IDEAS FOR IMPACT

Engaging Communities

IDEAS FOR IMPACT

Contacts - Emma Halliday, FHM

Agendas and Expectations - Helen Ryan, Lancaster City Council

Events - Jane Taylor, LEC

Working with Groups - The IDEAS Team

Outcomes - Gemma Coupe, LICA

IDEAS FOR IMPACT

Working with Groups

1

Sharing

Using knowledge and experience that is common to participants.

The intellectual and social basis for collaborative working.

2

Exploration

Enabling participants to work together to explore new questions or ideas.

Divergent; creating new concepts, ideas and perspectives unique to the participant group.

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Convergent; creating explicit, standalone outcomes that can be used beyond the engagement itself.

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Building in longevity and impact to ensure all participants benefit from their contributions.

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ЯМАЛ

who are you?

Tell us your name and describe yourself using 5 words and by drawing 5 lines, you will have 5 seconds to articulate this to the group

Name: LEON CRUICKSHANK.

DESIGNER, RESEARCHER, FACILITATOR, PLAYFUL ACADEMIC

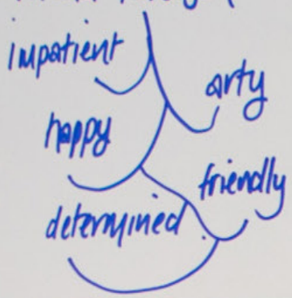
Leapfrog Young People Partner Scoping Meeting
Tuesday March 24 2015

Leapfrog

who are you?

Tell us your name and describe yourself using 5 words and by drawing 5 lines, you will have 5 seconds to articulate this to the group

Name: Nicola Paterson



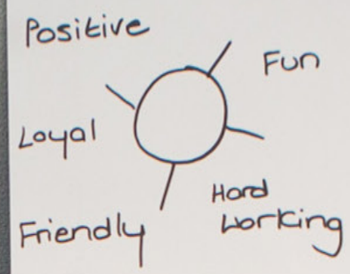
Leapfrog Young People Partner Scoping Meeting
Tuesday March 24 2015

Leapfrog

who are you?

Tell us your name and describe yourself using 5 words and by drawing 5 lines, you will have 5 seconds to articulate this to the group

Name: JENNIFER MILLIGAN



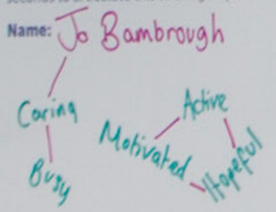
Leapfrog Young People Partner Scoping Meeting
Tuesday March 24 2015

Leapfrog

who are you?

Tell us your name and describe yourself using 5 words and by drawing 5 lines, you will have 5 seconds to articulate this to the group

Name: Jo Bambrough



Leapfrog Young People Partner Scoping Meeting
Tuesday March 24 2015

Leapfrog

who are you?

Tell us your name and describe yourself using 5 words and by drawing 5 lines, you will have 5 seconds to articulate this to the group

Name: Jill Connolly

Interested
Busy
Nerdy.
Compassionate
family

Leapfrog Young People Partner Scoping Meeting
Tuesday March 24 2015

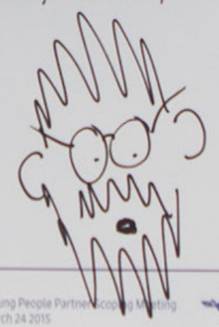
Leapfrog

who are you?

Tell us your name and describe yourself using 5 words and by drawing 5 lines, you will have 5 seconds to articulate this to the group

Name: ROGER WHITHAM

RESEARCH, DESIGN, VISUAL, DIGITAL, TECHNOLOGY



Leapfrog Young People Partner Scoping Meeting
Tuesday March 24 2015

Leapfrog

who are you?

Tell us your name and describe yourself using 5 words and by drawing 5 lines, you will have 5 seconds to articulate this to the group

Name: Gemma Coupe

Design-Manager
Intrigued today
Home ♡
mad-cat-lady

Leapfrog Young People Partner Scoping Meeting
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Leapfrog

who are you?

Tell us your name and describe yourself using 5 words and by drawing 5 lines, you will have 5 seconds to articulate this to the group

Name: [illegible] r. sims (RA)

- libertarian
- indigo
- sensitive
- animals
- noam

Leapfrog Young People Partner Scoping Meeting
Tuesday March 24 2015

Leapfrog

How Many Showers Do You Have In One Day ? Ahhrrggghhh !! Am ? Pm ?

What did you do?

The Worst Icebreaker

Why did it not work?

WAAAAAY Too Personal

Each person submits a remarkable fact about themself → the group has to

What did you do?

The Best Icebreaker

Why did it work?

guess who has done what

INTRODUCTIONS AROUND THE ROOM

What did you do?

The Worst Icebreaker

Why did it not work?

INTIMIDATING, DON'T

What did you do?

The Best Icebreaker

Why did it work?

THE ONE WE HAVE JUST PARTICIPATED IN !

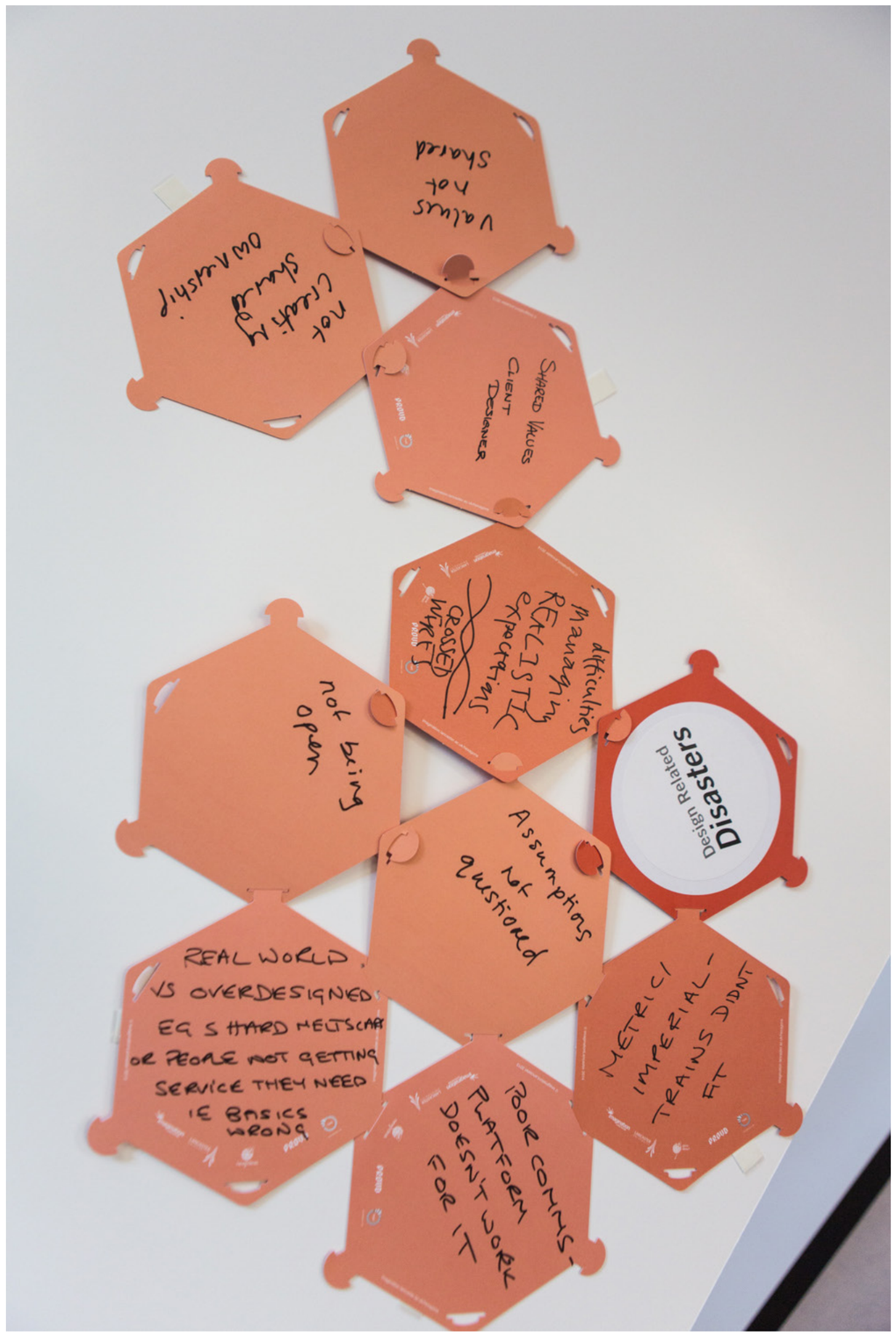
What did you do?

The Best Icebreaker

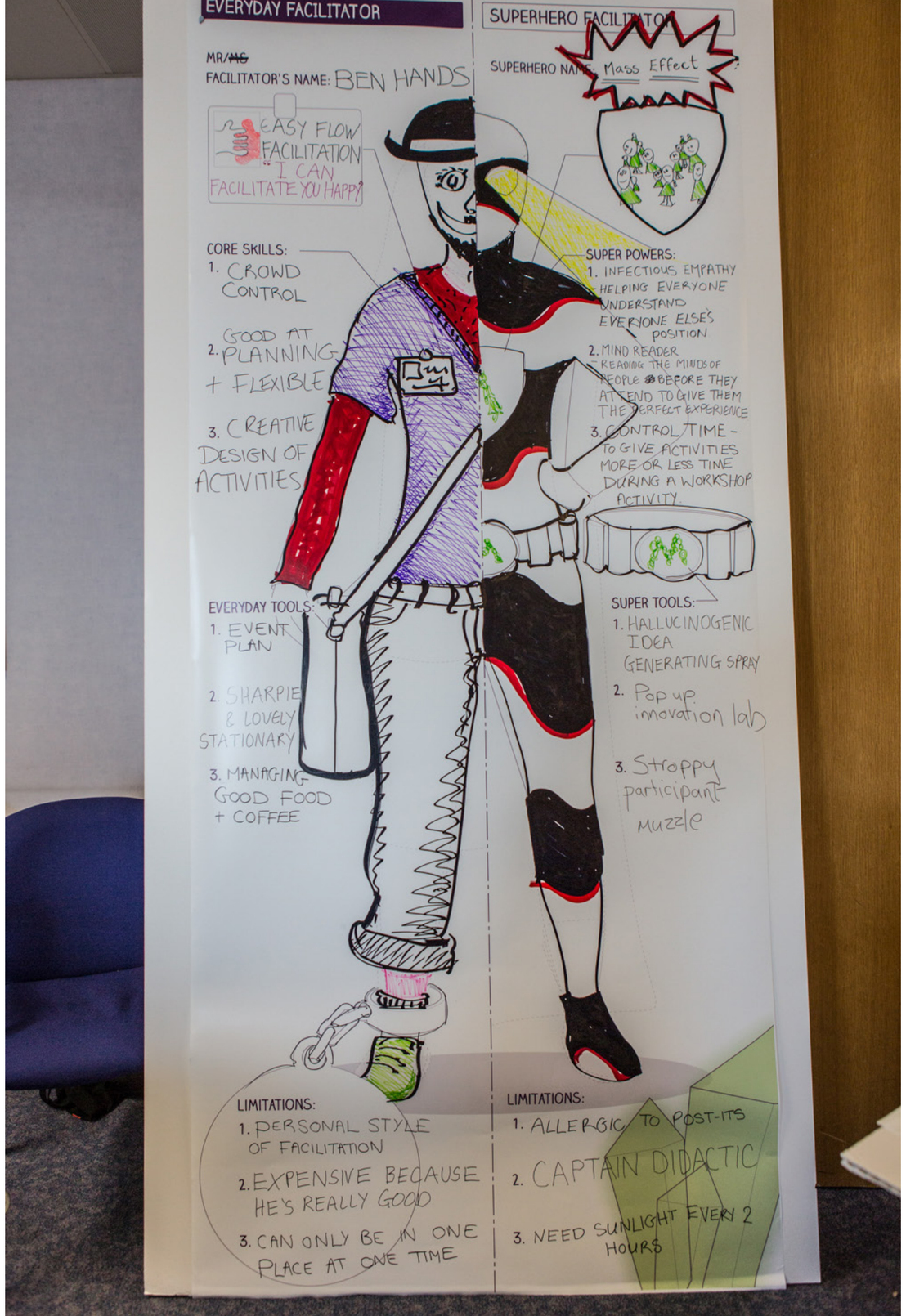
Why did it work?

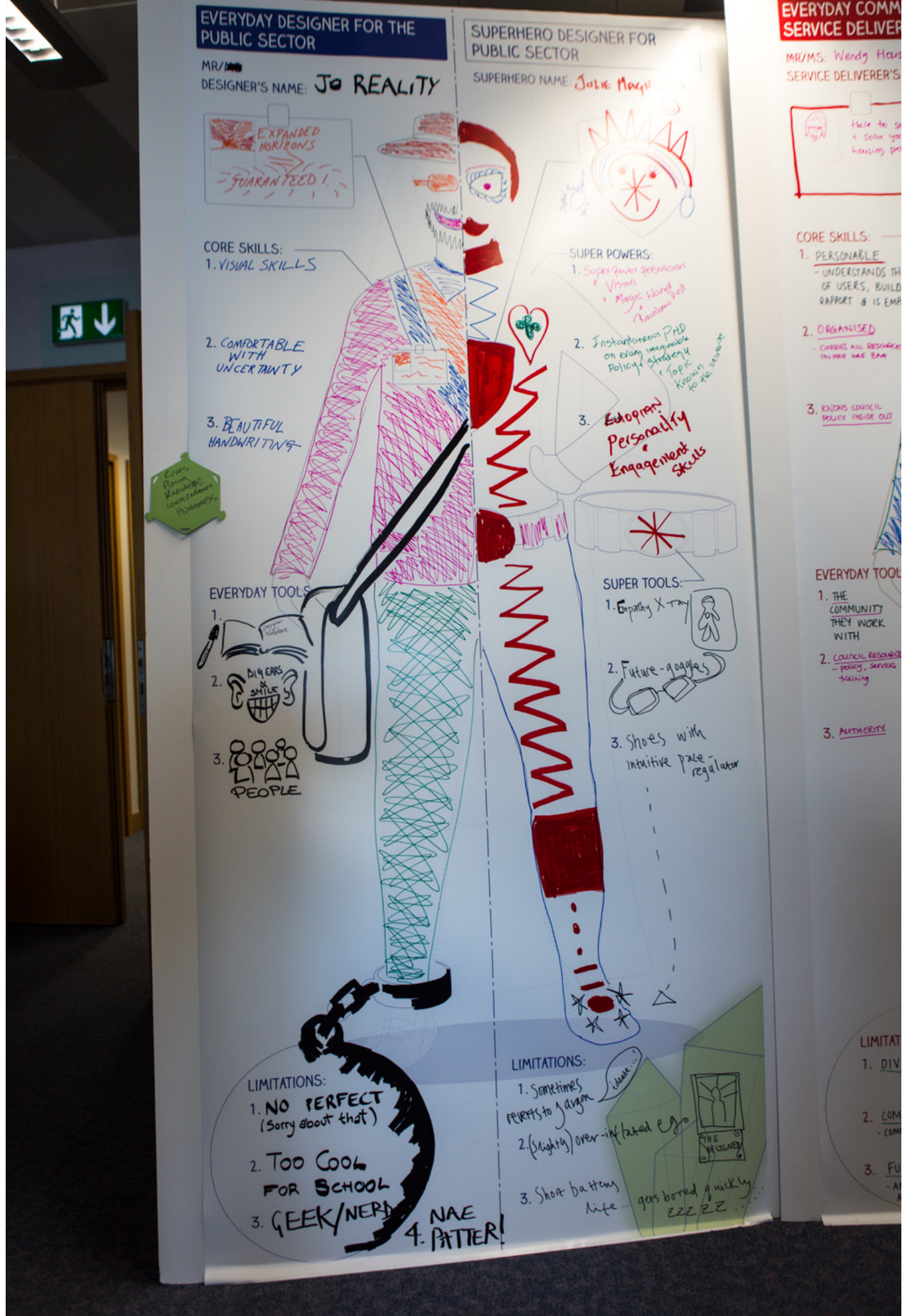
DON'T REALISE THAT YOU ARE ACTUALLY BREAKING THE ICE, INFORMAL NATURAL CONVERSATION.

Great
Experiences
With Designers
The skill of "not filtering" – EVERY IDEA IS "IN"!!
What does Great look like?
Free Sharpies
Giving up control – someone else is leading the process + knows what they're doing
Develop Shared objectives so can collaborate equally
Safe Environment to Experiment
Permission to think of solutions without constraints – you'll often find the solution is do-able (within constraints)
They wear groovy shoes → you're cool by association


Design Related
Disasters
Values not shared
not creating shared ownership
SHARED VALUES CLIENT DESIGNER
difficulties managing REALISTIC expectations
CROSSED WIRES
not being open
Assumptions not questioned
REAL WORLD VS OVERDESIGNED EG SHARD MELTSCAPE OR PEOPLE NOT GETTING SERVICE THEY NEED IE BASICS WRONG
METRIC/ IMPERIAL – TRAINS DIDNT FIT
POOR COMMS – PLATFORM DOESN'T WORK FOR IT

Disasters
Anna


EVERYDAY FACILITATOR
SUPERHERO FACILITATOR
MR/MS
FACILITATOR'S NAME: BEN HANDS
SUPERHERO NAME: Mass Effect
EASY FLOW FACILITATION "I CAN FACILITATE YOU HAPPY"
CORE SKILLS:
1. CROWD CONTROL
2. GOOD AT PLANNING + FLEXIBLE
3. CREATIVE DESIGN OF ACTIVITIES
SUPER POWERS:
1. INFECTIOUS EMPATHY HELPING EVERYONE UNDERSTAND EVERYONE ELSE'S POSITION
2. MIND READER READING THE MINDS OF PEOPLE BEFORE THEY ATTEND TO GIVE THEM THE PERFECT EXPERIENCE
3. CONTROL TIME - TO GIVE ACTIVITIES MORE OR LESS TIME DURING A WORKSHOP ACTIVITY.
EVERYDAY TOOLS:
1. EVENT PLAN
2. SHARPIE & LOVELY STATIONARY
3. MANAGING GOOD FOOD + COFFEE
SUPER TOOLS:
1. HALLUCINOGENIC IDEA GENERATING SPRAY
2. Pop up innovation lab
3. Stroppy participant muzzle
LIMITATIONS:
1. PERSONAL STYLE OF FACILITATION
2. EXPENSIVE BECAUSE HE'S REALLY GOOD
3. CAN ONLY BE IN ONE PLACE AT ONE TIME
LIMITATIONS:
1. ALLERGIC TO POST-ITS
2. CAPTAIN DIDACTIC
3. NEED SUNLIGHT EVERY 2 HOURS


EVERYDAY DESIGNER FOR THE PUBLIC SECTOR
SUPERHERO DESIGNER FOR PUBLIC SECTOR
MR/MS
DESIGNER'S NAME: JO REALITY
SUPERHERO NAME: Julie Magu
EXPANDED HORIZONS
GUARANTEED!
CORE SKILLS:
1. VISUAL SKILLS
2. COMFORTABLE WITH UNCERTAINTY
3. BEAUTIFUL HANDWRITING
SUPER POWERS:
1. Super Power Persuasion & Vision + Magic Hand & Rainbow Dust
2. Instantaneous PhD on every imaginable Policy & strategy + Topic known to the universe
3. Eutopian Personality & Engagement Skills
EVERYDAY TOOLS:
1.
2. BIG EARS & SMILE
3. PEOPLE
SUPER TOOLS:
1. Empathy X-ray
2. Future-goggles
3. Shoes with intuitive pace-regulator
LIMITATIONS:
1. NO PERFECT (Sorry about that)
2. TOO COOL FOR SCHOOL
3. GEEK/NERD
4. NAE PATTER!
LIMITATIONS:
1. Sometimes reverts to jargon
2. (Slightly) over-inflated ego
3. Short battery life ... gets bored quickly ZZZ ZZ
THE DESIGNER
EVERYDAY COMM
SERVICE DELIVER
MR/MS: Wendy Hous
SERVICE DELIVERER'S
CORE SKILLS:
1. PERSONABLE
2. ORGANISED
3. KNOWS COUNCIL POLICY INSIDE OUT
EVERYDAY TOOL
1. THE COMMUNITY THEY WORK WITH
2. COUNCIL RESOURCES - policy, services training
3. AUTHORITY

Leapfrog
name: Jo
organisation: YPS Lancashire County Council
role: Voice & Influence Worker.
communities & target groups
Future: families work
Surplus / lower level social work cases.
Early Support.
Young People 13-19
0-19?
NEED
OPPORTUNITY
LANCASHIRE
geographic digital reach
Lancaster
Wyre
Fylde
Ribble Valley
Bunley
Preston
Pende
Hyndburn
Chorley
Rossendale
hopes for future
YP involved in new service design
Multi-skilled teams.
Wellbeing Prevention & Early Help.
YOUTH ZONES.
Young People have services available that meet their needs.
Youth Strategy
CYPMAF (Multi-agency forum)
partners & networks
Children & Young Peoples Trusts
Youth Parliament (BYC)
Vol Orgs
Schools & Colleges.
New World
- Families
- 0-19
- W,P & EH.
purpose & vision
Talk Zone.
Information Services & Support.
Tracking destinations
Increasingly Family orientated
Youth Clubs / Opportunity

actors / events
process
Secure funding for our projects
Have the support from Library Colleagues
- Young people
- Children
- Team
- Senior staff
- Council
Identify idea
Check feasibility
Check interest in idea
Put together proposal / brief for time + resources
Engage interested parties
Discuss options for delivery
Obtain sign up to project
Formalise plan
Have resources in place + with necessary groups
Introduce project to participants
Enthuse
Carry out
Deliver
fulfill
Evaluation
Observation
Decision
Leapfrog
Engagement Processes
civil servants (it's a bowler hat!!!)
meeting
Creativity
big cheese (senior manager)
talk to each other
what outcome do we want to achieve?
who's involved, commitment to creativity?
options for discussion
written brief
deliver workshops
engage with those who don't 'get it'
we don't have all the answers
Leapfrog
Engagement Processes
Developing
Legislation, policy and strategies
civil servants across SG
Local Authorities, NHS + other public authorities
third sector stakeholder groups
public ?????
Young People ???
Advisory groups
Public
CYP – Commissioning participation organisation to consult with CYP
focus groups, surveys, youth investigations, discussion days
sometimes!
Resources!
thinking do we need a new policy, what issue do we need to address
drafting
we have the ethos and buy in to consult with CYP
consulting
Role of social media?
Refining
Communicating a policy. But at what point?
Implementing
evaluation
???
What do you think about?
What is impact?
how do we feedback to CYP about changes or no changes?
How do we use the information?
often in a format difficult to use
How do we balance views and perspectives
Politics
Leapfrog

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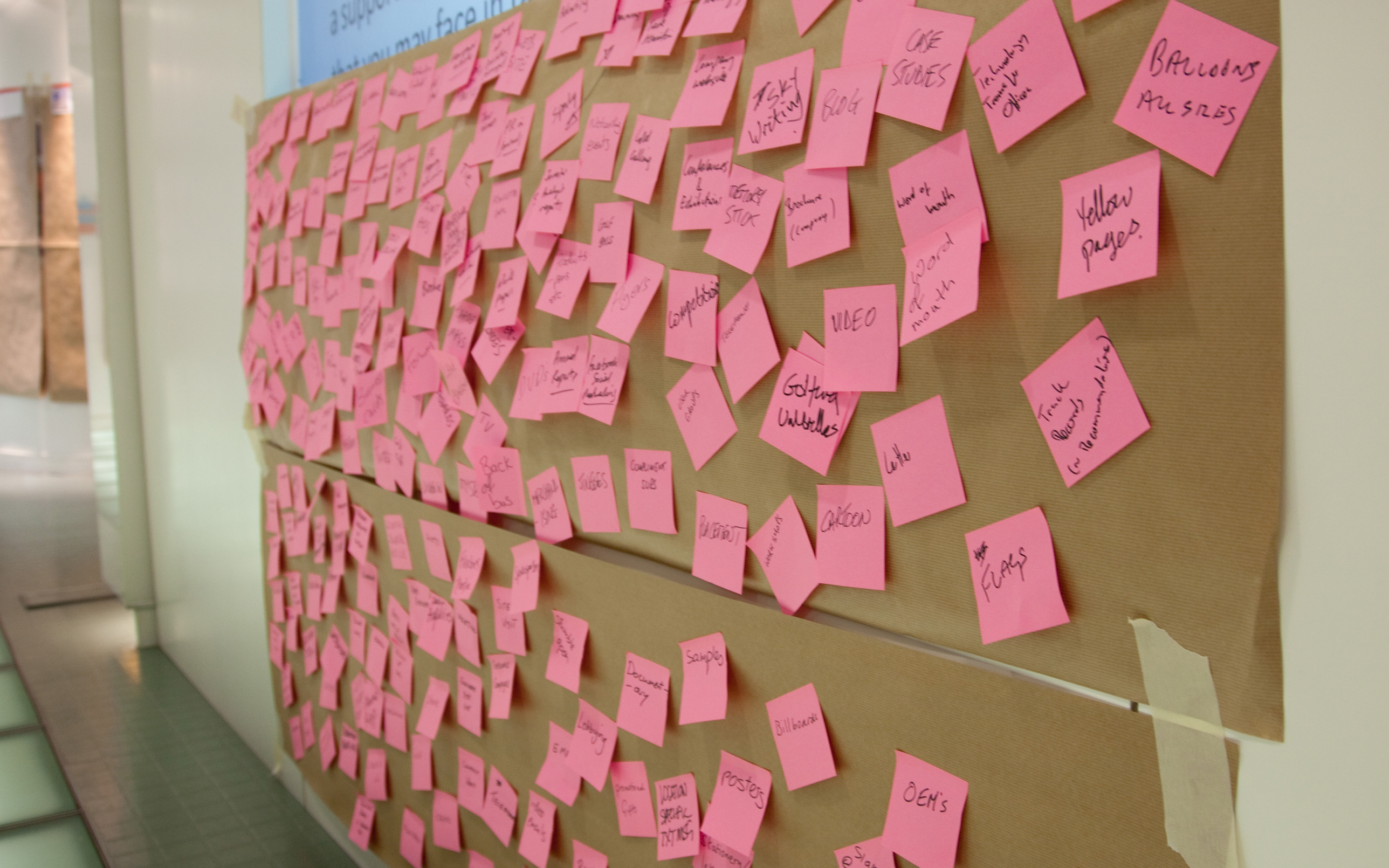

CASE STUDIES
BLOG
BALLOONS
ALL SIZES
Yellow pages.
Word of mouth
Word of mouth
VIDEO
Golfing Umbrellas
Track Records
CARTOON
FLAGS
Samples
Billboards
Posters
OEM's
TV
Back of bus
Competition
Brochure (Company)
Sky Writing

Don’t jump to asking for what you want.

Imagining Outcomes
go viral
Individuals describe the best and worst possible outcomes for a project/process. The specific ideas are not relevant, but it will reveal their thinking and goals.
How could this be developed into something you would use at the start of a meeting?
Would it have helped in the past with respect to a particular project/activity?
Can you refine the forms to improve them?
What would be most appropriate for the contexts in which you might employ this?
Other barriers to use?
Road Map
Mission
decisions
business plan
tailor with logo
journey
linear line
More serious
Road map is easier to implement
Comic + game
Zing businesss game
Challenge
Audience
Press releases
Mac software - comic strips
Outcome
Tools that reflect different agendas
Comic book
pages
Externalising perspectives
case studies
Ready drawn speech bubbles
Captain KE
traffic lights
flip coins at parts of journey
Best lessons
Worst lessons
theory game
Engage participants in the set up
Bordieu...
General theory of practice
playing the game
Hazards
ball going down either side
Magic 8 ball
Changes track
Air hockey
pin ball
barriers
Video/animation
3D figures
Comic pages
NEWS HEADLINES
(Reputation)
SUCCESS
FAILURE
INTEGRITY

UNIVERSITY SYSTEMS (Processes, Finance)
LEADERSHIP
'KE' AS A 'CORE' ACTIVITY
FUNDING
PICKING WINNERS (PARTNERS FUNDERS etc PEOPLE)
TIME
MOTIVATIONAL CONFLICTS (BETWEEN KE PARTNERS) COMMUNITIES + LU.
EXPECTATIONS what do we/you get out of KE
Working with new people - trust building
Sustainability
Measurement of Impact
Expectation of Funding Bodies
ACADEMIC ENGAGEMENT (particularly early career Researchers)
Different clock speeds
TIME SYNCHRONISATION (TIMELINESS)
Contracts!
Communication
Different priorities - sometimes clashing
CONFLICTING AGENDAS
GEOGRAPHY
TIME
REWARD & RECOGNITION
Keeping teams in place
Defining KE
Communication
SCOPE
CULTU

Is being a research-led Uni a difficulty?
How can we link KE + High impact research?
Do we do KE because we want to or because we have to.
How do we reserve training perfected KE + Research?
'KE' AS A 'CORE' ACTIVITY
Do we need to change the Culture of a University to develop KE activity.
Are some leaders too far removed from the point of contact of KE activity.
How do we link KE and the Unis 'Civic Mission'
LEADERSHIP
HOW DO WE EDUCATE FOLKS IN TERMS OF THE BREADTH OF KE
HOW DO WE GIVE KE STAFF STABILITY OF EMPLOYMENT A SENSE OF BELONGING
Who should lead specific KE activities?
DO WE NEED A CHANGE IN LEADERSHIP
HOW DO WE EMPOWER PEOPLE TO TAKE OWNERSHIP?
DO WE HAVE UNIQUE ADVANTAGES ON WHICH WE CAN BUILD DISTINCTIVENESS
HOW DO WE CONNECT STRATEGY/ GRAND ASPIRATIONS WITH PRACTICE
Where in the system is the leadship.
How do we train/ support emerging KE leaders?
Are there barriers affecting good leadership.
CAN WE PERFORMANCE MANAGE KE EFFECTIVELY?

Mix comfortable and novel frames.

TRACKING

tracking objects.

tracking collectors

TRACKING - SLEEP ETC. DATA COLLECTION

SENSING eg HOT AND COLD LOCATION

Collecting data - sensors

FLUIDITY + TRANSPARENCY (FORGETTING)

BREAKDOWN

digital craft

Cut + paste, Collage

Breakdown of night/day + digital/real

Can't see physical properties of digital objects

PUBLIC PRIVATE

DEVICE DEMOCRACY

QUALITY

BUBBLING

TINKERING + HACKING

Existing Project

DOES MY KETTLE REALLY NEED TO SPEAK TO A CENTRAL HUB?

AMAZON LOCKERS

USER (UI) EXPERIENCE PEOPLE EXPERT BETTER!

BETA

Theory of IoT doesn't allow for human behaviour

BETA - REAL TIME DESIGN

INTERFACE

OBJECTS + SYSTEM

Product + context is the product

USER

HACKING

New materials/recycle

open source

3D printing access

How → Recipe/image ingredients

Hack/cut + paste/invent

Community Sharing

Object re-mix

amateur experts (eg BBQ)

+ hacking as new forms of innovation

. object + human learn together

. hacked object lead to hacked human behaviour

OBJECTS WITH NETWORKED AI

MAKE THINGS WHICH CAN LEARN (NEURAL NETS) & EVOLVE (GENETIC ALGORITHMS) FROM THE CONDITIONS/ENVIRONMENT/ REQUIREMENTS WE GIVE THEM.

DYING

FUTURE GHOSTS - TRAJECTORY OF LIFE

DNA - TAILORED MADE OBJECTS - PEOPLE - COMPOSTABLE

CYBORG LIFE

STEAMPUNK - CHIP.

LEARNING STAGES.

IMMERSIVE EXPERIENCES

IMMERSIVE DISCOVERY

SHARING & SKILL.

SHARING

CROWDED ACTIVITY — BUILDING AN OVERALL PICTURE.

TRACKERS AS FACILITATORS

USER EXPERIENCE & LEARNING

SUSTAINABILITY

VALUE - LEARNING TO QUESTION SPOT THE GAPS.

CO-CREATION

LIFE LONG LEARNING.

BEHAVIOUR CHANGE - WILL WE CARE WHERE OUR INFORMATION IS?

WE WILL NEVER NOT LOST AGAIN.

PROXIMITY

INTERACTION SPACE

MEMORY CONSCIOUSNESS PERCEPTION OF REALITY

DISSOLUTION OF MEMORY

RELATIONSHIP WITH OTHERS

AUGMENTED BODIES

- WHAT WILL IOT DO TO OUR MEMORY.

- WHAT WILL DO TO RELATIONSHIPS.

I CHOOSE IT CHOOSES WHO CHOOSES ?

X Y Z

TRUST

PUBLISHED THINKING

TINKERING

Designing for ageing, repair, for personalisation

REVISIONING COMMUNITY THROUGH IOT AD TINKERING, MENDING, HACKING

SENSING BODIES

PEOPLE - NATURAL SENSING. CONTEXTUALISING EVERYDAY PRACTICE

BEHAVIOR CHANGE + ENERGY CONSUMPTION + LIVING.

BODY PARTS

PARTS OF BODIES

BODIES AS PARTS

BODIES IN CROWDS

CROWDS IS A BODY

Economics & Business

WHAT ARE THE IMPLICATIONS OF SHARING MORE WITH INTERNATIONAL SPACES?

WHAT ARE THE ECONOMICS OF PLAYABILITY ?

HOW DO WE MANAGE THE ALGORITHMIC SHIFT WITHIN AN IOT?

Social, Legal & Ethical

THEN

NOW

- WHO OWNS WHAT PART OF AUTONOMOUS?

WHO OWNS THEM?

Technology

CHANGING THE BANDWIDTH TO ACCESS OBJECTS/SPACES/PLACES.

EMOTIVE TV - MOOD (EMPATHIC)

IMMERSIVE DISCOVERY

New Learning Spaces

gauging appropriate response

Walton-tv?

Intrusive

Younger viewers

engaging

telecare/ personal care

Finding new content

TV inclusion in services

Tension between real and familiar interfaces

Freeing up environment

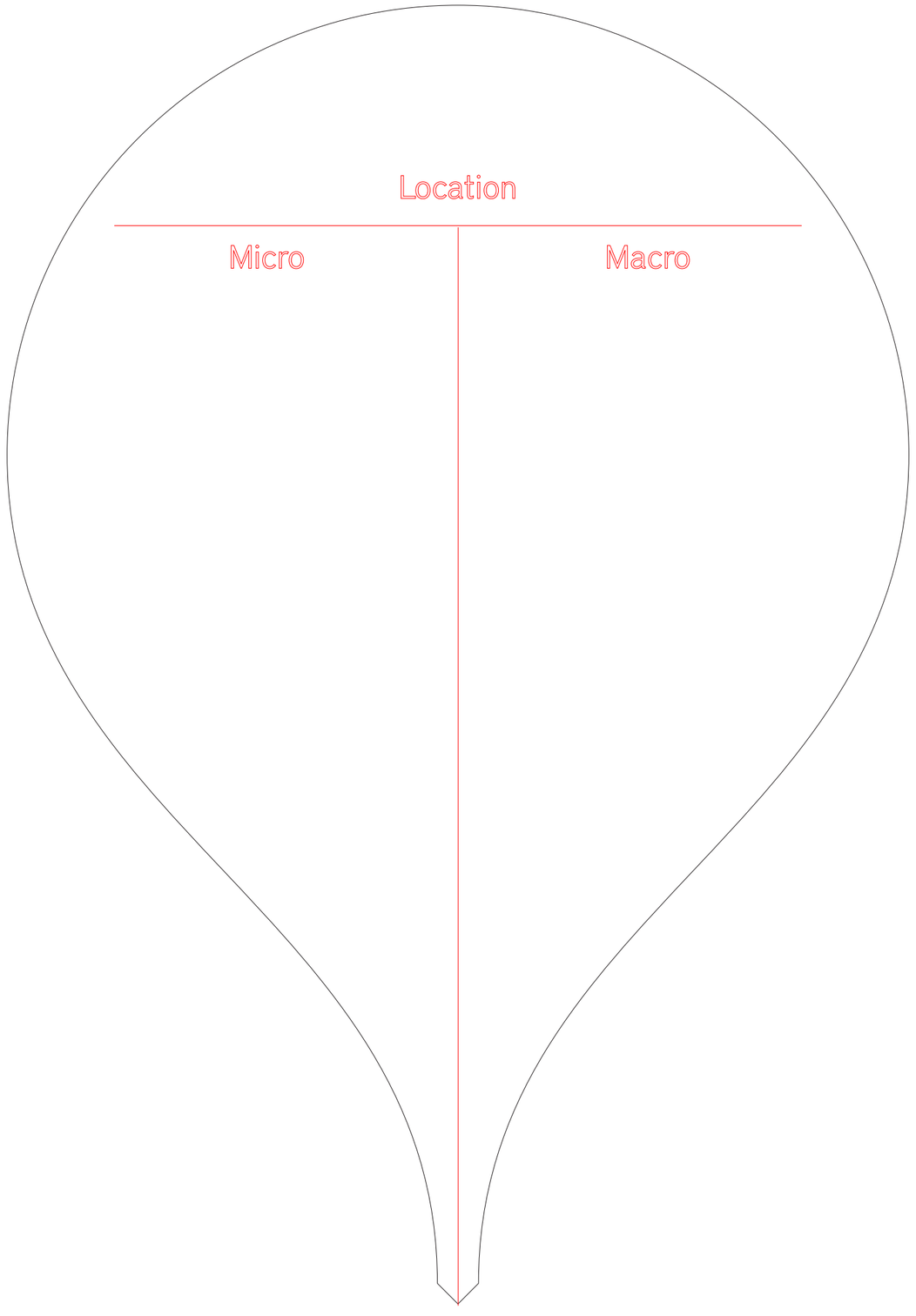
Augmented Reality

Display

Projection

SCREENLESS TV

RESEARCH QUESTIONS:


Location
Micro
Macro

THE WORST CASE...

Create shared representations.

NEM in DE (2)
ESRC/EPSRC FUNDING
"NEW ECONOMIC MODELS
THE DIGITAL ECONOMY"
(IS IT STILL GOING?)

MARKETING/CONSUMER BEHAVIOUR

CATHERINE
(UNI) LEGAL ASPE
OF DIGITAL TECH

FUNDERS

THE UNIVERSITY

Technology Strategy Board

How Do We Respond To The Ethic Case – "Design The Future"? [Lunch Date 20th Oct 2011]

Creative Machines Lab, Cornell – Hod Lipson. Synergies / Prototype.

EPSRC / Chamber of Commerce Unit – Manufacturing SMEs Leading.

NIS GRIN Gastrointestinal Research in the North

External Partners / Collaborations / Beneficiaries In The AM Space (Or Could Be!).

International Perspective / Landscape Who? Where? Where? How much Govt investment?

NHS Application?

Technology / cost / trade-off?

AM will not be as disruptive as media frenzy suggests.

How do we determine authenticity? (ie. music as downloads)

How to develop multi-material A.M for large(r) scale making?

Martin Spring Operations/Supply Chain "Servitisation" (Now)

How does additive manuf change structure, location and governance of inter-organisation networks?

Roger Whitham Design + Digital Tools

Nick Dunn Visualisation / Design

Julia Gillen Digital Literacies

How do people learn from one another, including online, to engage in additive manufacturing practices?

How do we Design / fabricate for material efficiency, disassembly, functionality, material-based properties

Bio implant manufacture modelling Coatings

R. Dickinson Eng. Director in Engineering

Mandy Dixon Hds Links University to NHS

Manidera Precision Tarabuzi / Innovation

How do we better integrate material properties / capabilities in the design process? → Prototypes & Tools

Connection between Health Hub and LCRDU to provide clinicians with understanding of AM and how it might benefit them

Lancaster Health Hub. - NHS Lab - Research / Innovation. -

Jeremy Roberts Project Engineer - LCRDU

Manfred Lau SCC graphic, HCI, digital fabrication

How does digitisation of the manufacturing process affect: ① work practices ② Design Margins ③ Social Implication

How do make easy-to-use tools for 3D printing/laser cutting?

Can AM parts rival conventionally manufactured parts?

System is disruptive but not only to manufacturing - it will disrupt service, health care, diff. future paths.... and so on

What are the Implications for those population that live in this economical areas?

How are different industries going to be affected differently?

How can we design physical tools to aid design for fabrication?

How can we design tools that may matter can use to design fabrication for Clinicians?

Imagination Lancaster

Design-led research lab: people, product, places, interaction

Literacy Research Centre

Everyday - professional - ways of using writing & reading to accomplish things

LUMS (Management School)

Management Science

Information Systems, Digitization, 'Dark Side'

SLM SLS FDM 3D Printing

Synthetic Biology

2 kW Laser + Laser Deposition (comb. planar rapid manufacturing, larger scale, low resolution)

Biomedicine — Cancer, Brain Ageing Disease transmission

(Connections between SUSDRAM and Lancaster Health Hub to introduce Health SMEs

Rapid 3D printing to enable disposable prototypes

How crucial is Scalability?

How to bridge gap between 'making' and products

Health x Medicine Microbiology x Parasitology

Roger Pickup Biomedicine Microbiology

Strength of 3D objects Combine engineers, computing, designers

-RESERVE BENCH-

Tom Abram Project Engineer & Researcher

Jason Alexander SCC Human Computer Interaction Robotics

Interactive Systems Lab (SCC/InfoLab)
- HCI → Human Factors
- Interactive Fabrication
- Rapid Prototype
- Tools for Fabrication

MixTab a mixed-reality environment for digital fabrication

Retrieve & Reclaim additive & subtractive methods for interactive fab

Interested in useful AM research i.e. medical applications, disabled aids, addressing developing countries issues etc.

Christian Weichel SCC Human-Computer-Interaction

Susdram: Engineering Design Academy

Lancaster Product Design Unit
by Academics, Engineers, Graduates, Students, Alumni, Post Mkt, Business Development, Private Sector Partnerships

What stage are we at? (What is the role of AM/3D technology)

Solid Works (cad) Magics (easy edits) Net fab Inventor Meshlab Sculptress Meshmixer

Paul Coulton Physical/Digital Design

Make a video about additive manufacturing at Lancaster & how we can liaise to develop new projects/assist SMEs etc.

Alistair Rennie - Lecturer in Manufacturing/Mechatronics

Karen Wright Lecturer in Biomedicine External relations / KEC

Andy Leaker Manufacturing -

3D printing for organ production eg. small or large bowel, heart, liver etc. How likely?

Ethics / Responsibility → Manufacturing Quality? → Design Effects? → Society? → IP?

Marketing: Consumer Behaviour

Neena at Economist

Mike Reeders-Lee (Small Island Consumer)

Carbon Footprint - Sustainable Manufacturing

Chemistry Partner Business

Catherine Easton (Law) Legal Aspects of Digital Tech.

IDEAS FOR IMPACT
Recent academics undertake high impact excellent research.

BBC

Society, Technology and Culture

Landscape

LANCASTER UNIVERSITY

0-2 years
Society, Technology & Culture

3-5 years
Society, Technology & Culture

5+ years
Society, Technology & Culture

0-2 years
Lancaster University

3-5 years
Lancaster University

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Building in longevity and impact to ensure all participants benefit from their contributions.

Advice

Creative leaps that occured when time was very limited
Creative leaps that occured with limited resources
Creative leaps that occured when time was very limited

PROACTIVE
MORE
RISK
SYMMETRY BREAKFAST
(INSTAGRAM ACCOUNT)
IT HAPPENS EARLY DAY

PROACTIVE

MORE RISK

LESS RISK

REACTIVE

Creative leaps that were self-directed

Creative leaps that were surprising

Creative leaps that involved appropriating (stealing) something

Creative leaps that occured when...

Creative leaps that occured with limited resources

Creative leaps that occured when time was very limited

Creative leaps that involved appropriating (stealing) something

Creative leaps that were surprising

Creative leaps that were self-directed

Creative leaps that were surprising

Creative leaps that were surprising

Creative leaps that were surprising

1

Sharing

Using knowledge and experience that is common to participants.

The intellectual and social basis for collaborative working.

2

Exploration

Enabling participants to work together to explore new questions or ideas.

Divergent; creating new concepts, ideas and perspectives unique to the participant group.

3

Formation

Enabling participants to filter concepts, create consensus and compare discoveries.

Convergent; creating explicit, standalone outcomes that can be used beyond the engagement itself.

4

Action

Ensuring ongoing value from the work done by participants.

Building in longevity and impact to ensure all participants benefit from their contributions.

Workshop 3: Refine

What do you want people to do?

- Reflect / Converse
- Adopt new behaviours
- Take on new projects

Put ideas from the workshop back into the lives of participants.

THE UNIVERSITY

Additive Manufacturing at Lancaster University

CAPABILTIIES AND QUESTIONS

IDEAS for IMPACT

Lancaster University

Prototyping Ideas & Services

How can we design physical tools to aid design for fabrication?

How to bridge the gap between 'making' and products?

Imagination Lancaster
Design-led Research Lab
People, Products, Places and their Interactions

Can AM technologies produce reusable prototypes?

Roger Whitham
LECTURER, LICA
Design & Digital Tools

Paul Coulton
SENIOR LECTURER, LICA
Physical/Digital Design

Nick Dunn
PROFESSOR, LICA
Visualisation / Design

How do we better integrate materials properties/capabilities in the design process?

How can we design tools my mother can use to design for fabrication?

How do we design/ fabricate for material efficiency, disassembly, functionality, material properties?

How to develop multi-materials AM for large(r) scale making?

Learning & Language

How do we re-define authenticity in the context of AM?

Literacy Research Centre
Everyday & Professional ways of using writing and reading to accomplish things

How do people learn from one another, including online, to engage in AM practices?

Julia Gillen
SENIOR LECTURER, LINGUISTICS & ENGLISH LANGUAGE
Digital Literacies

What are the implications of AM for those populations that live in 'disconnected' areas?

AM is disruptive but not only to manufacturing.
Healthcare, art, culture... etc.

Lancaster Health Hub
NHS Links
Research / Innovation

What AM applications are possible to address medical issues in developed countries?

Health & Wellbeing

Mandy Dixon
CLINICAL RESEARCH HUB MANAGER
Hub Links University to NHS

Health & Medicine
Microbiology & Parasitology

Is 3D printing for organ production likely?

What applications exist with relevance to the NHS?

How crucial is scalability?

Roger Pickup
ASSOCIATE DEAN FOR RESEARCH, FH&M
Biomedicene, Microbiology

Karen Wright
LECTURER, BIOMEDICAL AND LIFE SCIENCES
External relations/KE

Interactive Systems Lab
HCI & Human Factors
Interactive Fabrication

PROJECT
Reform & ReClay
additive & subtractive methods for interactive fabrication

Jason Alexander
LECTURER, SCC
Human-Computer Interaction

Christian Weichel
RESEARCH ASSOCIATE, SCC
Human-Computer Interaction

PROJECT
MixFab
Mixed-reality environment for digital fabrication

Manfred Lau
LECTURER, SCC
Graphics, HCI, Digital Fabrication

How can we model the material strength of 3D printed objects?

TECHNOLOGIES

- SLM
- SLS
- FDM
- 3D Printing
- Laser deposition
- Solidworks
- Magics
- NettFab
- Inventor
- Meshlab
- Sculptris
- Mudbox
- UP! 3D
- Makerbot
- Ultimaker

Tools for Design & Making

How do we make easy-to-use tools for AM/laser cutting?

Lancaster Product Development Unit
Business Support and Outreach

PROJECT
SusDRaM
Engineering Design Academy

Allan Rennie
LECTURER, HEAD OF LPDU
Manufacturing

Jenny Roberts
PROJECT ENGINEER, LPDU

Andrew Pinkerton
SENIOR LECTURER, ENGINEERING
Laser material processing

Andy Baker
TECHNICIAN, ENGINEERING
Manufacturing

Tom Abram
SENIOR PROJECT ENGINEER, LUPD
Project Engineer & Researcher

Can AM parts rival conventionally manufactured parts?

How are different industries going to be affected differently by AM?

Manufacturing Products & Processes

Chris May
ASSOCIATE DEAN: ENTERPRISE & EXTERNAL RELATIONS, FASS

Lancaster Universty Management School
Mangement Science, Information systems

What are the ethical implications of AM?
Manufacturing defects?
Design Defects?
Safety?

How does digitization of the manufacturing process affect work practices and knowledge management?

What are the social implications of digitized manufacturing?

Monideepa Tarafdar
PROFESSOR, MANAGMENT SCIENCE
Processes, Technology, Innovation

Martin Spring
PROFESSOR, MANAGMENT SCIENCE
Operations/Supply Chain "Servitization"

How does AM change the structure, location and governance of inter-organisational networks?

What are the implications for intellectual property?

Business & Economics

External Organisations

15+ Third Sector

750+ SMEs

Innovate UK

ERDF

20+ Corporates
Including BAE Systems, Proctor & Gamble, Brother and 3D Systems

EPSRC

Lancaster Chamber of Commerce

UK Government Office for Science: "The Future of Manufacturing" (Foresight)

N8 Grin
Gastrointestinal Research in the North

NHS

Creative Machines Lab
Cornell

new/ideas
A Meeting of Minds

LEAD
What could we do differently in terms of delivery?
Who is driving this within the department?
Have we got a clear strategy for the future of LEAD & Does everyone know it?
As technology has progressed since LEAD began do we now need to implement new technologies?
How do we best showcase the intangible benefits better?
Do we practice what we preach?
Do we loose part of the programme, when Sue leaves?
Where does LEAD fit into IEEDs strategy - do we have a strategy?
What effect will loosing Sue have?
How can we communicate better internally?
Should we be sharing more? - Commercialising?
How do you share experiences and knowledge about the process
Are we depardising the quality of the programme by sharing?
How do you find a balance between expectations/priorities of different groups/people
Do people have to physically co-located
Who are the 'best practice' people we can draw from?
Who within the organisation are best placed to manage expectations?
What do we ask them to gather egs of best practice?
Andrew much responsibility should fall to students?
What responsibility does HE have for helping/supporting students to manage?
The Creative Exchange
How do you tell if you have the right people involved?
How do we make it sustainable?
How does the environment influence the form KE takes -+ve or -ve
EITB - How can I create a KE community with students?
Should the network reflect project needs on wider strategy?
What where the obje
Do funding restrictions allow for experimentation
Postgraduates consultancy with the Arts
Do PGs have the skills & knowledge?
How do we best manage the process with client?
Strategically which type of client should we target?
What is the best way to maintain links with client?
How to manage the briefing with client?
Provide "right" training, HR, MA programme
What to share module without access MA?
Do we have sufficient staff with right skills & knowledge
Which ~~identify~~ areas for improving client-uni relations
Is there a "best way" to bring people together on projects
Are enthusiastic academics better, or just available?
Practice or reality? Can we bring it to work?
How do we put things in motion?
Are the feedback sheet particularly useful?
How do I ensure I attract best

ROUTES TO IMPACT

IDEAS FOR IMPACT

RCUK ROUTES TO IMPACT

Identify destinations or outcomes for the research activity below:

A

Informing the design of new (+ existing) digital collaborative tools.

B

Generating R&D investment in new digital collaborative tools.

C

Enhancing tools + methods for knowledge work in companies

CORE RESEARCH ACTIVITY

Identify a core research activity and describe it in a sentence that is easy for others to understand:

Exploring the relationship between technologies, tools and design in how people think, collaborate + create.

D

Research organisations changing and developing their working practices.

eg. Microsoft Research.

E

Educational tech. companies looking for novel approaches + technologies.

e.g. Promethian Tech.

F

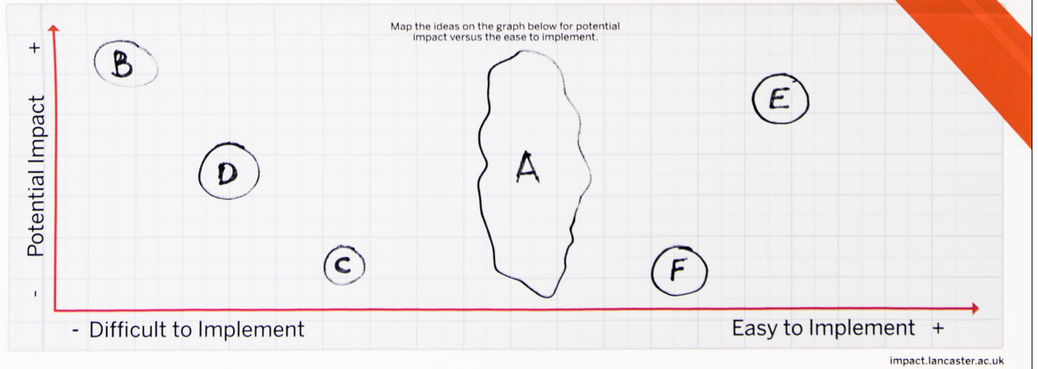
Design agencies looking for new creative processes + approaches.

eg. The Gild.

EXTERNAL INTEREST

What could be the external interest for your core research activity?

Map the ideas on the graph below for potential impact versus the ease to implement.



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Make new behaviours rewarding.

iDEAS
at Daresbury

Beyond Networking

Contact Classifier

Use the dots overleaf to...

Mark contacts that can help with new ideas

Finding

Mark contacts that can help refine and improve ideas

Refining

Mark contacts that can help bring ideas to market

Exploiting

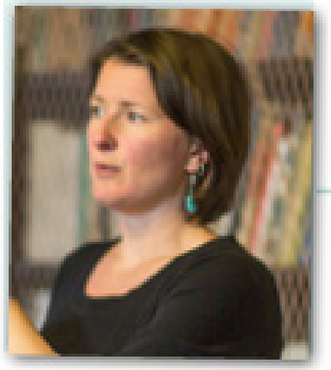
1
You need to get out more!

2
Push out of your comfort zone

3
Now you're getting the hang of it!

4
What else is out there?

5
Master of creative inspiration!



Attach inspiration along the poster.

Match future actions with clear value, responsibility and accountability.

3 What do you personally and professionally want to get from involvement in the support program?

2015 2016 2017

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug

A1 Co-Designing Creative Facilitation
Action: 1 Week Forres

A1 Co-Designing Creative Facilitation
Action: 1 week L.U.

A2 Short Projects
Action: Meta review & Systematic Studies

A2 Short Projects
Action: Mini projects start + Lancs

A2 Short Projects
Action: R + L Rp's Tesp talk.

A3 Major Projects
Action: 2 proj. launch
Action 3: LU
Action 3: GSA

A3 Major Projects
Action: 2 Projects complete
Action 3: LU
Action 3: GSA

A3 Major Projects
Action: Project launch
Action 3: LU

A4 Toolbox Design
Action: Toolbox #1

A4 Toolbox Design
Action: TOOLBOX #2 "WIDEBOY" BROADCAST

A4 Toolbox Design
Action: Toolbox #3

A4 Toolbox Design

A5 Evaluation of Co-Design and Facilitation

A6 Dissemination sharing and wider
Action: Somme Schools 3-Day Rachel LU

A7 Project Managment
Action: M+L Lanc.

A7 Project Managment
Action: M+L GLAS.

A7 Project Managment
Action: M L Glasgow

A7 Project Managment
Action: M FORRES

A7 Project Managment
Action: M+L Lanc.

A7 Project Managment
Action: M Vid.

A7 Project Managment
Action: M+L Lanc.

A7 Project Managment
Action: M. VID

A7 Project Managment
Action: M L glasgow.

ance to BBC
lized 2nd screen experience
o description via mobile
tion with big screen at public

Relevance to LU
Big Screen Interaction Research

vance to BBC
ng the gates down at
C Broadcasting House
/ Centre

Relevance to LU
New kinds of content e experience

Challenge
"public displays"
- easy pairing for 5K + users
  - as individuals
  - as groups
  - as one group
- ensure appropriate technology in media city.
- example applications + business models.

Skills Required
- scenario building
- technology (mobile)
- business modelling

High Wire Project

- lead scenario building
- contact with events org. (BBC + external)
- health + safety issues advice
- access to content centres
- explore IP issues

BBC Input

- get in touch with BBC big screen (Sarah Griffith) SAM
- gordon to decide in next 3 weeks.
- peel media?

- Participation in PD-NET Industrial Steering Group.
- Multi-partner, funded, blue-sky on public open display networks.
- Consider future research bid.

Other

Sam to find name for participant?

Challenge

What is the challenge?
How can BBC exploit the creative + innovative potential of Small + Micro companies (or freelance).

Relevance to BBC - Tech Trafer.
- Tapless production
- Lowering barriers to entry
- Getting others to take R+D → DEVELOPMENT.

Relevance to LU
- Broker (trusted)
- Expert in Novel knowlege Exchange.
- Funding in place NOW

Challenge

What is the challenge?
DEVELOP A SYSTEM THAT CAN SUPPORT A MASSIVELY MULTIUSER ONLINE GAME/EVENT WITH 2×10^7 SIMULTANEOUS USERS.

Relevance to BBC
- MASS PARTICIPATION INTERACTIVE CONTENT - BRING ONLINE AUDIENCES TO LEVEL OF TV. (INTERACTIVE)
- NEW GENRES

Relevance to LU
- RESEARCH INTO MASSIVE DATA COLLECTION + ASSIMILATION
- WIDER PROBLEM OF SENSOR DATA RECOVERY IN WIDE AREAS
- INVERTING THE CONTENT DISTRIBUTION NETWORK

Proposed by

CORE PARTNERS | SUPPORTING PARTNERS

Provisional Title

Other People & Expertise Needed

Academic, Commercial, Community & Technical

Topic, Opportunities, Challenges

Approach

Desired Outcome

Resources

THINGS YOU BRING | THINGS YOU NEED

GUIDANCE NOTES

Core partners will take the lead on developing the project.

Supporting partners (optional) may act in an advisory capacity or offer specific expertise in a particular area.

Please include a draft title for your project idea.
This does not need to be the final title that your project takes.

List the people and expertises that will be needed in by the project in addition to yourselves.

This must include both academic and commercial/ community involvement.

These do not have to be named individuals at this stage.

For example if expertise in a particular academic specialism is required but this person has not yet been identified, indicate this as ‘expert in X’.

This should be a brief description of the specific areas within public service innovation and democracy that this project is examining.

What opportunities and challenges will it address?

What current need will it fulfil or explore?

Please explain what format your project will take and an outline of projected activities. This may include one of the following:

- Pilot investigation
- Survey
- Prototype development
- Product testing

Include the outcomes that you expect to have at the end of the project, e.g. a report, visualisation, working prototype etc.

List the significant resources that will be necessary to undertake this project.

‘Things you need’ for example include researchers provided by CX, resources for prototypes and testing and a small amount of funds from the CX Fund for release of commercial staff to undertake research and in-kind support.

‘Things you bring’ are resources that partners are willing to provide, this may include items such as time to undertake research or develop outputs, or space to do the work.

IDEAS FOR IMPACT

impact.lancaster.ac.uk/tools

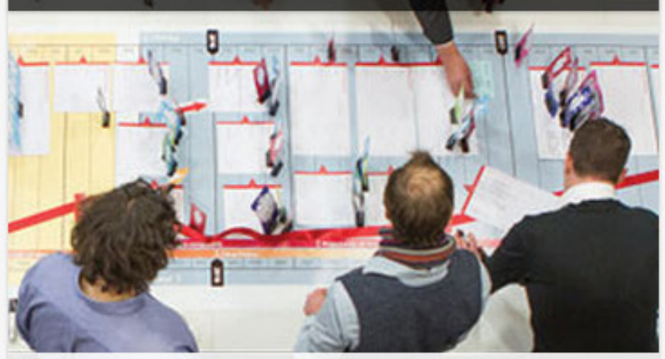
Collaboration & Impact Toolbox

Tools and resources to help you communicate, collaborate and connect your research with others.
Part of the IDEAS for Impact project.

Hexagon Cards

Connectable cards for mapping problems, generating ideas or modelling shapes.

Giant Timeline



A table-sized timeline for planning projects and activities.

What's Your Motivation

A mini comic strip for revealing people's motivations at the start of a project.

Meeting Action Points

A fun tool for creating a visualisation of progress between meetings.

New Tools

This is an ongoing project. Leave your email and get a notification when a new tool is added.

Email Send

You can also follow us on twitter:

Follow @ideas_team