

# The Pistoia Alliance UXLS Community: precompetitive collaboration for a brighter UX future!

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precompetitive collaboration for a  
brighter UX future!



# Our UXLS Community Objectives

1. Forge a project team to foster dialogue and share best practices.

2. Raise awareness of the value of UX in the life sciences

3. Keep up-to-date with changing guidance in a regulatory landscape

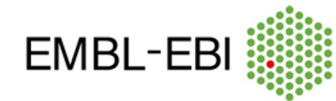
# A project team of UX folk in life science R&D

- We have built a community of over 110 UX specialists from biopharmaceutical R&D, academia, agrifood & technology organisations

## Steering committee



## Project members include



Swiss Institute of  
Bioinformatics



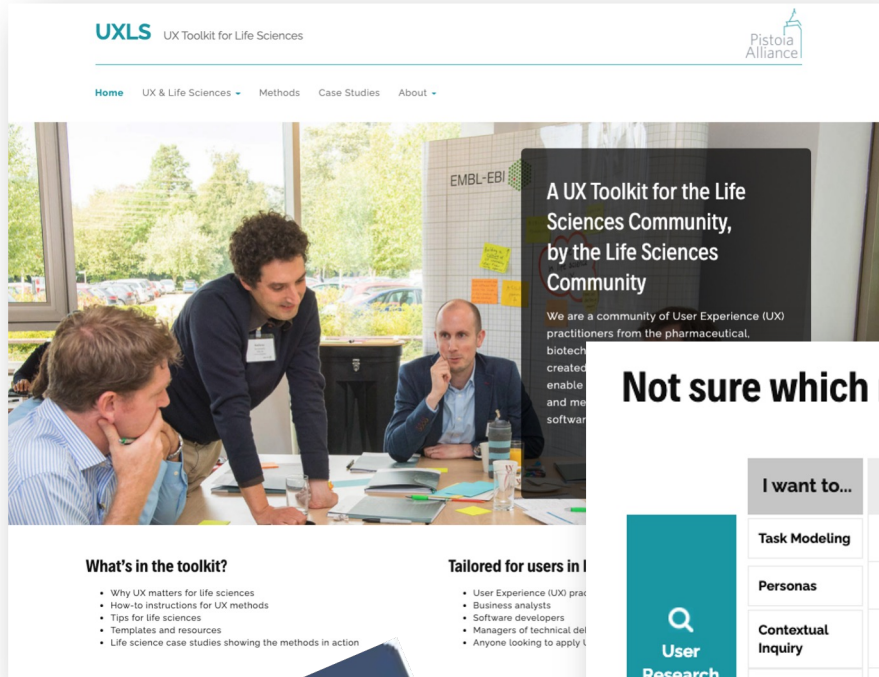


PISTOIA ALLIANCE  
USER EXPERIENCE  
FOR LIFE SCIENCES

**What have we achieved?**

**GSK**

# Website: The UXLS Toolkit



**UXLS** UX Toolkit for Life Sciences

Home UX & Life Sciences Methods Case Studies About

**A UX Toolkit for the Life Sciences Community, by the Life Sciences Community**

We are a community of User Experience (UX) practitioners from the pharmaceutical, biotech, and medical device industries who have created, enabled, and measured the success of software products.

**What's in the toolkit?**

- Why UX matters for life sciences
- How-to instructions for UX methods
- Tips for life sciences
- Templates and resources
- Life science case studies showing the methods in action

**Tailored for users in:**

- User Experience (UX) practitioners
- Business analysts
- Software developers
- Managers of technical development
- Anyone looking to apply UX to their work




### Not sure which method to use?

	I want to...	Gather user requirements	Decide what to focus on	Generate ideas and designs	Evaluate a design or product	Measure UX	Compare different designs or products
User Research	Task Modeling	✓	✓				
	Personas	✓	✓				✓
	Contextual Inquiry	✓	✓				
	User Interviews	✓	✓		✓	✓	✓
	JTBD	✓					
UI Design	Card Sorting	✓		✓			
	Prototyping			✓	✓		
Evaluation	SUS				✓	✓	✓
	HEART				✓	✓	
	Usability Testing				✓	✓	✓

### Case Studies


See the UX methods in action with real life sciences examples from our Pistoia Alliance members.



**Europe PMC personas and scenarios**  
Europe PMC | Jan 2018

Learn how Europe PMC used personas to learn more about scientists' literature search behaviour, and understand how to build trust in key user communities.

PERSONAS



**Clinical Trials Analysis Tool Redesign**  
AstraZeneca | Jun 2017

Learn how AstraZeneca used prototyping and usability testing to get real user feedback and redesign a key tool to be more intuitive.

# Blogs: Defining and helping clarify concepts

## Business Analysis and UX



Tweet Share

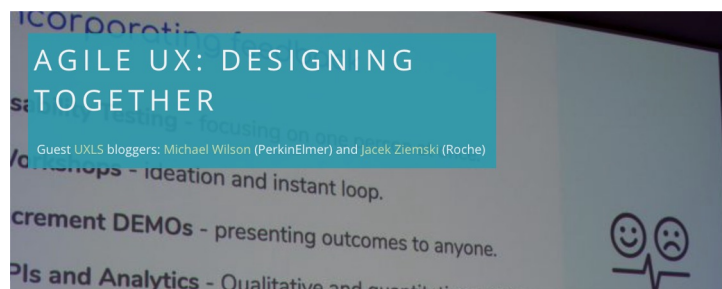
### The roles of User Experience Designer and Business Analyst in Life Sciences

In recent years Business Analysis and User Experience Design have been in demand in Life Sciences organisations. Companies are increasingly relying on these two complementary disciplines when it comes to designing and implementing digital solutions.

Business communities are actively taking crossover initiatives to support the relationship between UX and BA practices because these professionals are increasingly sharing tasks and responsibilities in the delivery of solutions.

It is clear that the two disciplines can overlap in supporting organisations in the era of digital transformation. However, the boundaries of these two roles can be unclear, which could blur the understanding of who is doing what, and risks generating a sense of us-and-themness. And if the BA or UX handbooks provide well-crafted definitions, their roles in life science organisations are not always as well defined (see Table 1). The culture and structure of an

## Agile and UX



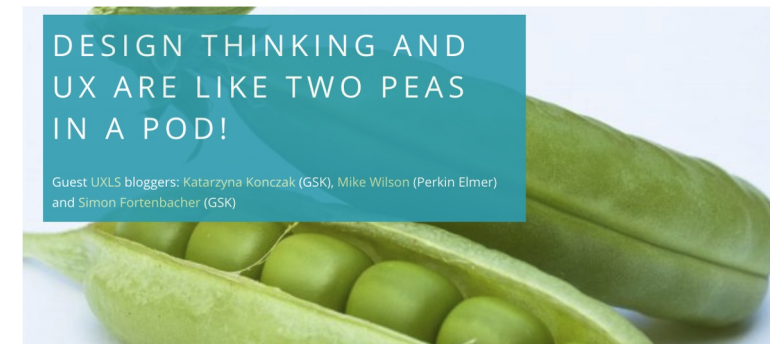
Tweet Share

When you hear the word "agile" is it just a trendy buzzword to you? Do you find it flexible but risky? Too short sighted and an excuse not to think ahead? Does it conjure up images of sticky notes, cult like devotion, and taking itself too seriously?

Or are you just bored hearing teams wave the banner of agile as a weapon against "corporateness" only to turn the "process" into the same rigor and rote behavior it claims to be the savior of? (Take a moment to do an eye roll.)



## Design Thinking and UX



Tweet Share

In large companies, design sounds risky and introduces a myriad of questions. How does design fit into business? How does collaborative design function effectively at the enterprise level? How do we design at scale while avoiding the risks and uncertainties? For many organisations, design thinking has provided a good solution to this problem space.

This has led many in life sciences to question how design thinking and UX relate to one another? Why do we have two similar sounding processes in our field?

Design Thinking and UX are by and large the same thing. Their goals are essentially the same. Put users at the forefront of your mind when designing creative solutions whether they are digital or physical. They use the same methods such as personas, empathy maps and user journeys. They follow a similar design trajectory of understanding the user, designing solutions and evaluating them against the user. They use a similar team ethos of using a multi-disciplinary team to come up with the best solution.

Traditionally the UX approach has been used to describe design in a digital landscape and design thinking can be applied to any problem space. To be fair the UX approach would likely work in any problem space. Although design thinking is often described in a linear process diagram most people would practise it iteratively as can be seen from Figure A from the Interaction Design Foundation. Compared to the UX approach in Figure B one can see the immediate commonalities.

UXLS Blogs: <https://www.pistoiaalliance.org/category/uxls/>

# Measurements: UX Capability



	1 What UX?	2 Isolated UX Projects	3 Intentional UX investment	4 Embedding UX into teams	5 Transformational UX and services
<p><b>Impact</b></p> <p>What Impact is UX having on the organisation.</p>	<p>Incidental improvements. No UX and improvements are incidental rather than designed.</p> <p>For example, improved search experience on an interface because you copied a product like Google.</p>	<p>Reactive UX. Enhancing or tinkering with existing systems rather than being involved with new developments.</p> <p>For example, improving the usability of say an existing search results interface because users are complaining about it.</p>	<p>Improvement by Design. UX is involved and integrated into new developments or off-the-shelf software from the beginning.</p> <p>For example, the deployment and design of a new off-the-shelf LMS system.</p>	<p>New concept and proactive UX. A project is starting with UX being a primary driver or UX specialists are able to initiate value-propositions for the business.</p> <p>For example, user research has identified insights and opportunities that will drive a new value proposition.</p>	<p>Strategic design leadership means that UX is integral to strategic forward mapping.</p> <p>For example, a truly patient centric product line.</p>
<p><b>UX Metrics and Analytics</b></p> <p>How are metrics collected and used.</p>	<p>None</p>	<p>Metrics are collected but not necessarily used and reported.</p> <p>For example, it maybe word of mouth or web analytics. You conduct a usability review and no actions are taken.</p>	<p>Collecting data (maybe only one type of data) and using it improve the quality of a product.</p> <p>For example, using SUS to track improvements on a specific feature.</p>	<p>UX metrics are formalised within a framework and form an integral measurement of ongoing business value.</p> <p>For example, establishing a Google HEART framework where metrics are tracked and shared with key leaders.</p>	<p>Organisational expectation that everything has UX metrics and a formalised framework. UX metrics feed into an organisational wide framework for senior leaders.</p> <p>For example, strategic objectives are defined in terms of UX metrics.</p>
<p><b>Process</b></p> <p>Culture of embedding of UX techniques</p>	<p>None</p>	<p>Limited (one-time) or project-specific (exploring UX techniques).</p> <p>For example, mocking up UI's or task flows to get stakeholder alignment.</p>	<p>Defined, repeatable UX techniques but not always integrated into product lifecycle. Have a set of UX techniques that you can reuse because you have defined the process of using them.</p> <p>For example, maintain a set of standard templates for user consent and usability testing that teams can re-use.</p>	<p>Continuously improve UX techniques and processes.</p> <p>For example, after a UX engagement you might review predicted engagement time, techniques and their effectiveness.</p>	<p>UX techniques are integrated consistently into the project delivery process.</p> <p>For example, in any product development they are embedded into the development cycle such as UAT's.</p>

Version 1  
Released on 23 September 2020



# Standards: ResearchOps



Melanie Thoma (Agilent)



Julie Morrison (Rockstep)



Kasia Konczak (GSK)



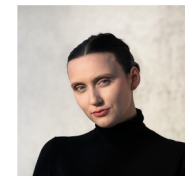
Caroline Little (AstraZeneca)



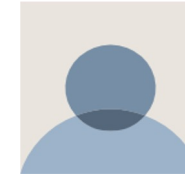
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Maria Ralph (Perkin Elmer)

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INTRODUCTION




## Research Ops categories (1/2)

We have adapted the Re+Ops framework into seven categories which should be considered when building Research Ops in the life sciences.

<h3>Environment &amp; Organisational Context</h3> <p>It is important to socialise and evangelise your UX research within your organisation from an educational, cultural and environmental perspective. Successful advocacy of UX research enables scaling of your UX research practice with appropriate funding support.</p>	<h3>UX Methods &amp; Processes</h3> <p>A good Research Ops infrastructure requires a defined methodology, process and standardisation of user research. This includes metrics, research guidelines and developing a research narrative across the organisation.</p>	<h3>UX Practitioners</h3> <p>A good user research practice requires dedicated UX research practitioners with a learning path to grow their skillset. This includes education for non-UX'ers who want to apply user research methods. As organisations mature, identifying gaps enables skillset growth of existing UX practitioners and enables them to bring in outside help when needed.</p>	<h3>Participants</h3> <p>A core challenge within life sciences is engaging with research participants such as scientists and patients. This requires a framework to identify personas, recruit and engage with participants.</p>
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## UX Methods & Processes

A good Research Ops infrastructure requires a defined methodology, process and standardisation of user research. This includes metrics, research guidelines and developing a research narrative across the organisation.



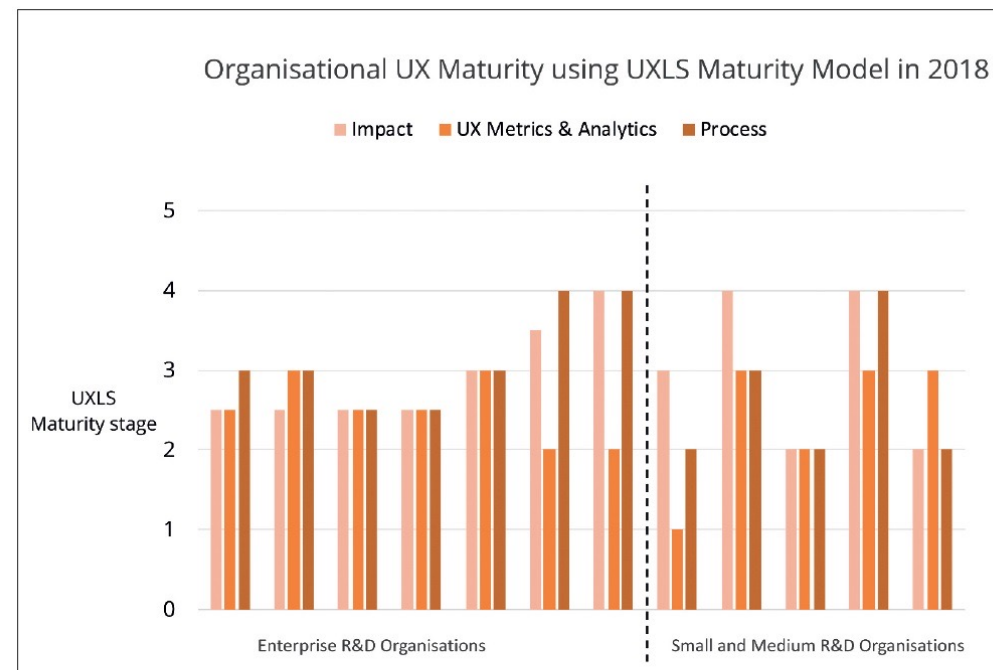
MATURITY STAGES

1 What UX?	2 Isolated UX Projects	3 Intentional UX Investment	4 Embedding UX into Teams	5 Transformational UX
	<h3>Define user research protocols for reuse</h3> <p><b>Identify user research protocols</b> by looking at past projects and seeing what makes sense to make a reusable component.</p>	<h3>Library of user research protocols and templates.</h3> <p>Library should be aligned with company policies and processes.</p> <ul style="list-style-type: none"> <li>Glossary of user research vocabulary</li> </ul>	<p><b>Refinement</b> of user research protocols as needed.</p>	<p><b>Continuous improvement</b> and evaluation of user research protocols as a standard operating process.</p>
	<h3>Sharing of user research insights</h3> <p><b>Share research insights</b> with the smaller project team.</p>	<p><b>Communication:</b> build a communication plan and identify who to share insights with?</p> <p><b>Framing research</b> Identify how research should be presented based on your audience. Organising and publishing it for audience consumption.</p>	<p><b>Templates</b> for analysis/briefing/ sharing user research insights</p> <ul style="list-style-type: none"> <li>Powerpoint decks to the Execs</li> <li>Decks for PM's or dev teams.</li> </ul> <p>Templates should be designed for the tools in which they will be consumed e.g. Jira.</p>	<h3>Experimenting with new methodologies</h3> <p>For example, R&amp;D of newly introduced research frameworks.</p>

# Publications: Evolution of UX in Life Sciences



Jacek Ziemski, Simon Fortenbacher, James Hoeksma, Jan Taubert, Roger Attrill, Paula de Matos, Andre Richter and Julie Morrison



**Figure 2** Maturity measured in January 2019 for 13 biopharmaceutical, agri-food, academia and industry-associated software vendors, using the in-house developed UXLS maturity model across the factors of Impact, Process and UX Metrics and Analytics

<https://www.ddw-online.com/evolution-of-user-experience-for-life-sciences-3-8506-202011/>

# Sessions: UX Therapy for UX Leaders in Life Science



PISTOIA ALLIANCE  
USER EXPERIENCE  
FOR LIFE SCIENCES

From Project to Product

Merck UX Toolkit and Design System

Coaching, teams and Covid accelerated challenges

Strategies to raise your UX maturity level

UX'ers new to life sciences

A day in the life of a scientist

Non-UI UX

Introduction to digital accessibility and Accessibility at the EBI

SAFE, Agile and UX

Accessibility at GSK

Accessibility - lessons learnt with user research

Colour and digital accessibility

Accessibility at BMS and AstraZeneca

# Conferences!



UXLS IS AN OPPORTUNITY  
TO BETTER GREASE THE  
WHEELS OF SCIENCE!

