATUS was administered to 28 participants (14 novices and 14 experts).

Main results

1. Awareness of usability was greater for experts
2. Usability expertise was wider for both experts and novices who rated fewer usability techniques
3. Usability was employed as strategic asset by experts and managed at initial level by novices
4. Both groups reported organizational problems (time, resources, access to users) rather than behavioral ones (resistance to change, poor integration in development process, lack of support from decision-makers).



Conclusion

STRATUS provides usability practitioners with a tool to cost-effectively assess strategic usability. STRATUS is much less resource-demanding than UMMs which require expertise with ISO standards, weeks to be carried out and analyzed, and the strong commitment of the people knowledgeable in each area being assessed.

References

[1] Bloomer, et al. 1997. Strategic usability: introducing usability into organisations. CHI’97 Tutorial Notes.
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[3] Nielsen, J. 2006. Corporate UX Maturity Stages. nngroup.com
[4] Schaffer, E. Institutionalization of Usability: A Step-By-Step Guide. Boston: Addison-Wesley, 2004.