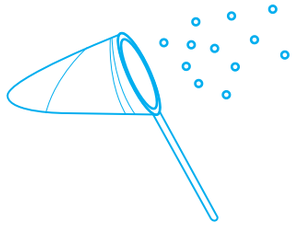


Marzia Mortati

PhD Candidate, Politecnico di Milano

Leon Cruikshank

Senior Lecturer, Imagination Lancaster, Lancaster University

Engage HEI 2010

The Net approach

Social Networks in action and Design Cognitive Tools

Objectives

In this presentation we would like:

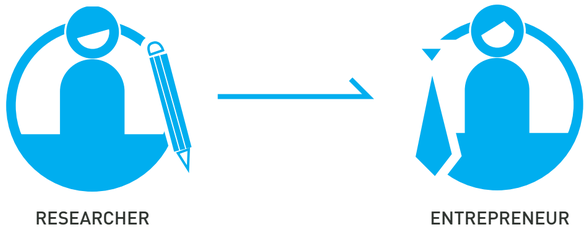
To present and share knowledge on our on-field experience

To propose a new conceptual approach to Social Networks

Through the project we would like:

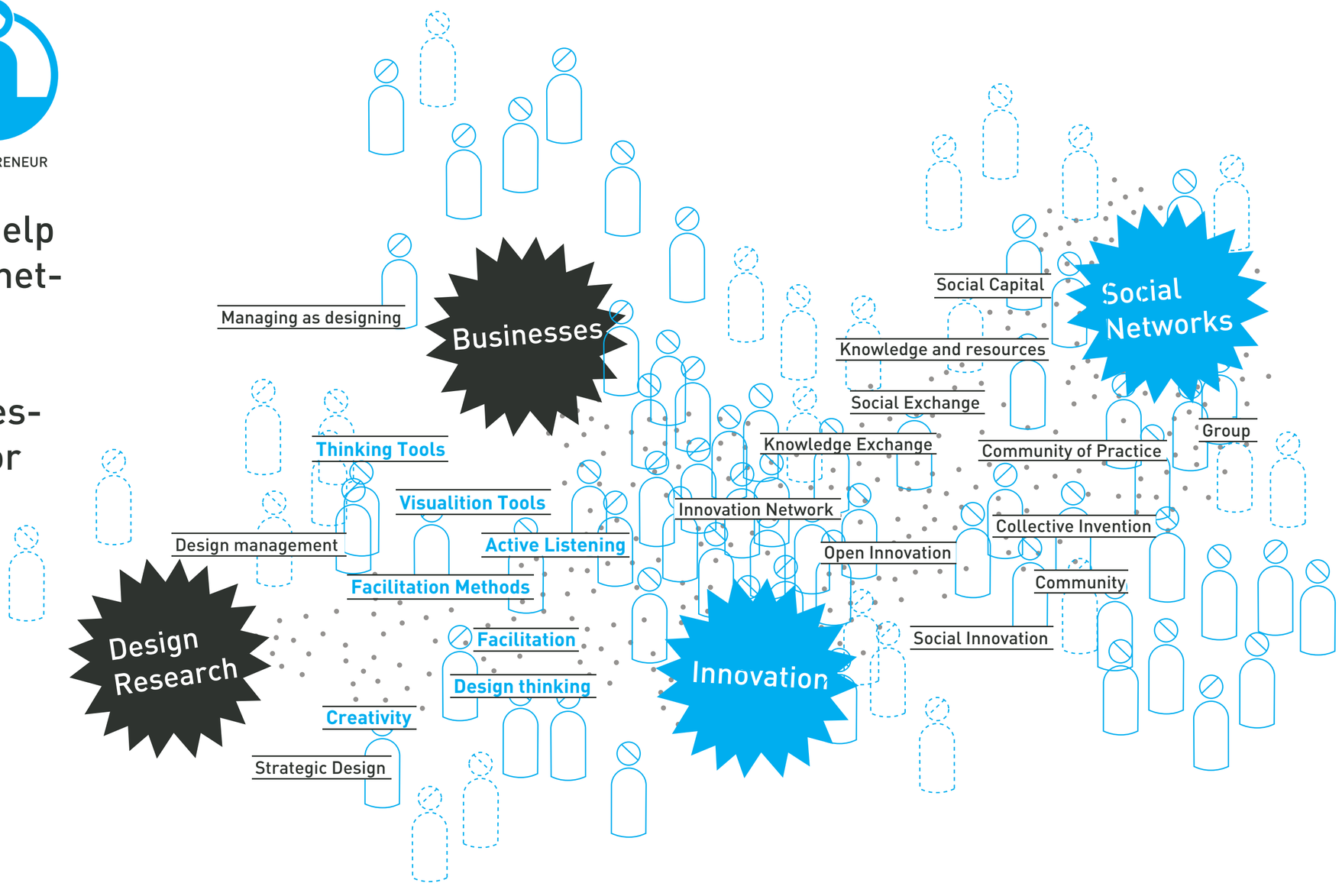
To address social network theory

To discuss on how design-inspired cognitive tools can transform social networks into practical tools



Can a design attitude help businesses use social networks strategically?

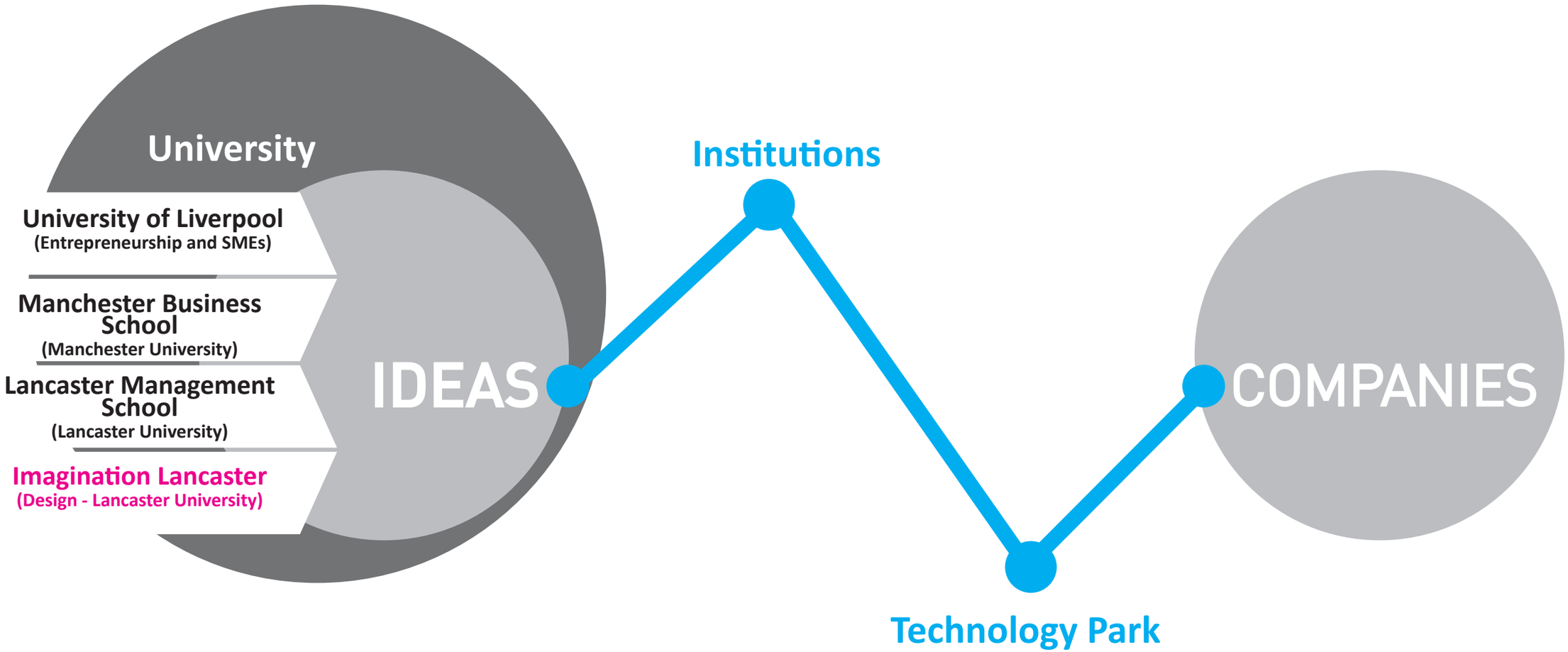
Can design help businesses design networks for innovation?



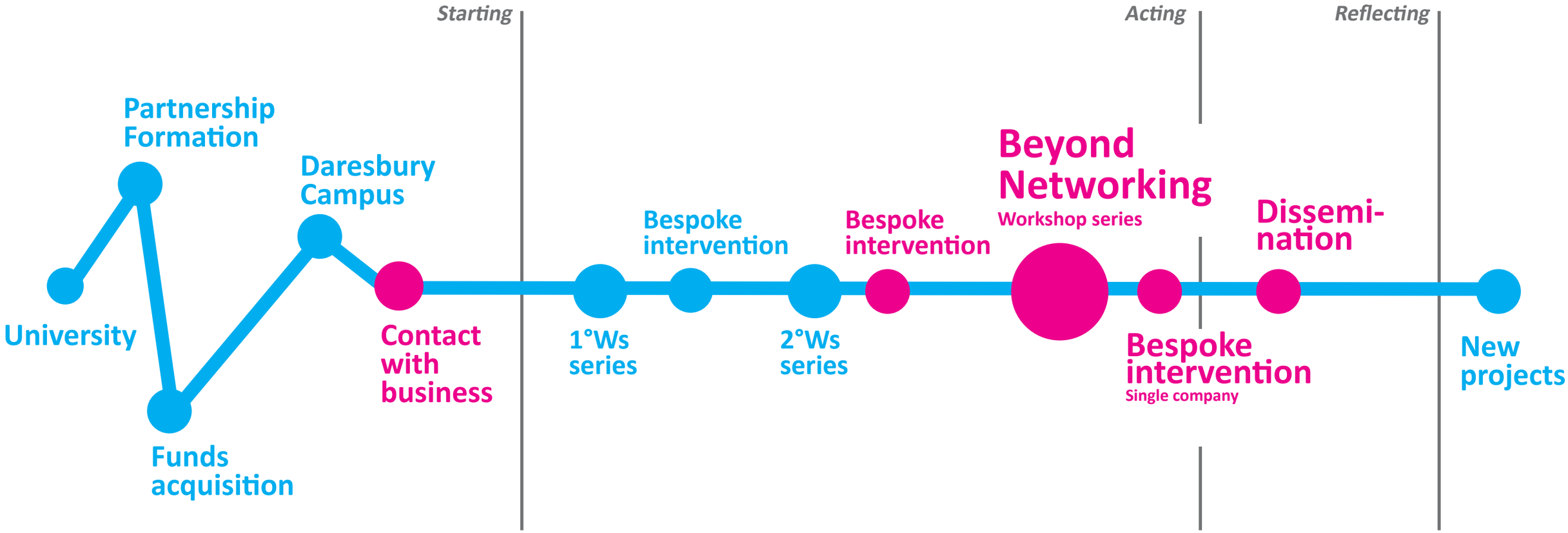
IDEASatDARESBURY

Multi-disciplinary partnership - key aims:

to help establish and enhance the performance of firms and organisations, to put 'new ideas into practice' through research and knowledge transfer activity centered on innovation, competitive performance and economic development.



IDEAS AT DARESBURY - The project



Approach

Designing the intervention

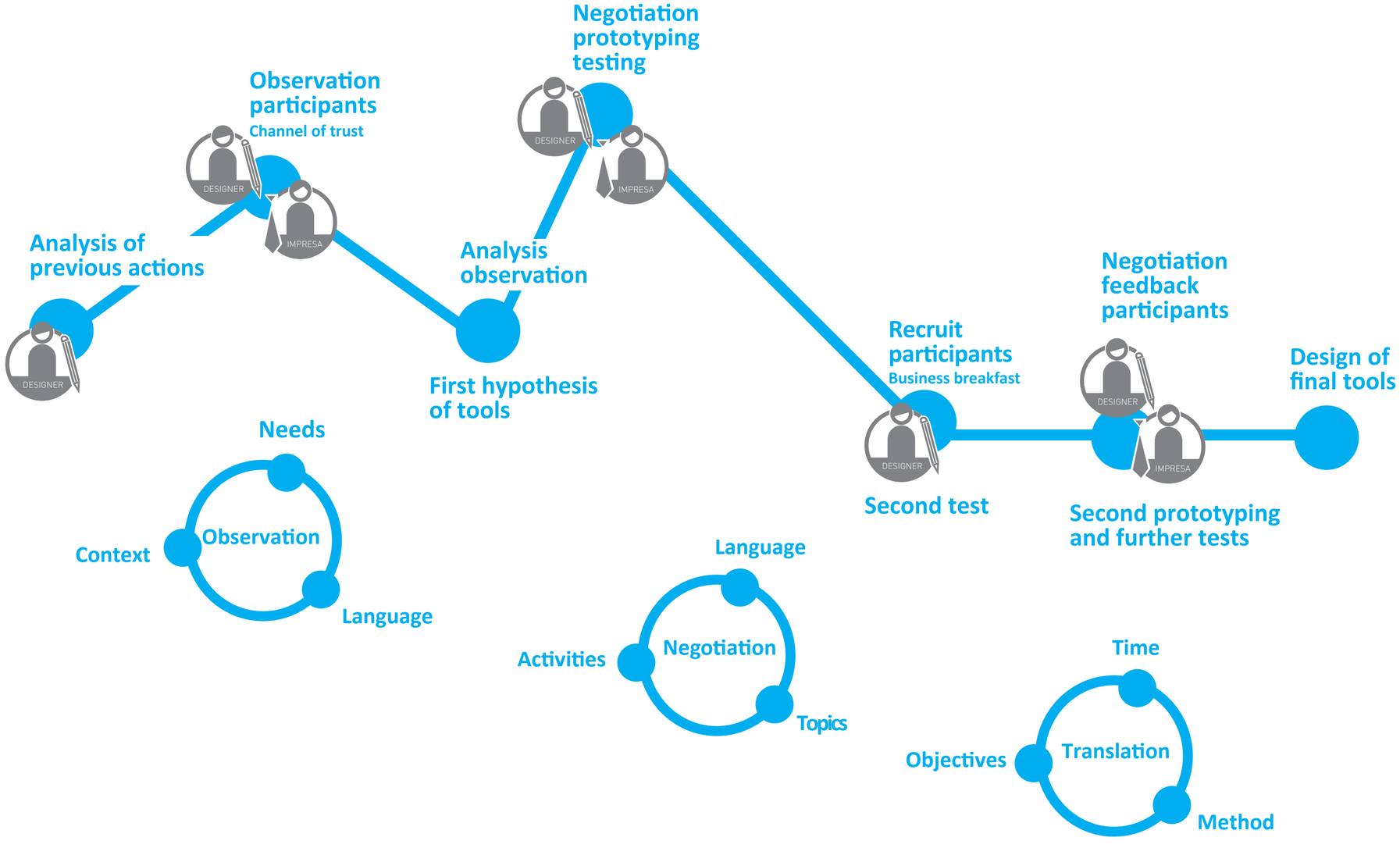
A sensitive observer might notice an interesting thing about creative people. They tend to work in two different ways.

‘finders’: They exercise their creativity through discovery, they are driven to understand, to find explanations for phenomena not well understood.

‘makers’: They demonstrate their creativity through invention. Makers are driven to synthesize what they know in new constructions, arrangements, patterns, compositions and concepts that bring tangible, fresh expressions of what can be.

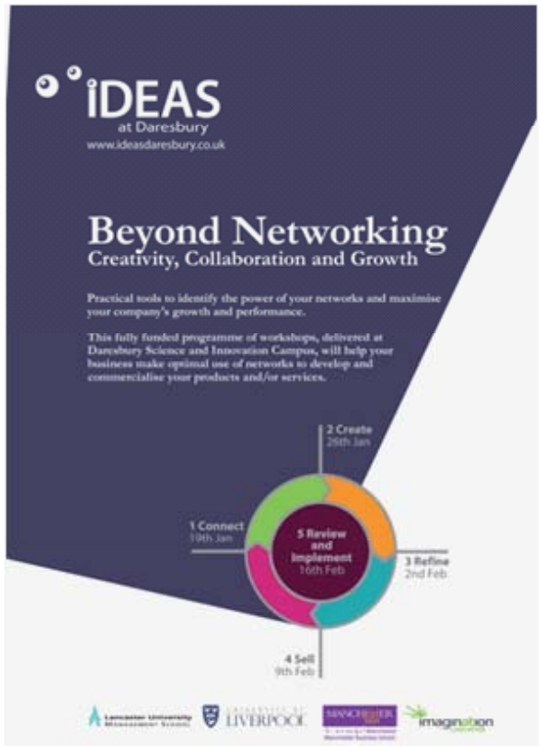
Owen, C. (2006) Design Thinking: Notes on Its Nature and Use. Design Research Quarterly 1:2 Dec. 2006, pp.16-27

Designing the intervetion



Beyond Networking

Workshop series



PROGRAMME

- **Connect** - Maximise the Benefits of Working with Others
Tuesday 19th Jan | 9am - 1pm
Understand your networks and how to use them more effectively
Experience new and effective approaches to developing beneficial relationships

- **Create** - Generate New Ideas Through Collaboration
Tuesday 26th Jan | 9am - 1pm
Foster creativity by working with others
Introduce and apply tools which can be used to enhance day-to-day creativity

- **Refine** - Develop Concepts into Practical Propositions
Tuesday 2nd Feb| 9am - 1pm
Grow ideas into attractive product/service offers
Develop attractive proposals to enter new markets
Effectively communicate ideas to customers

- **Sell** - Translate Propositions in Successful Products
Tuesday 9th Feb | 9am - 1pm
Identify key partners for product/service development and collaboration
Grow proposals into saleable products or services
Minimise risks, costs and time in development processes

Beyond Networking

Workshop series

PARTICIPATING COMPANIES

25 high-tech SMEs in two sectors:

› IT SERVICES
› SPECIALISED MANUFACTURING

Beyond
Networking

Connect

Maximising the benefits of working with others

Topics:
- Social Networks of entrepreneurs
- Generating value through Social Networks
- Dimensions for analysing a Social Network
- Hands-on activities

Beyond
Networking

Connect

Maximising the benefits of working with others

Tools:

Tool 1: SCOPING NETWORKS

Tool 2: MAPPING CONTACTS

Tool 3: NETS

Tool 1: SCOPING NETWORKS

iDEAS at Daresbury

Your Name

Context (your current job)

Connect, 19th Jan 2010

Core Contacts

Contacts who help with new ideas

	1	2	3	4	5	6
Name	TOM	RICHARD H	RUTH	MS. THOMAS	TESH	MR. NOBEL
Position	SALES MANAGER	PROJECT MAN.	MD	SALES REP		ENGINEER
Company	HP	APPLE	RP ENTERPRISES	OPEN CS		FREELANCE
Spatial						
Location	LONDON	HEATHROW	STOCKPORT	NEWBURY	MANCHESTER	OHIO, USA
Distance from you	200 miles	200 miles	20 miles	50 miles	30 miles	10000 miles
Strength of Ties						
Closeness of relationship (close ↔ distant)	X	X	X	X	X	X
Length of relationship	6 months, 1 years	6 months	5 years	1 months	10 years	3 years
Frequency of communication (constant ↔ rarely)	X	X	X	X	X	X
Heterogeneity						
Background	Executive	Executive	Small business owner, Entrepreneur	Friend or Family, Entrepreneur	Friend or Family	Small business owner

Companies have mapped:
› relationships between contacts
› strong and weak ties among contacts
› distribution of contacts to help us understand how they view their network

Tool 2: MAPPING CONTACTS

iDEAS at Daresbury

Connect
19th Jan 2010

Your Name

Please stick your business card under this label so we can have a look

1 MIKE
Bank

2 STEVE CRAFT

3 MARK
CBS

BROTHERS

PARTNERS

4 NEIL D

5 FIONA

6 TRICIA

7 PROF CHOY

R+D

8 ANDREW

10 DAVID GARDNER

9 CUSTOMERS

11 ED

12 NWDA SUPPORT

GOV SUPPORT

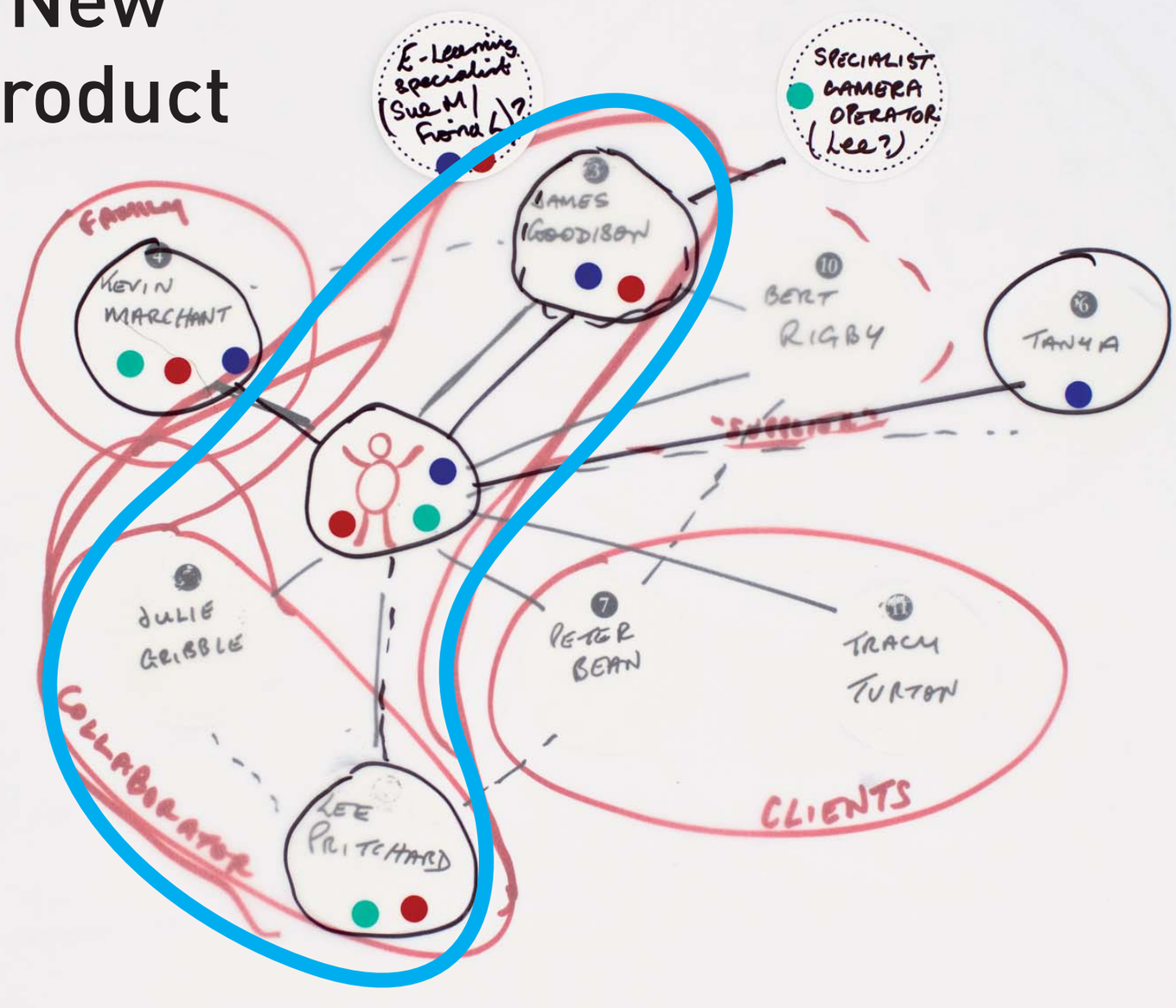
Tool 3: NETS

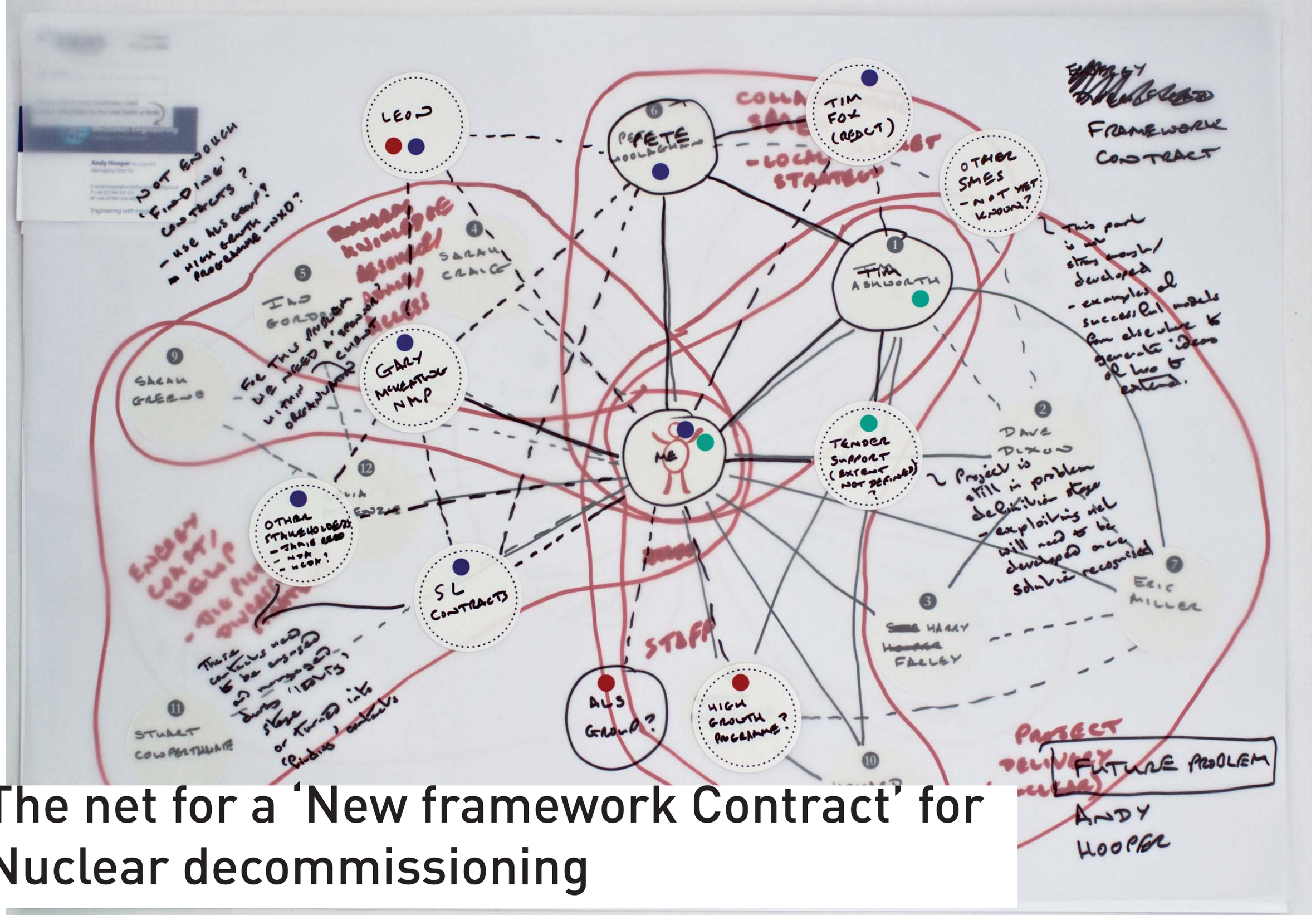
The concept of Net represents a simple and hands-on tool addressed at SMEs to design their network.

We define a net as the set of contacts that are activated in order to answer a specific need and exchange valued items (material or immaterial). Net indicates the more operational part of a wider network, where contacts are activated from time to time and often with different roles.

This helps companies understand immediately how their network can be used, improved and designed.

The Net for a New E-Learning Product

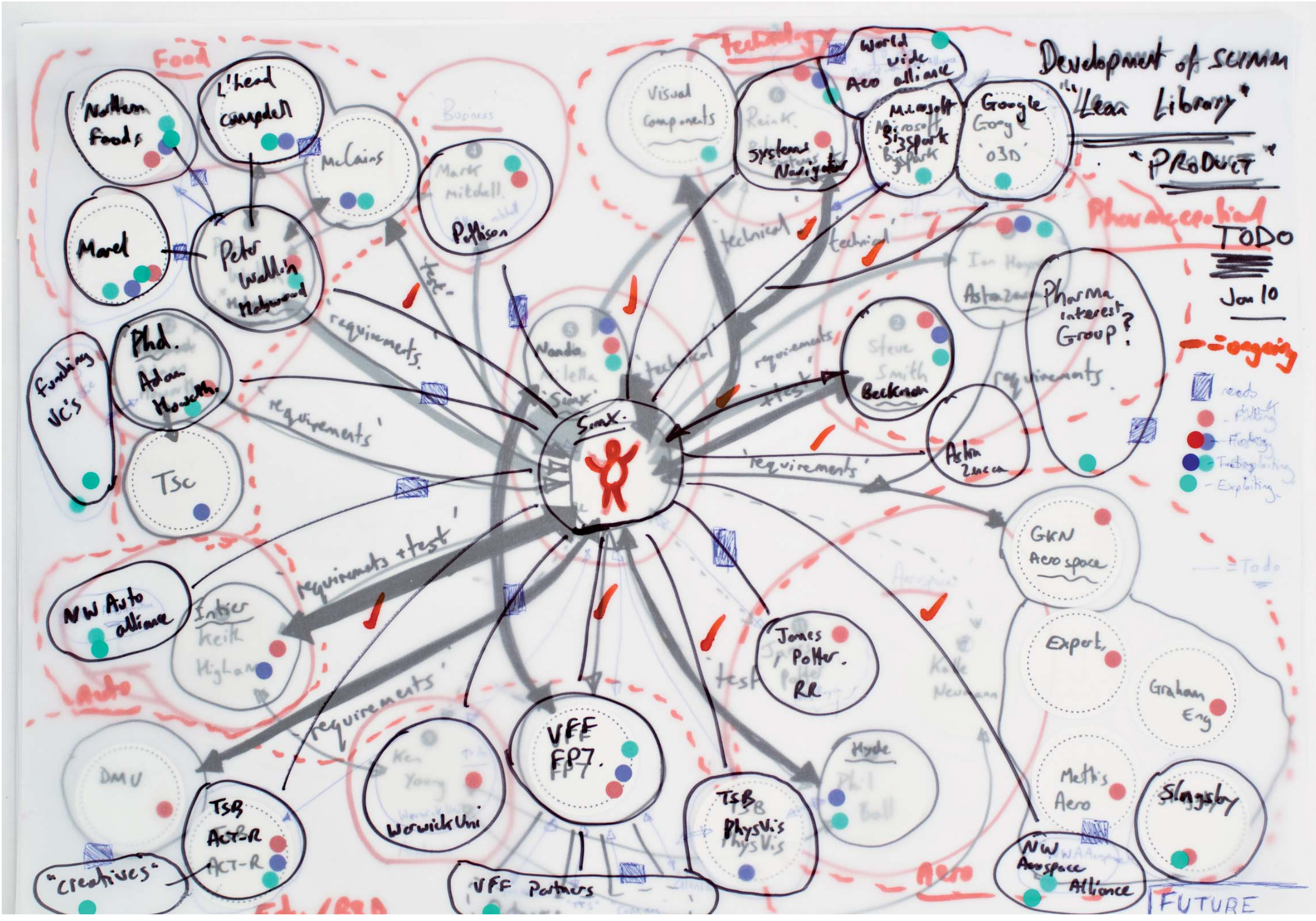




The net for a ‘New framework Contract’ for Nuclear decommissioning

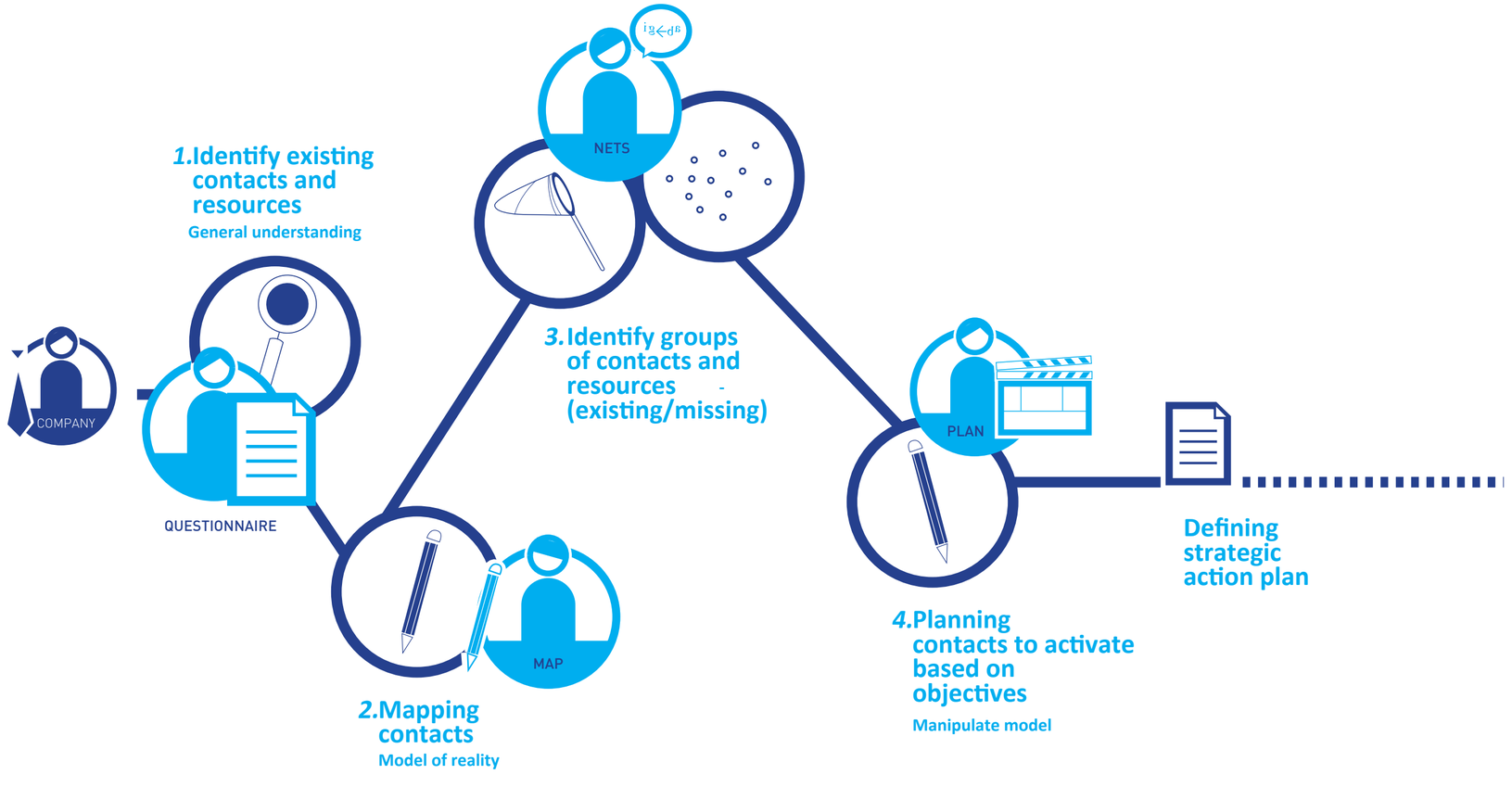
Companies have:
› identified a current or future innovation problem
› described existing or missing contacts to build a plan to tackle the problem

Nets to solve a future problem



Development of SCIMM
"Lean Library"
"PRODUCT"
TODO
Jan 10
Food
Northern Foods
L'head Campbell
McCains
Marel
Peter Wallin Halewood
Phd. Adam Howath
Funding VC's
TSC
Business
Mark Mitchell
Pattison
Technology
Visual Components
Systems Navigator
World wide Aero alliance
Microsoft Bizspark
Google 'O3D'
Pharmaceutical
Pharma interest Group?
Steve Smith Beckman
Astra Zeneca
Simx
requirements
requirements +test
requirements
technical
test
NW Auto alliance
Intier Keith Higham
Auto
DMU
TSB ACT-R
"creatives"
Warwick Uni
VFF FP7
VFF Partners
TSB PhysVis
James Potter RR
Hyde
GKN Aero space
Expert
Graham Eng
Mettis Aero
Slingsby
NW Aerospace Alliance
Aero
FUTURE

Connect ws: Activities and Tools



Feedback

1. High relevance for businesses
2. Actions for immediate implementation
3. Immediate benefits
4. Increased awareness

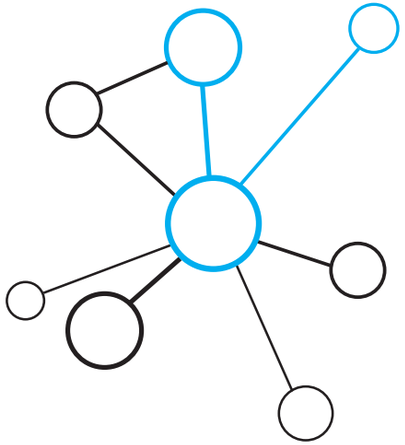
“There is a huge drive in our industry to network and that networking is the future of the service industry” Paul Oldham, Kelly Scientific Resources

“I have now got, directly from this session, a list of actions that I can go away with and do literally this afternoon.” Bob Lloyd, SimX Ltd.

“On the table were two people I have already added to the network. That is kind of a short term benefit right off the bat.”
“This session has brought me to a point where I realise, I need to manage that network and I have been able to identify the gaps in it .”
Andy Smith, Instrument Science Ltd.

Result

The concept of NET



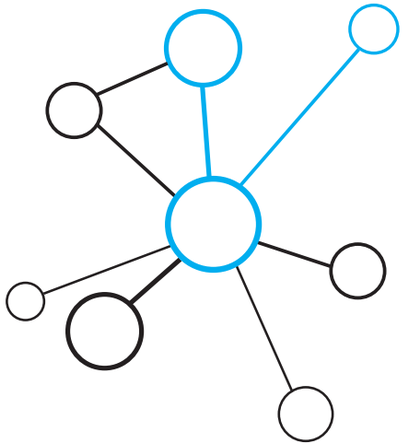
In the wider Social Network entrepreneurs benefit from their network by activating the nodes that are most useful to solve a problem.

Conceptually a sub-group of contacts exists that are activated at different times with different roles and to extract different re-sources.

This is an operational concept: nets are highly functional, they catch things.

Result

Design-inspired approach

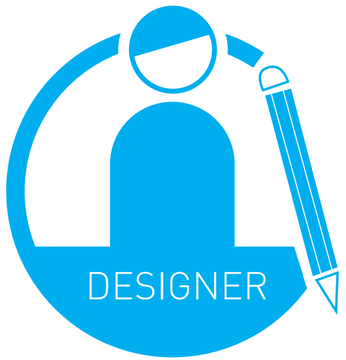


Understanding of the network is built through:

Visualisation
Prototyping of network (map as a model of reality)
Prototyping of the plan for action
Recognition of patterns
Human-centred attitude
Fantasy and reality
Systemic vision

This aims at helping the exploration of a wide variety of ties and their relationships, and at building a strategy for innovation.

Characteristics of a design thinker



Don Fabun
(1968). You and Creativity. Kaiser Aluminum News 25(3).

Sensitivity
Questioning attitude
Broad education
Asymmetrical thinking
Personal courage
Sustained curiosity
Time control
Dedication
Willingness to work

Silvano Arieti
Creativity. The Magic Synthesis. New York: Books

Fluency of thinking
Flexibility
Originality
Redefinition
Elaboration
Tolerance for ambiguity

Mihaly Csikszentmihalyi
(1996). Creativity. Flow and the Psychology of Discovery and Invention. New York: Harper Collins Publishers, Inc.

Generalized libidinal energy and restraint
Convergent and divergent thinking
Playfulness and discipline —or irresponsibility and responsibility
Fantasy and reality
Extroversion and introversion
Humility and pride
Masculinity and femininity
Traditional conservatism and rebellious iconoclasm
Passion and objectivity
Suffering and enjoyment

Charles Owen (2007)
Design Thinking: Notes on Its Nature and Use. Design Research Quarterly 1:2 Dec. 2006, pp.16-27

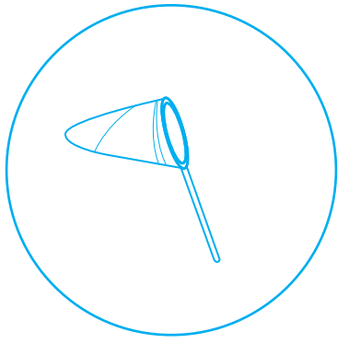
Conditioned inventiveness
Human-centered focus
Environment-centered concern
Ability to visualize
Tempered optimism
Bias for adaptivity
Predisposition toward multifunctionality
Systemic Vision
View of the Generalist
Ability to use language as a tool
Affinity for teamwork
Facility for avoiding the necessity of choice
Self-governing practicality
Ability to work systematically with qualitative information

Approach

Design: values, capabilities and tools

Thinking attitude

Thinker



Values

CREATIVITY
ACTIVE LISTENING
NEGOTIATION
TRANSLATION
SYSTEMIC VISION
FLEXIBILITY

Cognitive attitude

Enabler

Capabilities

IMAGINATION
CONVERSATION
VISUALISATION

Technical attitude

Facilitator

Tools

CREATIVE PROBLEM SOLVING
IMAGINATION TECHNIQUES
ACTIVE LISTENING TECHNIQUES
VISUALISATION TECHNIQUES

Result

Further research

The ‘Net approach’ implies the opportunity to start a series of further experimentations.

On a academic level it implies overcoming disciplinary barriers to build multi-disciplinary actions, as this seems the best way to achieve a real impact on businesses.

This can represent an exciting area for research that is impactful.

Discussion

What are your experiences?

http://www.ideasdaresbury.co.uk/

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