King's Digital Lab



Digital researchers and data experts

We create digital tools to explore academic research in new ways.

KDL PRACTICES: Team, Systems, Data and Models Part 2



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Dr. Arianna Ciula

Deputy Director of King's Digital Lab

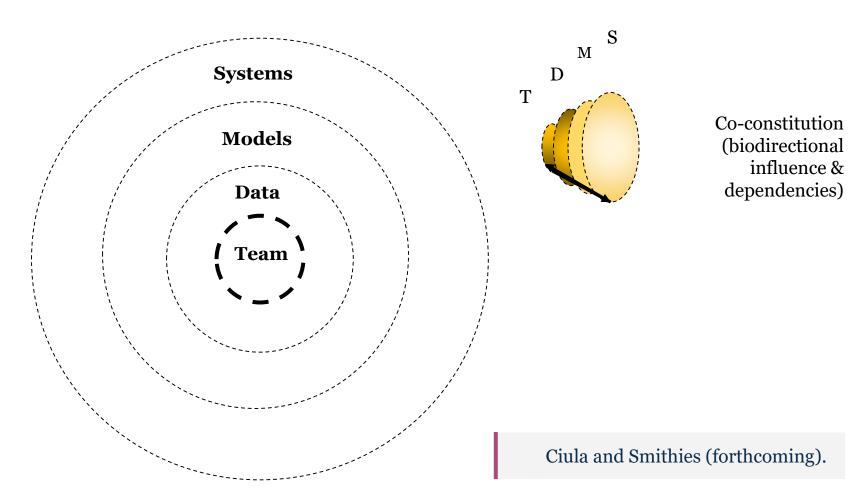
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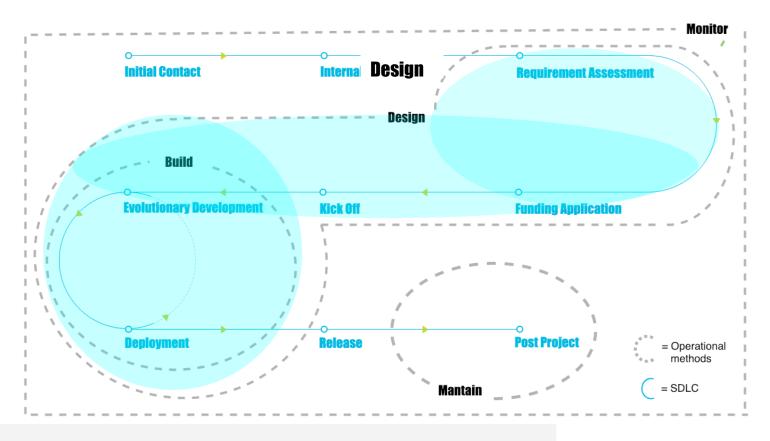




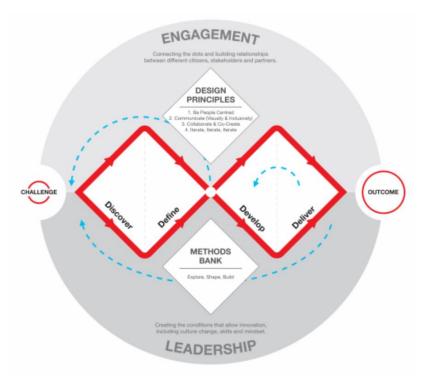




Design Methods







Design Integration Framework

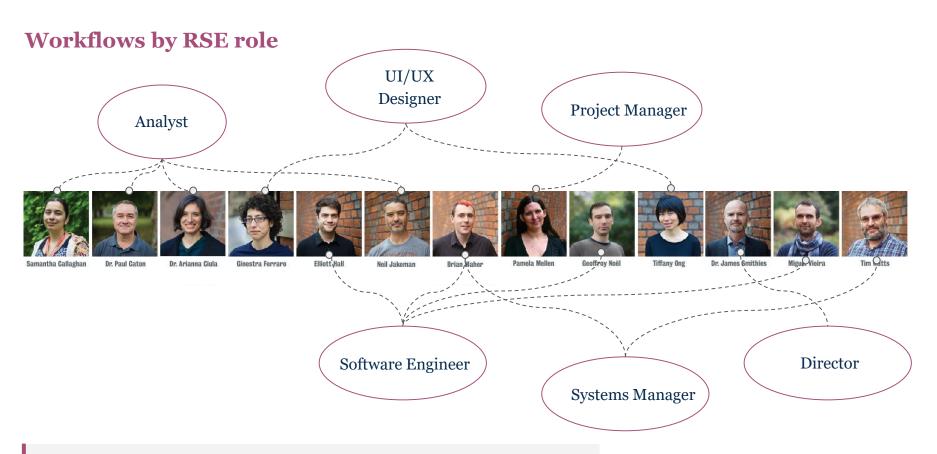
Double Diamond

Design Council (2007). What is the Framework for Innovation? Design Council's Evolved Double Diamond.

Image ©Design Council







Smithies (2019), The Continuum Approach to Career Development.



Project Manager

Workflows by role

PRE-PROJECT S	TART	LAUNCH POST PROJECT
DISCOVER / DEFINE	← Evolving and iterative Cycle ← DEFINE, DESIGN & DEVELOP	MAINTENANCE, ARCHIVE & DECOMMISSION
Monitor methods Project management tools Communication and meetings (internal and external) Governance documentation (including financial) and review	Monitor methods Project management tools High level project timeframe (change freeze, release, user acceptance, events) Communication Governance documentation	Monitor methods Project management tools (upgrade tasks) Communication Maintain methods Governance documents (including SLA renewal, decommission authorisation)

PRE-PROJECT STA	ART	ı	LAUN	NCH POST PROJECT
DISCOVER / DEFINE		and iterative Cycle © DESIGN & DEVELOP		MAINTENANCE, ARCHIVE & Decommission
Monitor methods Project management tools Communication and meetings (internal and external) Governance documentation (including preliminary requirements and forward planning) and review Design methods Research and technical assessment (e.g. terminology, standards, models, datasets, tools) Analysis, requirements elicitation and prioritisation (MoSCoW); project conceptualisation (including funding application) Review (meetings, workshops and focus	Monitor methods Project management too Communication (including meetings) Governance documentary Design methods Research and analysis Requirements refinements Modelling (abstract, data Review (meetings, work reports (monitor)) Build methods QA and Testing (e.g. foll testing) Technical documentation	g website and social ion t and re-prioritisation, standards mapping shops and focus groowing deployments;	n g) ups) and	Monitor methods Project management tools Communication (e.g. bugs) and meetings Governance documentation (including decommission process) and project review Maintain methods Governance documents and review (including SLA renewal, decomisions process) Archiving (including data deposit) and sustainability
groups) (monitor)	 Increments definition an Release process and characteristics 	d timeboxing		

King's Digital Lab Team, Systems, Data and Models

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PRE-PROJECT	START	l I		LA	UNCH	POST PROJECT
DISCOVER / DEFINE		© Evolving and iterat DEFINE, DESIGN 8			MAIN	ITENANCE, ARCHIVE & DECOMMISSION
Monitor methods Project management tools Communication and meetings Governance documentation and review Design methods Research and technical assessment (e.g. terminology, standards, models, datasets, tools, re-usability of components) Analysis (e.g. mapping requirements to architecture and datasets), requirements elicitation and prioritisation; project conceptualisation and preliminary modelling (including high level solution architecture) Review (meetings, workshops and focus groups) (monitor)	Monitor methods Project management tools Communication and meeting Governance documentation Design methods Research and analysis Requirements refinement an Modelling (conceptual, data, Review (meetings, workshop Build methods Logical and physical data more information architecture Translation and re-use of alg Data workflows pre-process Environment set up Back-end interface and func Front-end templates and func Front-end templates and func Code and other technical do QA, Testing (e.g. browser testack side) Optimisation and code refine Increments definition and tin Deployments (to developme Software upgrade	d re-prioritisation standards mapping, a cost and focus groups) of delling (including dat orithms/software moding tools (e.g. import/etionalities (including sectionalities cumentation (Githubsting; unit tests; acceptement neboxing (monitor)	(monitor) a structures and form dules & packages export/cleaning/valid search) and mapping monitor) otance testing) and D	lation) to CMS	■ Project ■ Command mee ■ Gover (including project in Maintain ■ Gover and revirtenewald process) ■ Archiv (including migration ■ Server	nance documentation ng SLA renewal) and review n methods nance documents ew (including SLA , decommission) ving and sustainability ng curation. backup, en, upgrade)

■ Release process and change freeze (monitor)



	PRE-PROJECT STA	ART	NCH POST PROJECT
	DISCOVER / DEFINE	← Evolving and iterative Cycle ← DEFINE, DESIGN & DEVELOP	MAINTENANCE, ARCHIVE & DECOMMISSION
Designer	Monitor methods Project management tools Communication and meetings Governance documentation and review (including sign off) Design methods Research and technical assessment Analysis, requirements elicitation and prioritisation; project conceptualisation Review (meetings, workshops and focus groups) (monitor)	Monitor methods Project management tools Communication and meetings Governance documentation Design methods Research (e.g. identity) and analysis (including user research and analytics if applicable) Requirements elicitation (e.g. via questionnaire) and prioritisation; project conceptualisation and preliminary modelling (including content map, user flows and journeys/paths, site map) Requirements refinement and re-prioritisation Modelling (conceptual, refinement of content map, user flows/journeys/paths, site map) User testing Review (meetings, workshops and focus groups) and report (e.g. usability) (monitor) Build methods Style (e.g. concepts and colours) and design (e.g. project title) Prototyping (wireframes, mockups) Translation and re-use of software modules & packages Environment set up Back-end templates (e.g. Django) Front-end templates and interfaces Code (HTML, CSS. Javascript) and other technical documentation (Github - monitor) QA, Testing (e.g. browser testing, devices portability; staging environment testing; instructions for partners; acceptance testing) Optimisation and code refinement Increments definition and timeboxing (monitor) Deployments (to development. staging and live environments) Release process and change freeze (monitor)	Monitor methods Project management tools Communication (e.g. bugs) and meetings Governance documentation (including SLA renewal) and project review Maintain methods Governance documents and review (including SLA renew) Archiving and sustainability

King's Digital Lab Team, Systems, Data and Models

PRE-PROJECT START LAUNCH POST PROJECT

DISCOVER / DEFINE	○ Evolving and iterative Cycle ○ DEFINE, DESIGN & DEVELOP	MAINTENANCE, ARCHIVE & DECOMMISSION	
Monitor methods	Monitor methods	Monitor methods	
■ Project management tools	■ Project management tools	■ Project management tools	
■ Communication and meetings	■ Communication	Communication and	
■ Governance documentation and review	■ Governance documentation	meetings	
■ Security reviews and monitor (systems)	■ Security reviews (systems)	■ Governance documentation	
		(including SLA renewal)	
Design methods	Design methods		
■ Technical assessment of infrastructure	■ Requirements refinement	Maintain methods	
requirements (e.g. storage, CPU power,		■ Governance documents	
network bandwidth).	Build methods	and review (including SLA	
	■ Environment set up and refinement to support back-end	renewal, decommission	
	and front-end functionalities	process)	
	■ Users set up (LDAP accounts)	Archiving and sustainability	
	To the sixed the sum and this or	(including migration,	
	■ Technical documentation	upgrade)	
	■ QA, Testing and Debug (systems)	Build methods	
	■ Software upgrade	■ Server/ices configuration	
		■ Server/ices configuration ■ Software (VM/OS) and	
		Infrastructure upgrade	

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