



EUR EKA

Engineering
Usability Research
Empirical Knowledge & Artifacts

An Experienced-based Expansive Learning Approach (of Analyzing Usability Test Data)

Ludwig Fichte & Panagiotis Germanakos, SAP SE | July 20, 2018

PUBLIC



Myself and User Experience

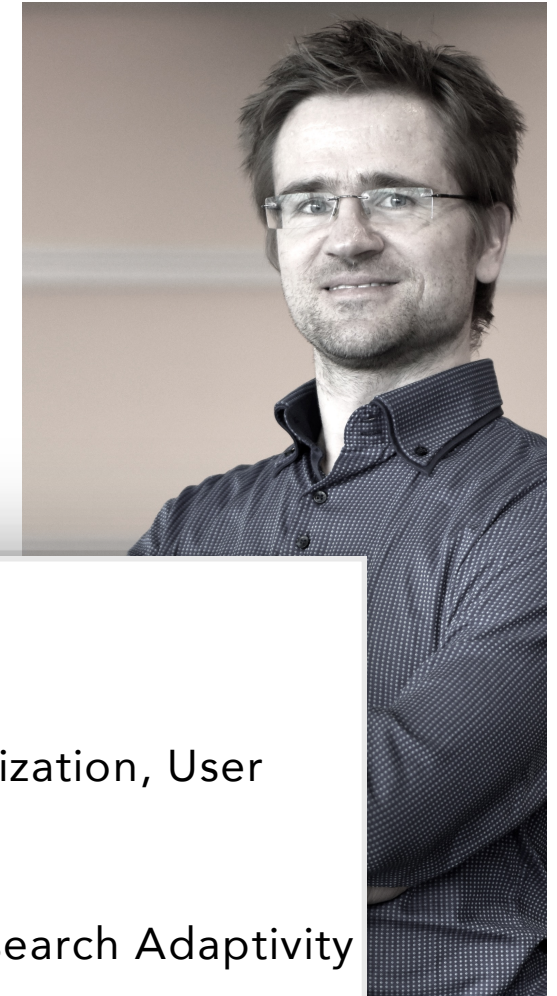
Me@SAP

- User Experience Researcher at SAP since 2007
- Focussing on qualitative user research in enterprise software
- Usability testing, contextual inquiries, Design Thinking
- UX method trainer



Dr. Panagiotis Germanakos

- UX Expert and Research Scientist at SAP
- HCI, Adaptive Cognitive Systems, Web Personalization, User Modeling
- Deputy Head of the Semantic and Cognitive Research Adaptivity Technologies Research Group at University of Cyprus



Myself and User Experience

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UX@SAP:

- Tens of thousands of developers vs. a couple hundred UXers
- Design-led development process
- Urgent need for frequent usability testing activities



Current Situation: Usability Testing Process

Planning and Execution of UR Activities

Preparation

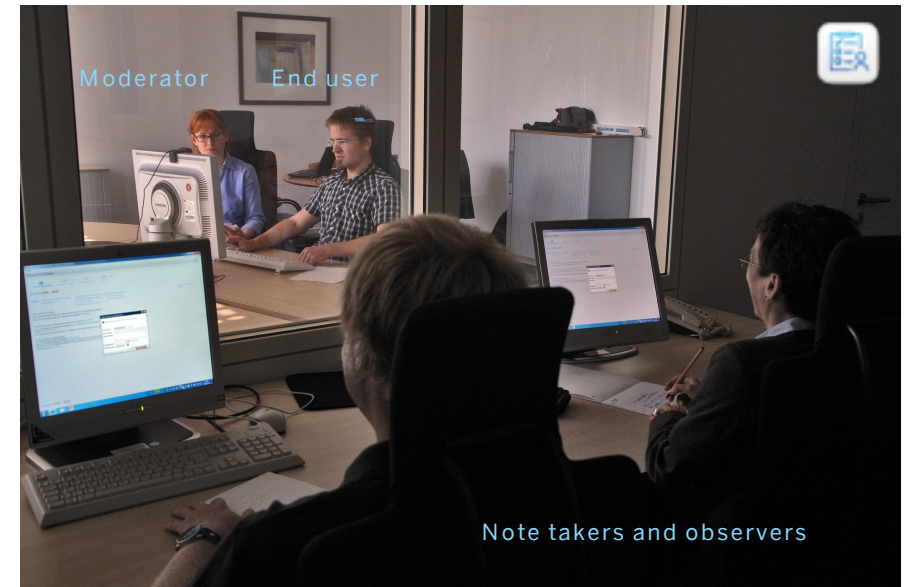


Phase	Activity	Responsible	Start	End	Status
Preparation	Define test objectives and scope	UR	2018-01-15	2018-01-20	Completed
	Recruit test participants	UR	2018-01-20	2018-01-25	In Progress
	Develop test scenarios	UR	2018-01-15	2018-01-20	Completed
	Prepare test environment	UR	2018-01-15	2018-01-20	Completed
Scheduling	Book test room	UR	2018-01-25	2018-01-25	Completed
	Notify test participants	UR	2018-01-25	2018-01-25	Completed
Execution	Conduct usability test	UR, Business Expert	2018-01-26	2018-01-27	In Progress
	Collect and analyze data	UR	2018-01-27	2018-01-28	Not Started

Scheduling



Execution



Current Situation: Usability Testing Process

Planning and Execution of UR Activities

Outcome



Name	Level	Area	SL	Time
Preuschl, Sylvia	M/SM	HCAS	OTT	10:00

INTERVIEW GUIDE

3 INTERVIEW & OBSERVATION
 > This section contains some sample questions that can be used as a starting point for developing for mind that you need some high-level questions to start the discussion/interview and you can then do questions as reminders for you to check whether you touched that specific point during the interview
 > Special: Specify the question's position on the screen if you need it
 follows: Critical: Definitely to be done; High: Should be avoided, else

- Senior Manager, dedicated to a larger account where they deliver larger transformations projects
- Strong functional focus on change management
- Does a lot of tracking of milestones, working with teams from different units and virtual projects

Q#	SubQ###	SubQ###
3.1	3.1.1	3.1.1.1
		3.1.1.2
		3.1.1.3
		3.1.4
		3.1.5
		3.1.6

Handwritten notes on grid paper:
 > Have both technical values & description in one screen side-by-side.
 > kind of value i.e. min, no to be shown once (e.g. technical value not display value)
 > CLEAR: too much white space on the right on the screen
 > Searching capability (missing)
 > Multiple deletion of articles possibility (has confirmation for each article)
 > CLEAR: article description is missing on the output
 > Classification classes are rather small (5-16 class.)
 Qualification [Classification of Articles]:
 Understand the product → create .xfl prototype (class specification, design)
 → create each part
 → create class for each part (cont. all different types of profiles)
 → receive .xfl from legacy system with all parts
 → create similar parts in SAP
 → assign articles in classes by creating a script
 → Paper work (e.g. articles) → legacy system vs reality
 → Paper work (e.g. articles) → legacy system vs reality
 → Paper work (e.g. articles) → legacy system vs reality
 → Paper work (e.g. articles) → legacy system vs reality

Vertical notes on the right:
 insights, e.g. articles from
 "from" in the overview; Thinks
 sales project, people issue; may
 would like to flag the items
 gin where it comes from and
 : many people and would like
 h many people and would like
 tion; due dates, impact; would
 he left.
 date in the issue
 k; a button would be clearer
 vity
 tle
 ith projects and tasks
 f to make no other
 them
 comment; plays around then
 on; with help finds edit button
 task; remind me button should



So, what's needed?

Sophisticated **TOOL** that would facilitate empirical/qualitative **DATA ANALYSIS** of formative usability test studies

COMBINING PROBLEM FOCUS (research data, issue consolidation)
WITH SOLUTION FOCUS (recommendations, follow-up, solution discussion and tracking)

STANDARDIZED REPORTING of usability research outcome that could enhance **TRANSPARENCY** and **COMPARABILITY** across different solutions or domains

GUIDED user studies analysis **METHODOLOGY**, that can bridge the gap between data collection and interpretation-based actions

Environment to cover all phases of usability study data analysis, and **FOCUSING ON TEAM COLLABORATION** for facilitating a highly synergetic outcome

A tool that scales across **DIFFERENT LEVELS** of **EXPERTISE**

So, what's needed?

Sophisticated **TOOL** that would facilitate empirical/qualitative **DATA ANALYSIS** of formative usability test studies

GUIDED user studies analysis **METHODOLOGY**, that can bridge the gap between data collection and interpretation-based actions

COMBINING PROBLEMS (research data, issues) **WITH SOLUTIONS** (recommendations, solution discussions)



...to cover all phases of study data analysis, and **USING ON TEAM COLLABORATION** for facilitating a highly synergetic outcome

STANDARDIZED REPORTING usability research outcomes could enhance **TRANSPARENCY** and **COMPARABILITY** across different solutions or domains

A tool that scales across **DIFFERENT LEVELS** of **EXPERTISE**

EUREKA and Experiential Learning / Expansive Learning

Experiential Learning

(David A. Kolb, 1984)

- Gain knowledge by being actively involved in experiences
- Four stages of learning cycle:
 - 1) doing, making the experience
 - 2) reflecting experience
 - 3) concluding, creating concepts
 - 4) planning, adapting learnings
- Learning as a process of conflict resolution to adapt to the world

Learning by Expanding (Activity Theory)

(Yrjö Engeström, 1987)

- Learning acquired through collaboration, interaction, active reflection
- Embracing different backgrounds, expertises, motives, skills of learners in inter-social system
- Learning outcome = transformational process which cannot be predicted outside the given formation

EUREKA and Experiential Learning / Expansive Learning

Experiential Learning

(David A. Kolb, 1984)

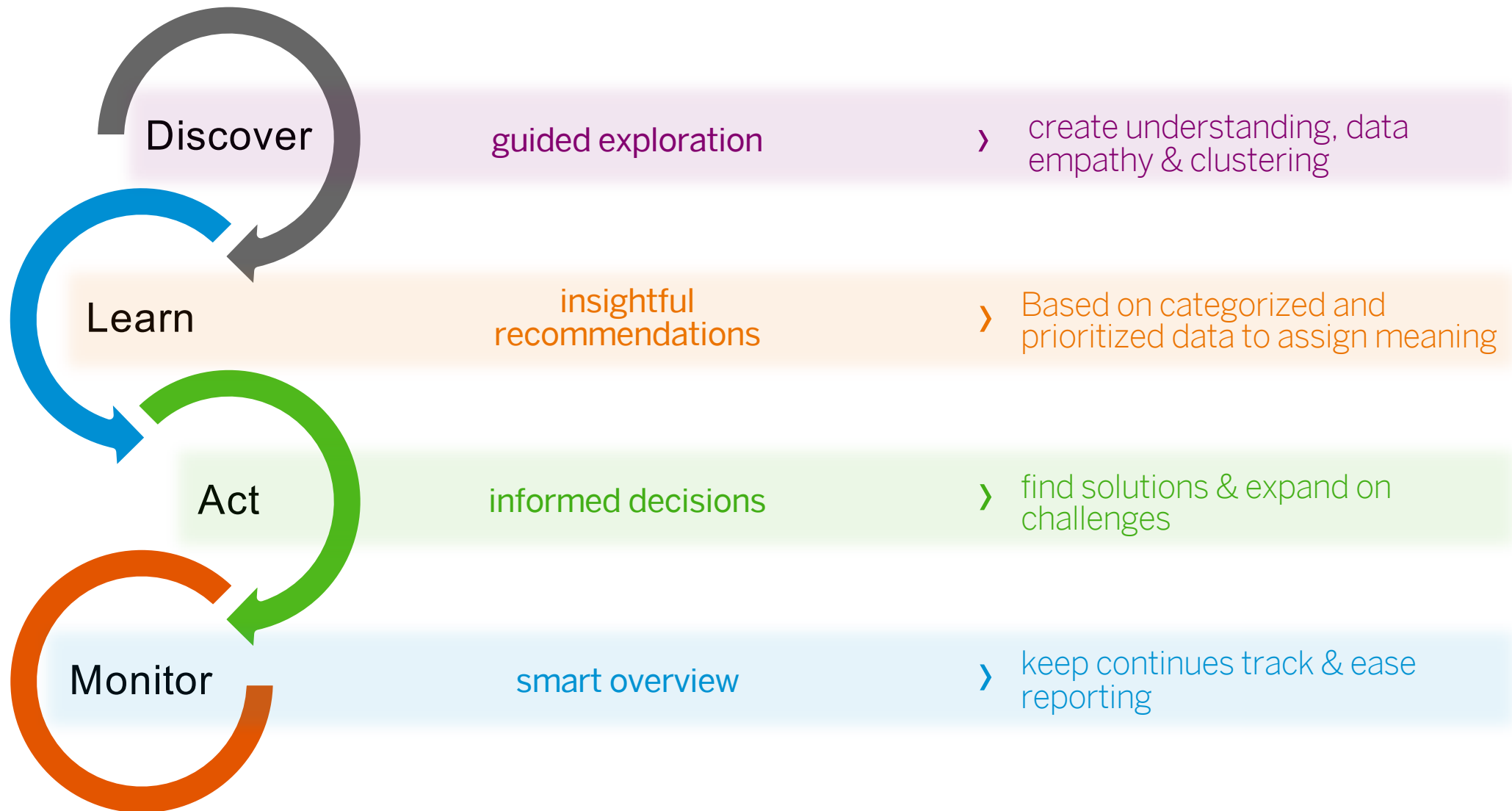
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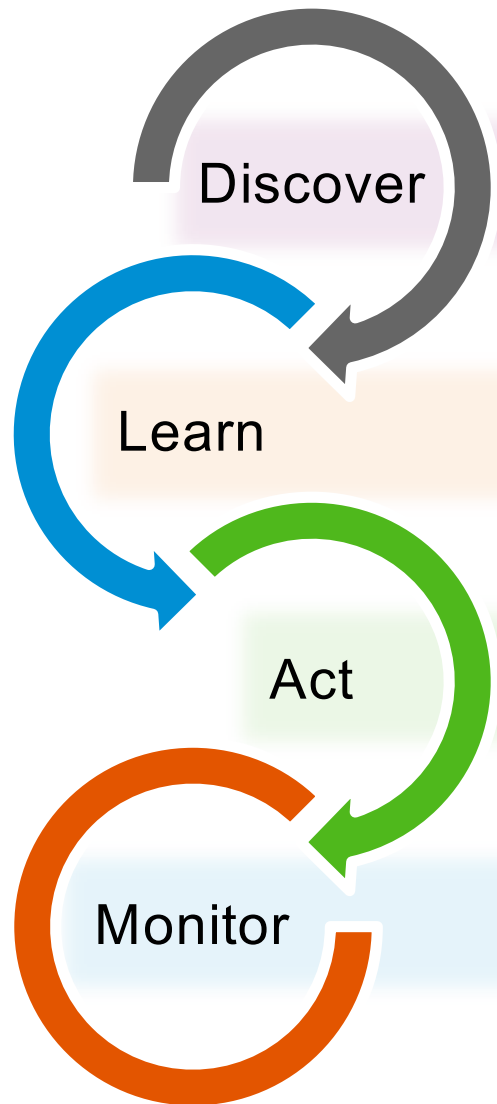
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EUREKA and Experiential Learning / Expansive Learning



EUREKA and Experiential Learning / Expansive Learning



guided exploration


insightful recommendations

informed decisions



smart overview

EUREKA DISCOVER | Understanding of Customers

SAP Project Companion for Consultants 

Usability Study: Feedback Analysis - CUSTOMERS

ID	CUSTOMER						COMMENTS
	#	ORGANIZATION NAME	COUNTRY	END-USER NAME	ACTUAL ROLE	END-USER ALIAS	
1	JT International S.A.	Russia	Dmitry	Manager	End-user 1	50%	I have 20 years of experience. Responsible for development, Developing-security-execution. Leading up to 20 people but it depends on the projects. Sometimes leading projects parallel but usually one project more or less remotely.
2	Delaware Consulting	France	Bruno	Senior Consultant	End-user 2	100%	BA consultant, rather experienced, in BI now, before that MM. Senior Consultant. Works for retail customers. Workshops with the customers, they express their needs, than they implement the solution, customizing, development, then go back to the customer. Sometimes they need to address, issues, then sometimes customer wants, more, 80% at least on customer site. Sometimes two, maybe 3, usually 1 or 2.
3	Swisscom AG	Switzerland	Daniel	Principal Consultant	End-user 3	90%	SAP Consultant for 12 years. Mostly physically on the customer site but there a lot of online meetings as well. Many parallel projects. Normally I project milestones. I speak to the tester what exactly to do with the task. The tester is the key user on the customer site.
4	Stretch Consulting	Sweden	Thomas	Consultant	End-user 4	90%	Ex-SAP employee in the BI area with lot of experience. Currently he works for Scania, they are having an EWM project in Belgium, and they will be rolling that out. He is coordinating the consultants. I am a little bit of a sidekick to the PM, gathering issues, and working closely with consultants to PM. Some I solve, some I delegate
5	Corposate Business Solutions GmbH	Germany	Bastian	Consultant	End-user 5	80%	Works on mobile for fiori development and web ID. Currently he is a consultant 90% on customer site. He organizes the workshops/coaching and engage developers. There has some delegate responsibility.
6	Audi AG	Germany	Stephan	Consultant/ Architect	End-user 6	80%	I fulfill both roles in IT finance (solution manager-consultant). Daily workshop/topic briefing and project planning. Problem tracking and connections away the projects consultants and customers. IOS user.
7	Avelon	Belgium	Dries	SAP Consultant	End-user 7	100%	
8	FH Aachen / trans4m.io	Germany	Christian	Prof/ Consultant	End-user 8	50%	
9	Kerig	France	Rohan	Senior Consultant/ PM	End-user 9	70%	

1a

Overview | Guided Exploration | **Insightful Recommendations** | Informed D | **Up** | Customers | Solutions (EUREKA+) | Usab-Var-Clus-Scr Charts | User Guide

EUREKA DISCOVER | Understanding of Customers/Users

SAP Project Companion for Consultants
Usability Study: Feedback Analysis - CUSTOMERS

ID	CUSTOMER						COMMENTS
	ORGANIZATION NAME	COUNTRY	END-USER NAME	ACTUAL ROLE	END-USER ALIAS	ROLE FIT	
1	IT International S.A.	Russia	Dmitry	Manager	End-user 1	50%	I have 20 years of experience responsible for development, Developing security-execution. Leading up to 20 people but it depends on the projects. Supporting, rather experience usually one project more or less remotely.
2	Delaware Consulting	France	Erune	Senior Consultant	End-user 2	100%	BA consultant for 12 years. Mostly ph... that MM. Senior Consultant. Works for retail customers. Workshops with the customer, they express their needs, then go back to the customer. Sometimes they need to address, issues customer wants, more, 80% at least on customer site. Sometimes two, maybe 3, usually 1 or 2.
3	Swisscom AG	Switzerland	Daniel	Principal Consultant	End-user 3	90%	... site but there a lot of online meetings as well. Many parallel projects. ... to do with the task. The tester is the key user on the customer site.
4	Stretch Consulting	Sweden	Thomas	Consultant	End-user 4	80%	... he works for Scania, they are having an EWM project in Belgium, and they ... a little bit of a sidekick to the PM, gathering issues, and working closely
5	Corporate Business Solutions GmbH	Germany	Rastian	Consultant	End-user 5	80%	... is a consultant 90% on customer site. He organizes the ... delegate responsibility.
6	Audi AG	Germany	Stefan	Consultant/ Architect	End-user 6	80%	... alling that out. He is coordin... Daily workshop/topic briefing and project planning. Problem tracking and ... user.
7	Avelon	Belgium	Dimitri	Senior Consultant/ PM	End-user 7	100%	... tants to PM. Some I ...
8	Fit Aachen / transform.io	Germany	Olivier	Senior Consultant/ PM	End-user 8	50%	
9	Kerig	France	Rafael	Senior Consultant/ PM	End-user 9	70%	

1a

EUREKA DISCOVER | Data Empathy and Guided Exploration

SAP Project Companion for Consultants														EUREKA						
Usability Study: Feedback Analysis - EXPLORATION																				
TASKS ID	COMMENTS FROM THE SESSIONS	END-USERS										End-Users Mentioned a Comment	Total References/Comment	% of References/Comment	Aggregated % of References	COMMENTS				
		End-User																		
T#_ID#	Consolidated Description Iteration 1 (from note-takers)	50% 1	100% 2	90% 3	90% 4	80% 5	80% 6	100% 7	50% 8	70% 9	0% 0									
T1-2_30	When a selection of an assignee is made the screen "jumps down"	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	0,5	<FR>	<FR>	1	0,5	6%	6%	The screen "jumps down" after an assignee selection	
Success WITH ASSISTANCE	Task Description: Your manager is interested in the status of action 'Identify planned downtime periods'. (a) Add comment (b) change priority to high, (c) create linked issue and assign it to colleague, (d) follow-up with notifications											AVG/SubTask	Total/Task							
	(a)	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>					0,67				
	(b)	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>					0,11				
	(c)	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>					0,44	0,61			
(d)	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>					1,22					
TASK 3	T3_1	Easily found the active project and from then he moved to action. He found the effort in 'Edit' directly	0,5	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>				11%	0,5	6%	6%	The effort in 'Edit' is easy to be found	
	T3_2	He found easily the timeline, where expected. He likes a lot the look and interaction of the timeline	0,5	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	0,5	<FR>	<FR>				22%	1	11%	11%	Spotting the timeline was where it was expected. "I like the interaction and look" Timeline is helpful but the items and critical parts (e.g. overdue, high prio) should be more visible; currently visually are all the same/ flat. Different visual hierarchy (e.g., tree structure) for the different types of element would be nice (e.g., seeing dependencies)
	T3_3	Timeline: It is helpful but the critical should be more visible. If something is due today, it should be indicated. But also you need to think about rules like high prio and due. I want the consultants to work on the high prio due today or tomorrow	0,5	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>				11%	0,5	6%	23%	Being able to customize the timeline in different modes (e.g. project lifecycle, sprints), and determine if it will be in ascending/ descending order
	T3_4	Timeline: The same design is used for action and work package. Everything the same visually, but not the same type, maybe and icon, or color. Different visual hierarchy (e.g., tree structure) for the different types of element would be nice, to see what is connected with what, what are the things I created, I depend upon, etc.	<FR>	1	<FR>	0,9	<FR>	<FR>	1	<FR>	0,7	<FR>				44%	3,6	40%	19%	Too much content on the timeline per individual item (e.g. should be one or max 2 lines)
	T3_5	I would like to have the opportunity to set the time in the timeline in different modes, e.g. project(s) lifecycle, sprints. Also, to determine whether to be shown in ascending/ descending order	<FR>	<FR>	<FR>	0,9	0,8	0,8	<FR>	<FR>	<FR>	<FR>				33%	2,5	28%	28%	The red color in high prio relates to an error. "I do not like to see an red color in the sap world"
	T3_6	Timeline: Too much content on the timeline per individual item. When there are thousands of actions, this is too much for each action, (e.g. should be one or max 2 lines)	<FR>	1	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	0,7	<FR>				22%	1,7	19%	19%	Red square to indicate high prio catches my eye and I think it is good that it is linked to the header
	T3_7	The red icon is for high priority. Red is an error color to him. I do not like to see an red color in the sap world.	<FR>	1	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>				11%	1	11%	11%	Red square to indicate high prio catches the eye and it is
		<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>	<FR>				11%	0,0	10%	10%		

1b Guided Exploration

EUREKA DISCOVER | Data Empathy and Guided Exploration

Have some related values a description
 screen side-by-side
 kind of value i.e. how to be shown once (e.g. red icon
 (L242) : too much white space on the right on
 the screen
 Searching capability (missing)
 Multiple deletion of articles possibility (you get
 confirmation for each article)
 (L322) : article description is ~~not~~ writing on the

End-User	End-Users Mentioned a Comment	Total References/Comment	% of References/Comment	Aggregated % of References	Clustering and Summary Iteration 2 (see Tasks_Recommendation)
80% 80% 100% 50% 70% 0%	6 7 8 9 0	0.5	1	0.5	6%
		Avg/SubTask	Total/Task		
		0.67		0.11	
		0.44		0.61	
		1.22			

6% 11% 11% 6% 23%

0.9 0.8

1b

be for is easy to
 Spotting
 where it v
 the interac
 Timeline is
 items and
 overdue, h
 more vis
 are all elem
 Dis

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 timeline in different modes
 (e.g. project lifecycle, sprints),
 and determine if it will be in
 ascending/ descending order

Too much content on the
 timeline per individual item
 (e.g. should be one or max 2
 lines)

The red color in high prio
 relates to an error. I do not
 like to see an red color in the
 sap world
 Red square to indicate high
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TASK 3
 T3_2 the time
 T3_3 want the consultan
 T3_4 I would like to have the opportunity to set the time in the timeline in different modes, e.g. project(s) lifecycle, sprints. Also, to determine whether to be shown in ascending/ descending order
 T3_5
 T3_6 Timeline: Too much content on the timeline per individual item. When there are thousands of actions, this is too much for each action, (e.g. should be one or max 2 lines)
 T3_7 The red icon is for high priority. Red is an error color to him. I do not like to see an red color in the sap world.

EUREKA LEARN | Assign Meaning and get Insightful Recommendations

SAP Project Companion for Consultants EUREKA

Usability Study: Feedback Analysis - RECOMMENDATION

#	TASKS ID (see Tasks_Exploration)	COMMENTS FROM THE SESSIONS				END-USERS		USABILITY VALUES & PRIORITY				RECOMMENDATION
		Cluster Summary	Cluster Name	Related Screen	Related Use Case	Aggregated % of References	Importance based on References	Usability Issue Type	Issue Judgement	Impact on Application	Priority	
1	T1-2_1	Android availability	Android	N/A	C-Ov2 > C-OV8 > AS3	6%		User Quote	Neutral	High	↓	Definitely you can wait for an action
2	T1-2_2-3	Provide a visible text entry for free comments and alternative ways for inserting comments, i.e. voice	Comments	New_Comment	C-Ov2 > C-OV8 > AS3	9%		Missing Functionality	Neutral	Medium	↓	Definitely you can wait for an action
3	T1-2_4	Change priority is straight forward	Priority	Edit_Action	C-Ov2 > C-OV8 > AS3	21%		User Quote	Positive	Medium	👉	You may wait for an action
4	T1-2_5-6	Priority is not visible if it is not high. It is really good to change priority with a couple of clicks	Priority	Action	C-Ov2 > C-OV8 > AS3	8%		Affordance, Visual Design	Negative	Medium	↓	Definitely you can wait for an action
5	T1-2_7	Add comment is not necessarily expected in '+'	Comments	Action	C-Ov2 > C-OV8 > AS3	85%		Buttons & Icons	Negative	High	↑	Definitely take an action now
6	T1-2_8-9	The search assignees should be fixed. The 'cancel' btn is not connected to a selection	Assignees	Select_Assignees	C-Ov2 > C-OV8 > AS3	19%		Technical Bug	Negative	High	👉	You may wait for an action
7	T1-2_10	After selecting an assignee the 'Done' btn is expected instead of simply going back	Assignees	Select_Assignees	C-Ov2 > C-OV8 > AS3	28%		Navigation	Neutral	Medium	👉	You may wait for an action
8	T1-2_11	It is nice to have all these different types of notifications and subscription options	FollowUp	Issue	C-Ov2 > C-OV8 > AS3	6%		User Quote	Positive	Medium	↓	Definitely you can wait for an action
9	T1-2_12	Provide different issue types like bugs that need to be fixed and changes	Issues	New_Issue	C-Ov2 > C-OV8 > AS3	6%		Missing Functionality	Neutral	Medium	↓	Definitely you can wait for an action
10	T1-2_13	Provide a menu to set 'my profile'	MyProfile	Overview	C-Ov2 > C-OV8 > AS3	11%		Missing Functionality	Neutral	Medium	↓	Definitely you can wait for an action
11	T1-2_14	Show only once the photo of a person that does multiple updates	Photo	Action	C-Ov2 > C-OV8 > AS3	11%		Affordance, Visual Design	Neutral	Medium	↓	Definitely you can wait for an action
12	T1-2_15	The creator of an action/issue should be shown once (currently in creation and history)	Actions	Action	C-Ov2 > C-OV8 > AS3	11%		Data Entry & Selection	Neutral	Medium	↓	Definitely you can wait for an action
13	T1-2_16-17	View how many actions need to be completed before the one at hand, and also where an action is found in the WP or overall project hierarchy	Actions	N/A	C-Ov2 > C-OV8 > AS3	11%		Missing Functionality	Neutral	Medium	↓	Definitely you can wait for an action
14	T1-2_18	The creation date of an action should be visible more prominently	Actions	Action	C-Ov2 > C-OV8 > AS3	11%		Affordance, Visual Design	Neutral	High	↓	Definitely you can wait for an action
15	T1-2_19	Items in history should be in descending order	History	Action	C-Ov2 > C-OV8 > AS3	11%		Data Entry & Selection	Neutral	Low	↓	Definitely you can wait for an action
16	T1-2_20	On the detail screens...	ActionsIssues	Action	C-Ov2 > C-OV8 > AS3	11%		Data Entry & Selection	Neutral	Low	↓	Definitely you can wait for an action

Navigation: Overview | Guide | **2** | Insightful Recommendations | Informed Decision | Wrap-Up | Customers | Solutions (EUREKA+) | Usab-Var-Clus-Scr Charts | User Guide

EUREKA LEARN | Assign Meaning and get Insightful Recommendations

SAP Project Companion for Consultants

Usability Study: Feedback Analysis - RECOMMENDATION

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3	T1-2_4	Change priority is straight forward	Priority	Edit_Action	C-Ov2 > C-OVB > ASS	21%	▲	User Quote	Positive	Medium	↔	You may wait for an action
4	T1-2_5-6	Priority is not visible if it is not high, it is really good to change priority with a couple of clicks	Priority	Action	C-Ov2 > C-OVB > ASS	8%	▲	Affordance, Visual Design	Negative	Medium	↓	Definitely you can wait for an action
5	T1-2_7	Add comment is not necessarily expected in '-'	Assignees	Action	C-Ov2 > C-OVB > ASS	1%	▲	Affordance, Visual Design	Neutral	High	↑	Definitely you can wait for an action
6	T1-2_8-9	The search assignees should be... The 'cancel' btn is not connected to selection	Assignees	Select_Assignees	C-Ov2 > C-OVB > ASS	19%	▲	Technical	Neutral	High	↔	You may wait for an action
7	T1-2_10	After selecting an assignee the btn is expected instead of simply going back	Assignees	Select_Assignees	C-Ov2 > C-OVB > ASS	28%	▲	Navigation	Neutral	Medium	↔	You may wait for an action
8	T1-2_11	It is nice to have all these different types of notifications and subscription options	FollowUp	Issue	C-Ov2 > C-OVB > ASS		▲	User Quote	Positive	Medium	↓	Definitely you can wait for an action
9	T1-2_12	Provide different issue types like bugs that need to be fixed and changes	Issues	New_Issue	C-Ov2 > C-OVB > ASS	6%	▲	Missing Functionality	Neutral	Medium	↓	Definitely you can wait for an action
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11	T1-2_14	Show only once the photo of a person that does multiple updates	Photo	Action	C-Ov2 > C-OVB > ASS	11%	▲	Affordance, Visual Design	Neutral	Medium	↓	Definitely you can wait for an action
12	T1-2_15	The creator of an action/issue should be shown once (currently in creation and history)	Actions	Action	C-Ov2 > C-OVB > ASS	11%	▲	Data Entry & Selection	Neutral	Medium	↓	Definitely you can wait for an action
13	T1-2_16-17	View how many actions need to be completed before the one at hand, and also where an action is found in the WP or overall project hierarchy	Actions	N/A	C-Ov2 > C-OVB > ASS	11%	▲	Missing Functionality	Neutral	Medium	↓	Definitely you can wait for an action
14	T1-2_18	The creation date of an action should be visible more prominently	Actions	Action	C-Ov2 > C-OVB > ASS	11%	▲	Affordance, Visual Design	Neutral	High	↓	Definitely you can wait for an action
15	T1-2_19	Items in history should be in descending order	History	Action	C-Ov2 > C-OVB > ASS	11%	▲	Data Entry & Selection	Neutral	Low	↓	Definitely you can wait for an action
16	T1-2_20	...	Actions/Issues	Action	C-Ov2 > C-OVB > ASS	11%	▲	Data Entry & Selection	Neutral	Low	↓	Definitely you can wait for an action

2

EUREKA ACT | Meet the Issues and make Informed Decisions

SAP Project Companion for Consultants EUREKA

Usability Study: Feedback Analysis - DECISION

ID	TASKS ID	PRIORITY ON COMMENTS		RECOMMENDATION & SOLUTION		DECISION		MONITORING
#	T#_ID#	Cluster Summary	Priority	Recommendation	Possible Solutions	Team Decision		Progress
1	T1-2_1	Android availability	↓	Definitely you can wait for an action		Go	▶	Not Started
2	T1-2_2-3	Provide a visible text entry for free comments and alternative ways for	↓	Definitely you can wait for an action		Go	▶	In Progress
3	T1-2_4	Change priority is straight forward	↔	You may wait for an action		Go	▶	Done
4	T1-2_5-6	Priority is not visible if it is not high. It is really good to change priority with a couple of clicks	↓	Definitely you can wait for an action		Maybe	▶	<Select Progress>
5	T1-2_7	Add comment is not necessarily expected in '+'	↑	Definitely take an action now		No Go	▶	<Select Progress>
6	T1-2_8-9	The search assignees should be fixed. The 'cancel' btn is not connected to a selection	↔	You may wait for an action		Go	▶	In Progress
7	T1-2_10	After selecting an assignee the 'Done' btn is expected instead of simply going back	↔	You may wait for an action		No Go	▶	<Select Progress>
8	T1-2_11	It is nice to have all these different types of notifications and subscription options	↓	Definitely you can wait for an action		Go	▶	Done
9	T1-2_12	Provide different issue types like bugs that need to be fixed and changes	↓	Definitely you can wait for an action		Go	▶	Done
10	T1-2_13	Provide a menu to set 'my profile'	↓	Definitely you can wait for an action	Investigate why the picture did not "tell" the user that is there	Go	▶	Done
11	T1-2_14	Show only once the photo of a person that does multiple updates	↓	Definitely you can wait for an action		Maybe	▶	<Select Progress>
12	T1-2_15	The creator of an action/issue should be shown once (currently in creation)	↓	Definitely you can wait	Global decision dependent	Maybe	▶	<Select Progress>

Navigation: Overview | Guided Exploration | Insightful Recommendation | **3 Informed Decision** | Wrap-Up | Customers | Solutions (EUREKA+) | Usab-Var-Clus ...

EUREKA ACT | Meet the Issues and make Informed Decisions

SAP Project Companion for Consultants

Usability Study: Feedback Analysis - DECISION

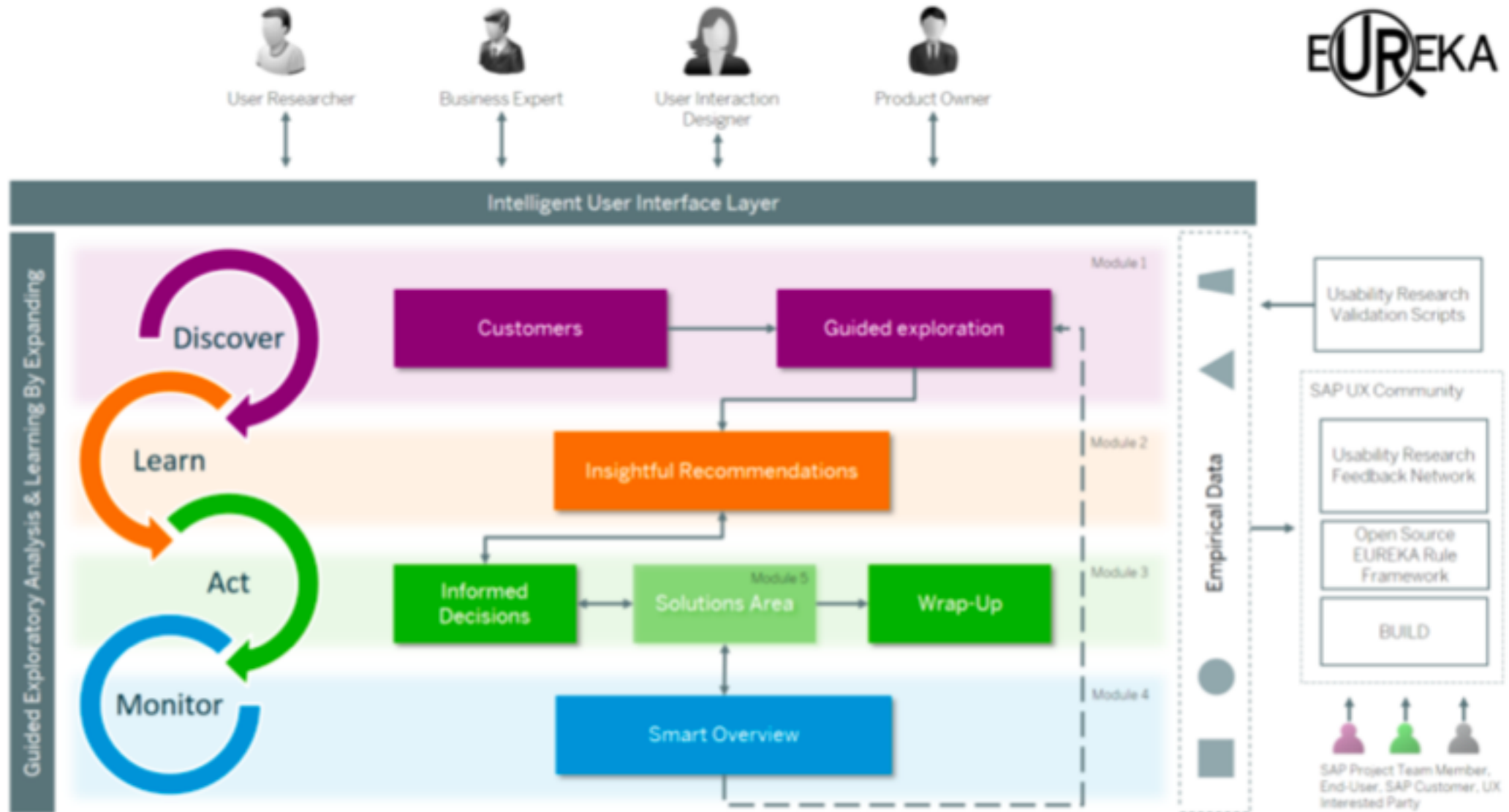
RECOMMENDATION & SOLUTION					DECISION		MONITORING
ID	TASKS ID	PRIORITY ON COMMENTS	RECOMMENDATION	Team Decision	Progress		
#	T#_ID#	Cluster Summary	Priority	Recommendation			
1	T1-2_1	Android availability	↓	Definitely you can wait for an action	Go	Not Started	
2	T1-2_2-3	Provide a visible text entry for free comments and alternative ways for	↓	Definitely you can wait for an action	Go	In Progress	
3	T1-2_4	Change priority is straight forward	⚡	You may wait for an action	Go	In Progress	
4	T1-2_5-6	Priority is not visible if it is not high. It is really good to change priority with a couple of clicks	↓	Definitely you can wait for an action	Go	In Progress	
5	T1-2_7	Add comment is not necessarily expected in '+'	↑	Definitely take an action now	Go	In Progress	
6	T1-2_8-9	The search assignees should be fixed. The 'cancel' btn is not connected to a selection	⚡	You may wait for an action	Go	In Progress	
7	T1-2_10	After selecting an assignee the 'Done' btn is expected instead of simply going back	⚡	You may wait for an action	No Go	In Progress	In Progress
8	T1-2_11	It is nice to have all these different types of notifications and subscription options	↓	Definitely you can wait for an action	Go	In Progress	<Select Progress>
9	T1-2_12	Provide different issue types like bugs that need to be fixed and changes	↓	Definitely you can wait for an action	Go	In Progress	
10	T1-2_13	Provide a menu to set 'my profile'	↓	Definitely you can wait for an action	Go	In Progress	Done
11	T1-2_14	Show only once the photo of a person that does multiple updates	↓	Definitely you can wait for an action	Maybe	In Progress	<Select Progress>
12	T1-2_15	The creator of an action/issue should be shown even if another is created	↓	Definitely you can wait for an action	Maybe	In Progress	<Select Progress>
13	T1-2_16	Global design dependent	↓	Definitely you can wait for an action	Maybe	In Progress	<Select Progress>

3 Informed Decision

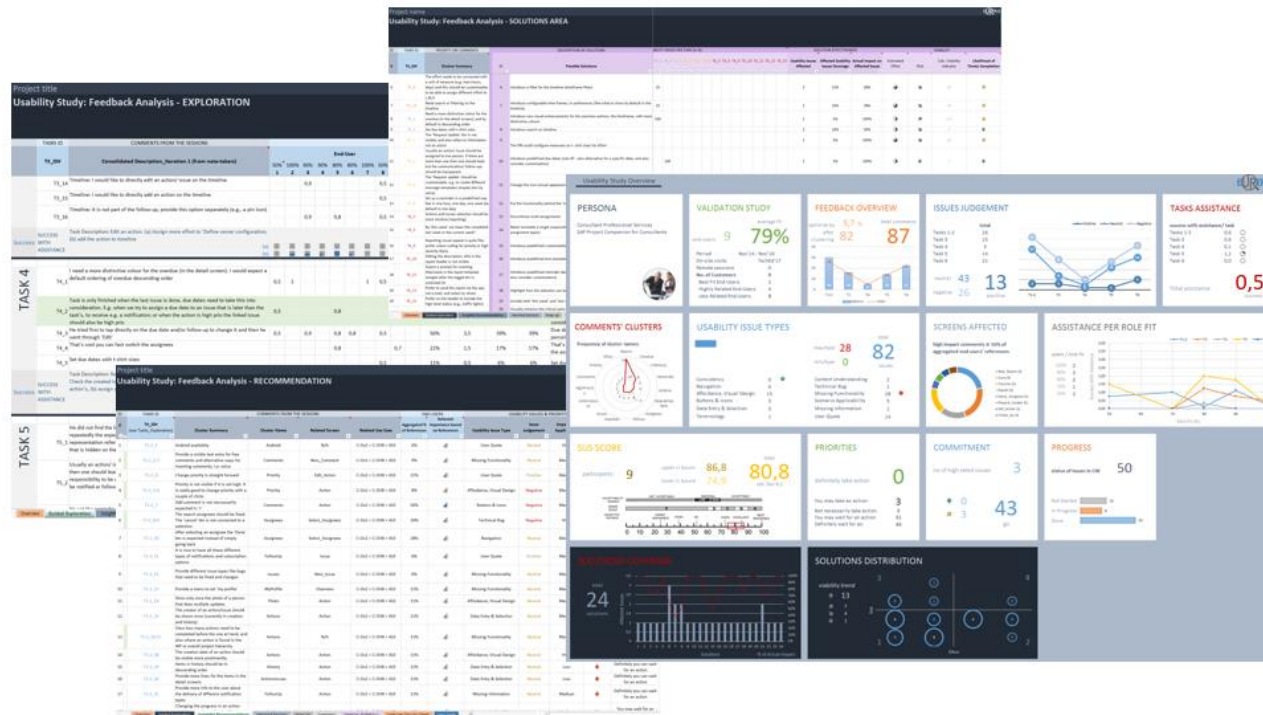
EUREKA MONITOR | Keep Continuous Track with a Smart Overview



EUREKA Information Flow Overview

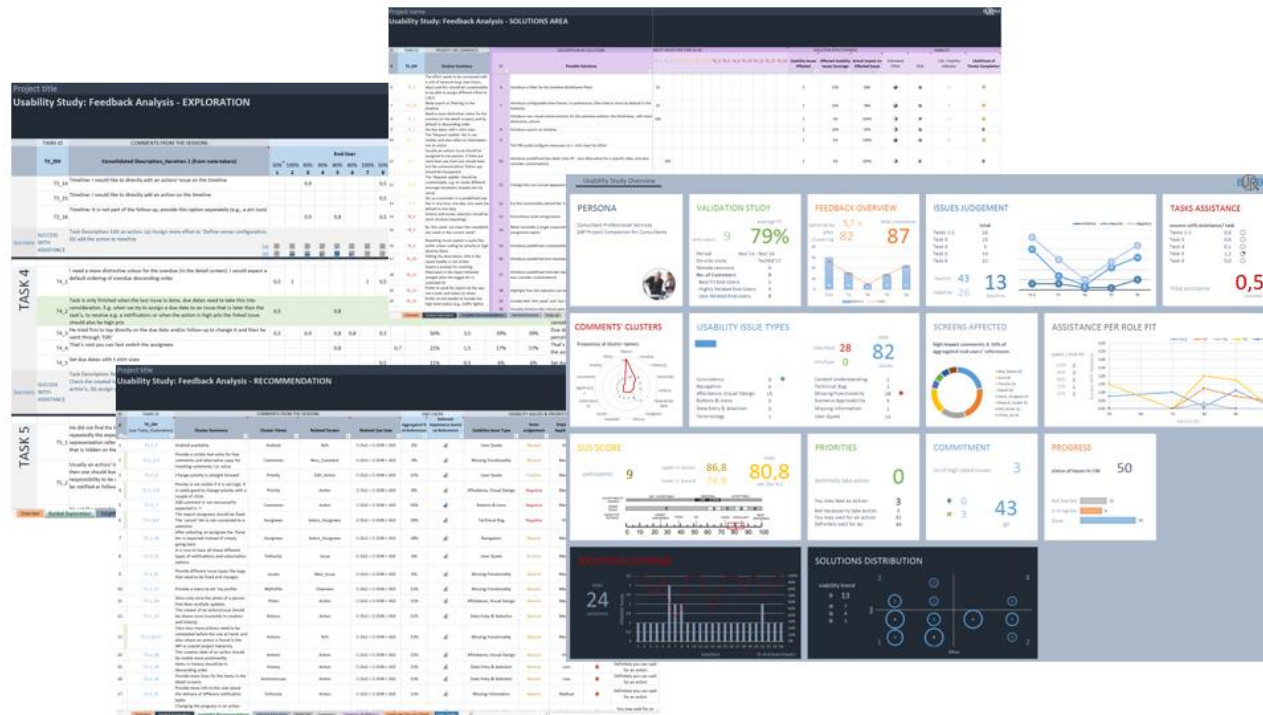


Benefits



- Less time, more data
- Connection between raw data and solution
- Transparency
- Comparability
- Easy reporting
- Consolidation across team members
- Guided approach
- Enhancing qualitative insights with numeric data
- Experiences of team members in the center
- Potential for smart functionalities (incl. NLP, smart algorithms to i.e. assign weighted frequencies, calculate solution viability, make recommendations, identify clusters) , sentiment analysis, APIs)

Downsides of XLS



- Complicated to set-up
- Not self-explanatory
- No active guidance
- Hard to use it collaboratively
- Time-consuming data input
- No proper APIs
- XLS antipathy

Next Steps

Design

- Creating hi-fi mockups
- Coming-up with MVP

User Research

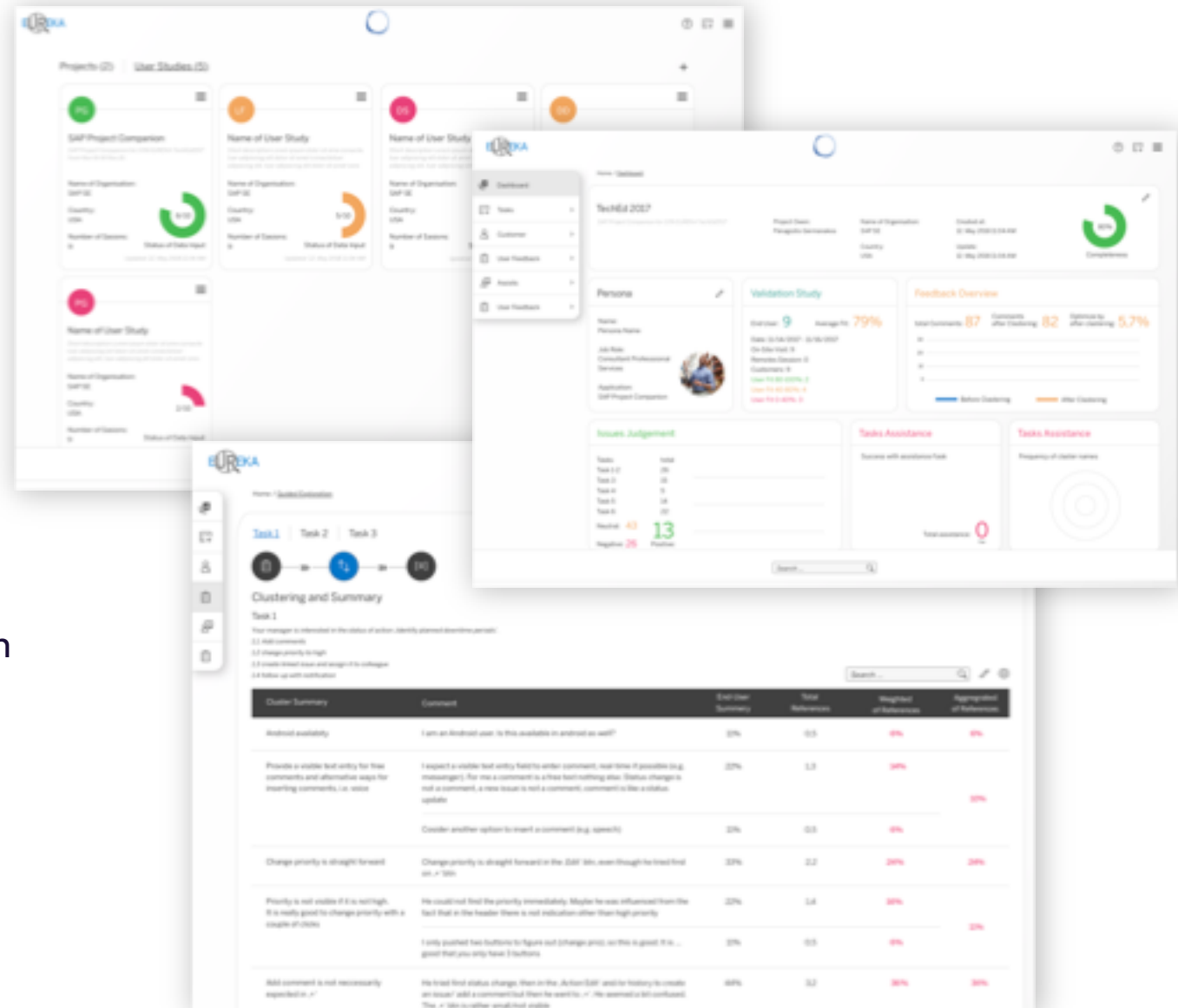
- Customer interviews
- Mockup validation
- Taxonomy validation

Development

- Architecture
- Algorithms
- Technology PoC
- (Sentiment analysis, NLP)
- APIs

Product Management

- Customer akquisition
- Marketing
- Business modelling



Thank you!

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EUREKA youtube clip:

https://youtu.be/x4_DGEBwhkc

Appendix: Main Learning Theories and their weakness in regard to EUREKA

Main Learning Theories	Weaknesses	Main Learning Theories	Weaknesses
<p>Behaviourism <i>Learning is the acquisition of new behaviours based on environmental conditions, the use of instructional cues, practice, and reinforcement</i> [23,24]</p>	<ul style="list-style-type: none"> • Emphasizes on the perspective that a change of behaviour is a result of experience that can be measured • Uses feedback (reinforcement) to modify behaviour in the desired direction • Strict linear instructor-learner relationship in terms of stimuli presentation and passive response 	<p>Constructivism <i>Humans construct knowledge and meaning from their experiences and their own understanding</i> [26, 27]</p>	<ul style="list-style-type: none"> • Lack of structure, might lead to a cumbersome learning process for some individuals • Learners might not have the ability to form relationships and abstracts between the knowledge they possess and the knowledge they are learning for themselves, leading to confusion and frustration • Focuses strictly on self-evaluation of one's progress (neglecting the comparison with other learners), creating in cases a fuzzy understanding of the actual knowledge units a learner acquires or at which stages in learning process might struggle
<p>Cognitivism <i>Learning process happens inside the human mind, acquisition of the language, and internal mental structure</i> [25]</p>	<ul style="list-style-type: none"> • Focuses solely on the mental activities of the learner (learning is an internal brain process), neglecting other factors that may affect behaviour like individual experiences, biological structures, chemical imbalances, etc. • Instructor triggers opportunities for learning utilizing the mental processors (and data) of learners • It is based and measured on controlled environments 	<p>Social Learning <i>People could learn new behaviours and information from watching others (a.k.a. observational learning)</i> [28]</p>	<ul style="list-style-type: none"> • Main emphasis on the environment as an influential factor that directs learning of an individual and his directs, but not on his own actions • Not direct consideration of age of individuals or developmental learning stages and growth

Appendix: Selection of Analysed Tools which focus on Usability-Tests

	Qualitative Analysis Capabilities						
	(Highlight) Videos	Pattern Analysis	Clustering Issues	Filter/search comments	Combine recording with findings/notes	Categorize/tag individual comments/findings	Create/track solutions
Primarily U-Test Support							
Rapidusertests	X		X	X	X	X	
Reframer (by OptimalWorkshop)	X		X	X	X	X	
WhatUsersDo	X			X	X	X	
Userfeel	X				X	X	
Ovologger	X			X	X	X	
Usability Testing Management Tool			X	X		X	X
Validately	X			X	X	X	
TryMyUI	X				X	X	
Fullstory	X	X			X		
User Action Framework			X			X	X

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