



EPSRC Centre
for Innovative
Manufacturing in
**INDUSTRIAL
SUSTAINABILITY**

Sustainable Business Models



PRESENTED TO
IfM Open Day 2015

PRESENTED BY
Steve Evans

14/05//2015

Trends:

*2014 strong interest
whenever shown*

- *Deployed in over 70 businesses*
- *Applicable to across business stages*
- *Works in multiple sectors*

Drivers:

- *Uncertainty in future operating conditions*
- *Technological and societal advances*
- *Growing opportunity for significant and disruptive changes*

What is the problem?

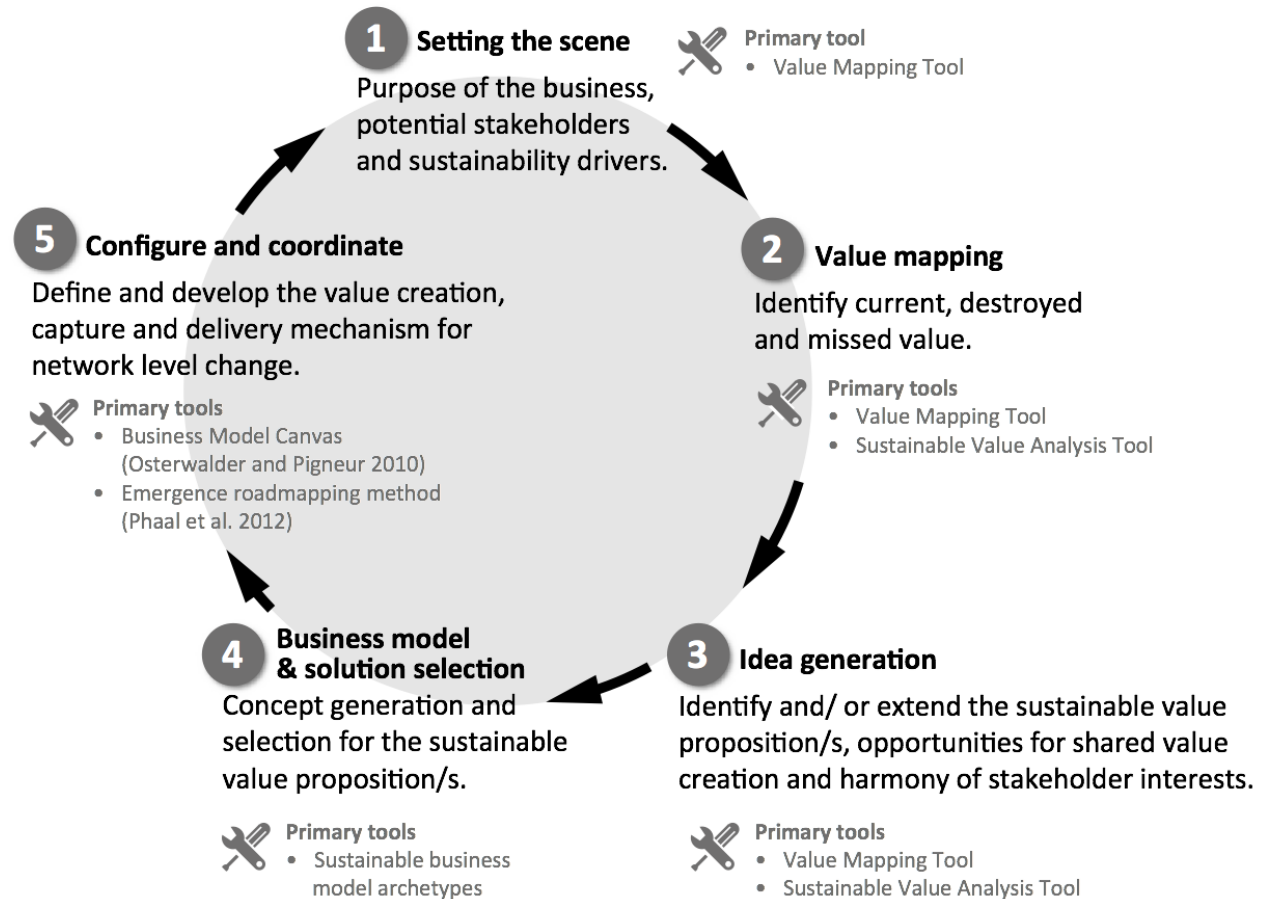
- Tools for sustainable business modelling :
 - Rethinking the business purpose – sustainability into the core of the business
 - Taking a longer term and system-wide perspective on value rather than short term gain
 - Broader range of stakeholders
- Companies **may not be fully** aware of the full range of value outcomes of their business operations - **sustainable value**
- Value for a network of stakeholders – **aligning conflicts/frictions**
- Structured approach to think about value

Sustainable Business Modeling Process

*Developed from 2010
– 2015*

*Multiple teams
involved in the
development:*

*Prof Steve Evans
Dr Padmashi Rana
Dr Nancy Bocken
Dr Sam Short
Dr Doroteya
Vladimirova
Dr Maria Holgado
Dr Dai Morgan
Dr Curie Park
Ms Miying Yang
Ms Fenna Blomsma*



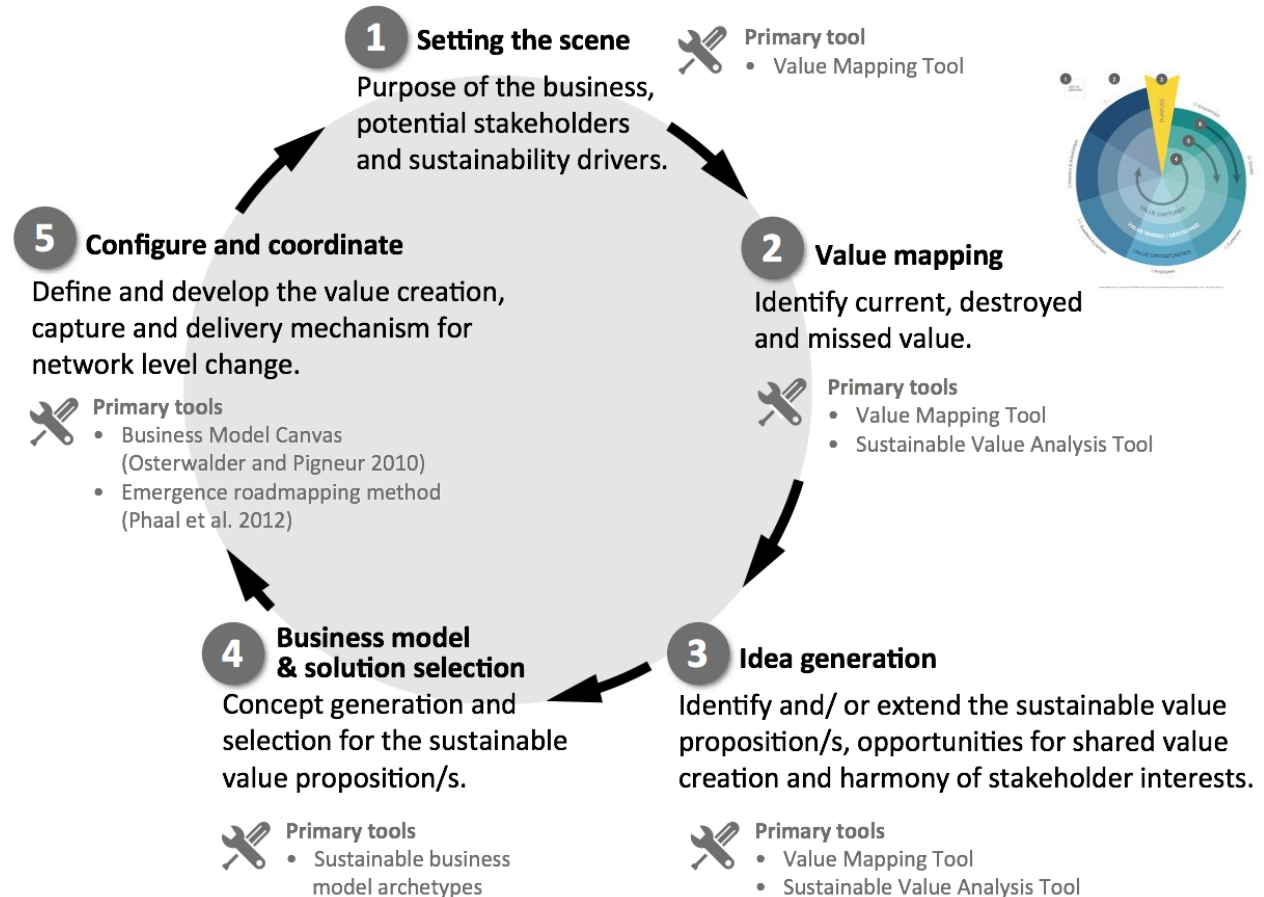
Quick guide: http://www.industrialsustainability.org/media/43450-Sustainable_Business_Modelling.pdf

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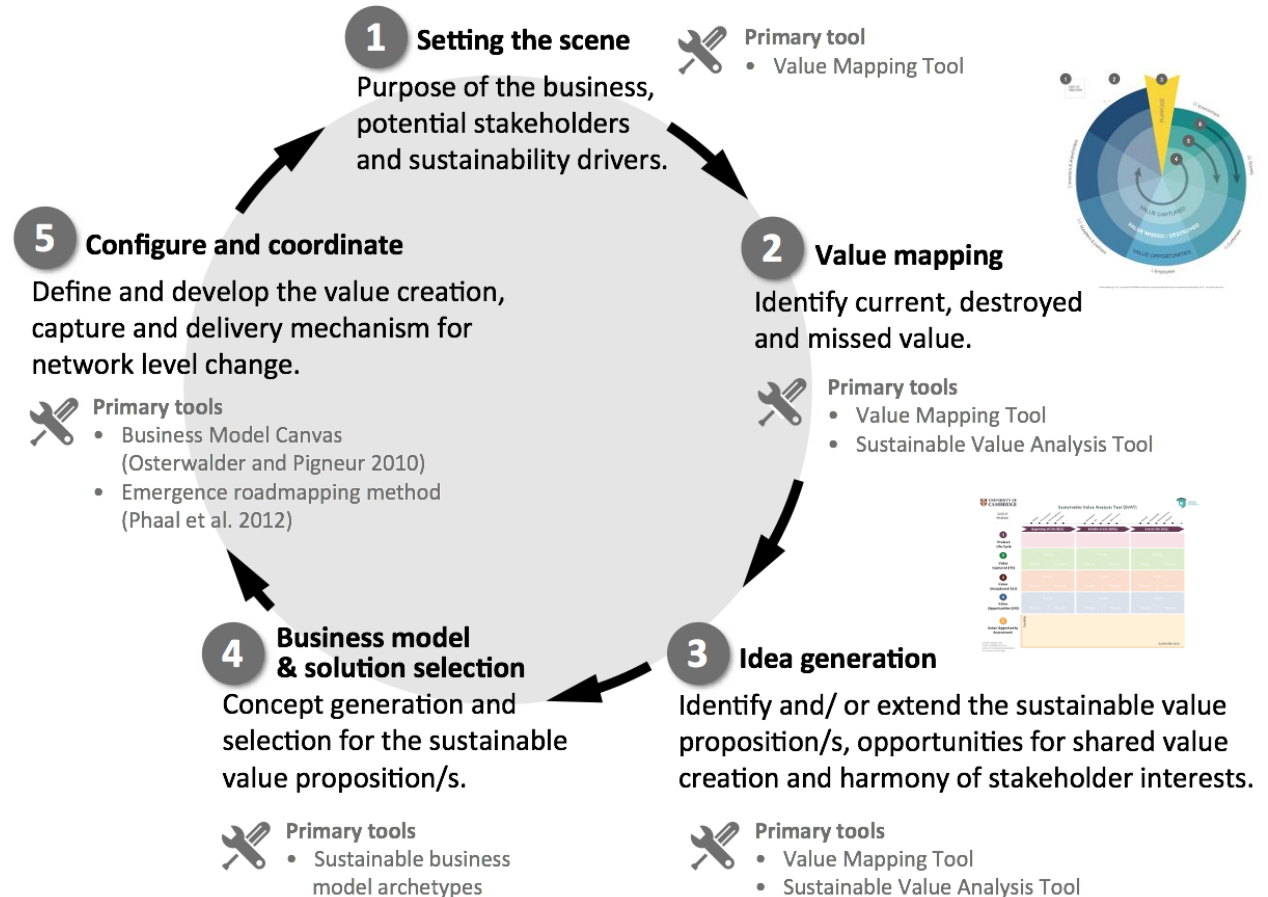
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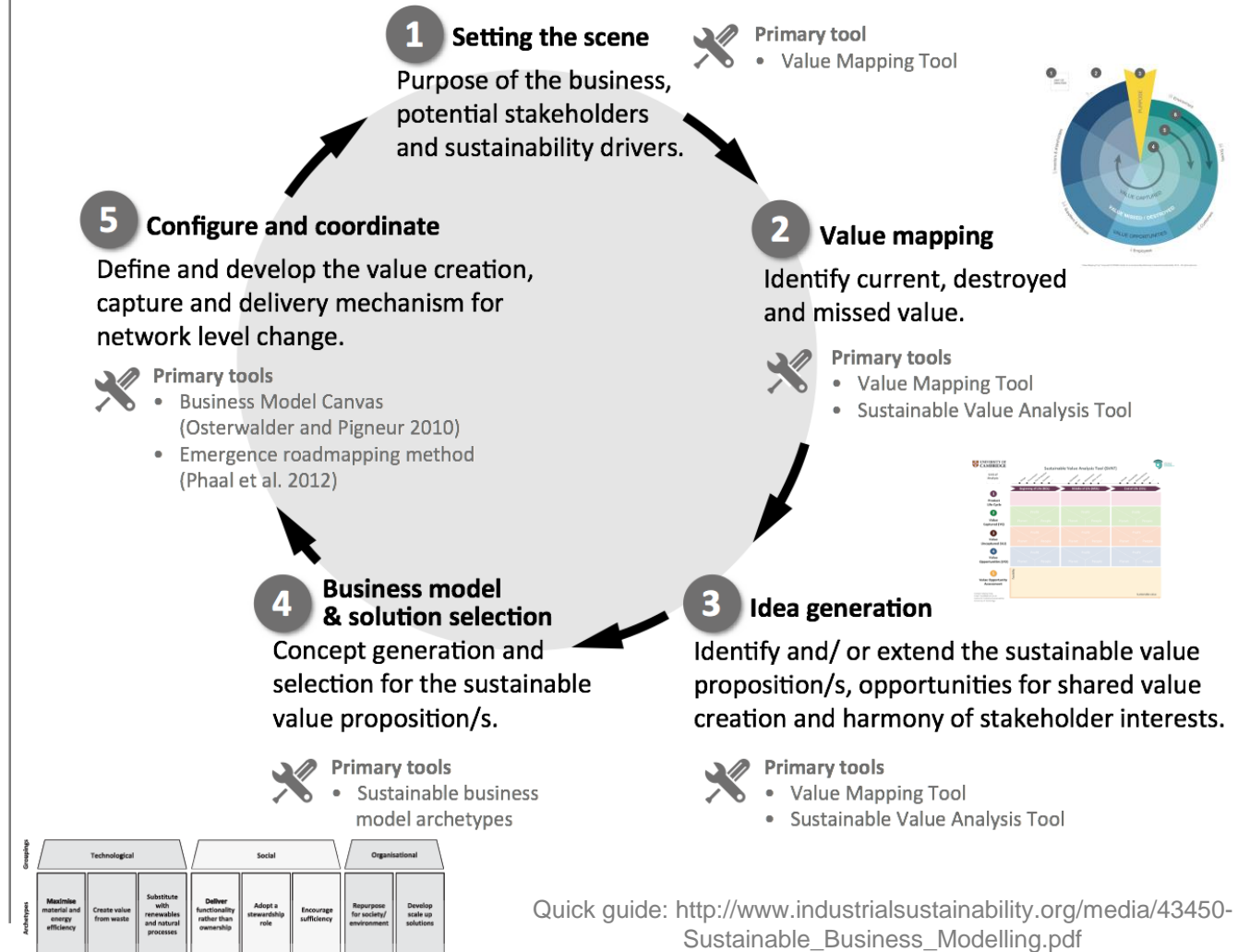
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Sustainable Business Modeling Process

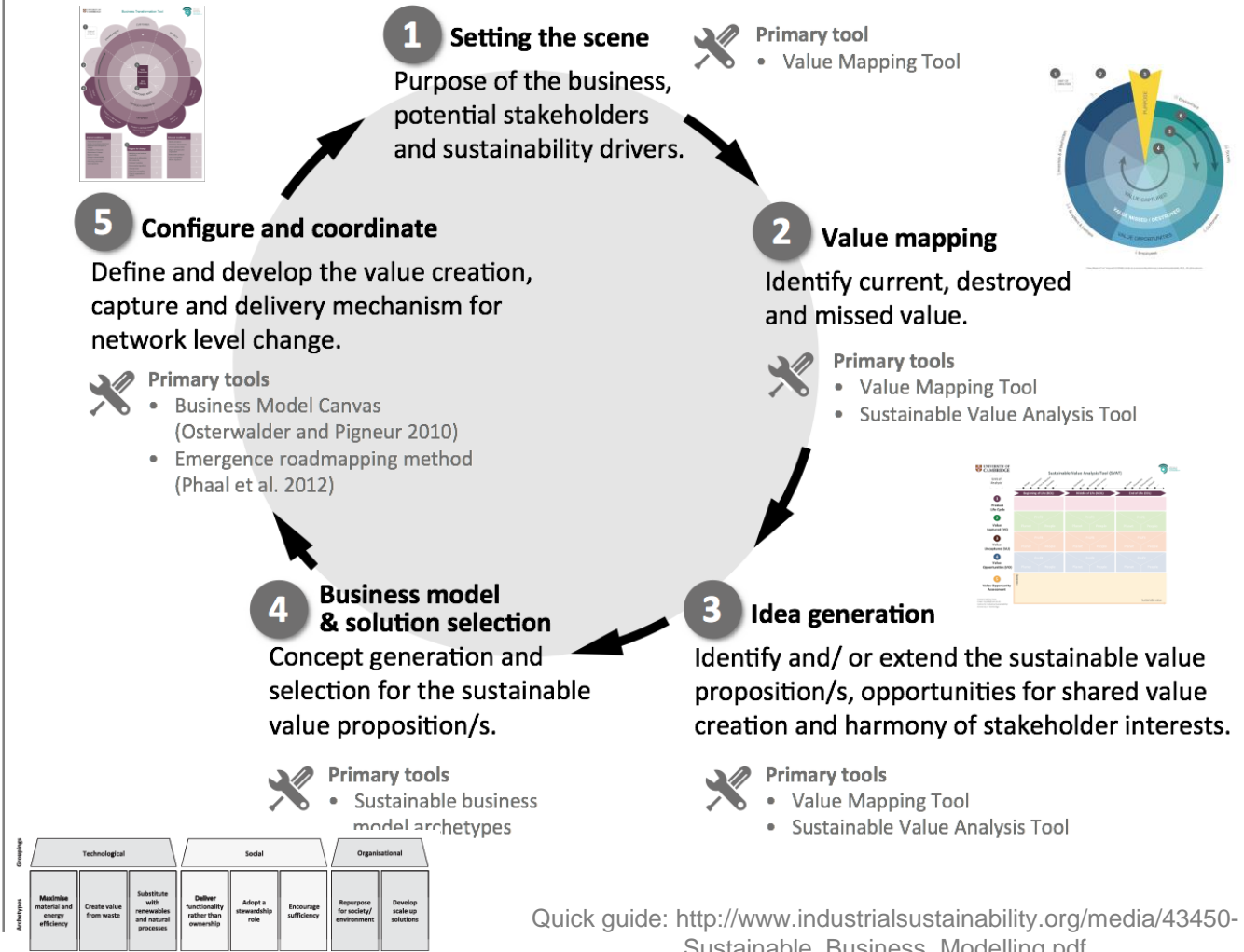
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Sustainable Business Modeling Process



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Sustainable Business Modeling Process

Full process is 2 days of workshop activities.

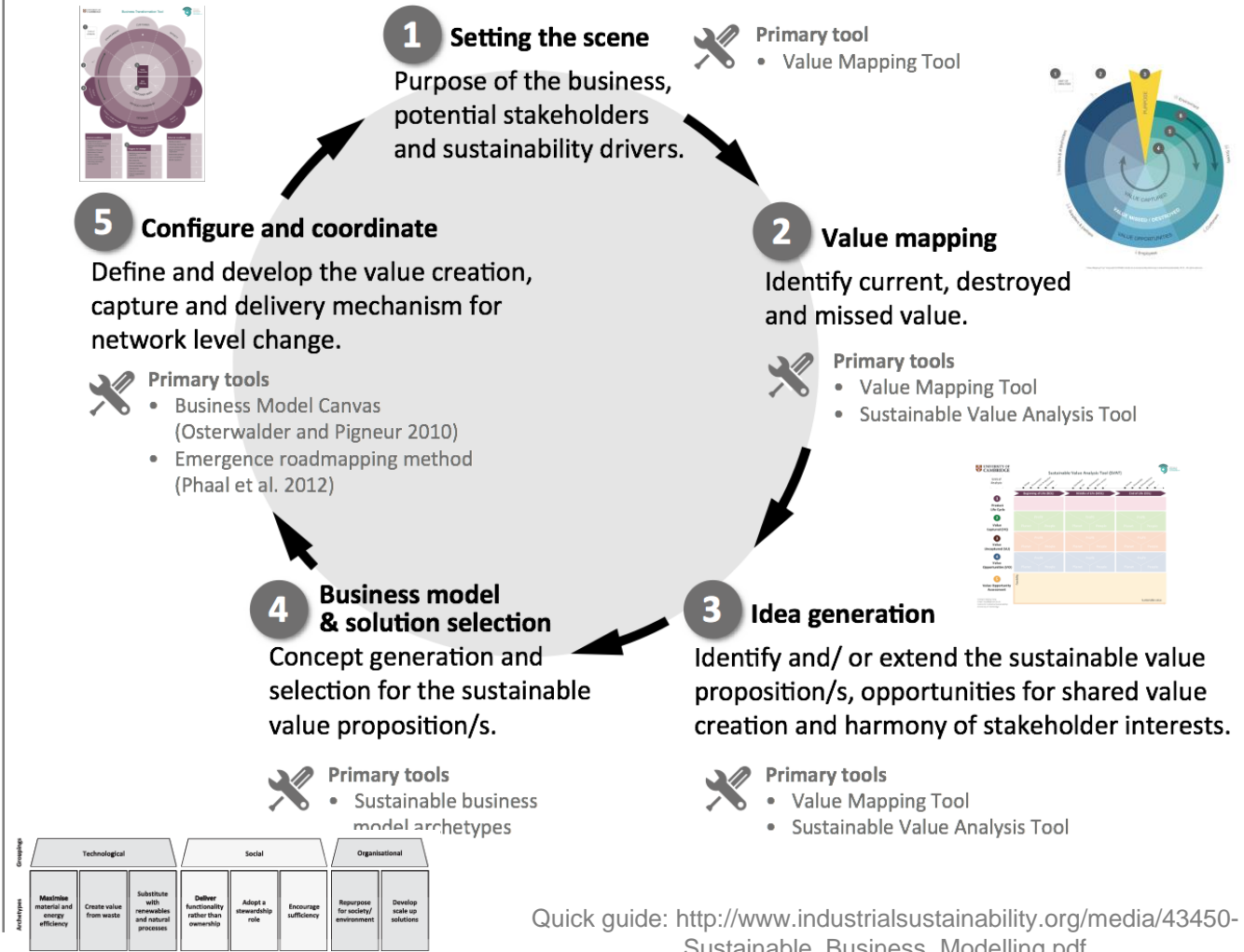
May be separated by a period of assumption testing

Level of information is always business confidential

Case studies are difficult to put into the public domain

"I would not give a fig for the simplicity that lies on this side of complexity but I would give my life for the simplicity on the other side of complexity"

Oliver Wendell Holmes Snr



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Example: Value Mapping

Value Mapping Tool

Companies **may not be fully** aware of the full range of value outcomes of their business operations.

Elicits failed value exchanges among multiple stakeholders in the business network and uncovers new value opportunities.

- New perspective on value – captured/uncaptured
 - Failed value exchanges – stakeholder tensions
 - Multi-partners - network level analysis
-
- Structured approach to think about value.

Is your business getting the full benefit of the value you are creating for customers and other stakeholders?

Could your business be actively destroying value for others, ultimately affecting the firm's ability to capture value in the long run?

Value Mapping Tool

Workshops

Used with other tools including:

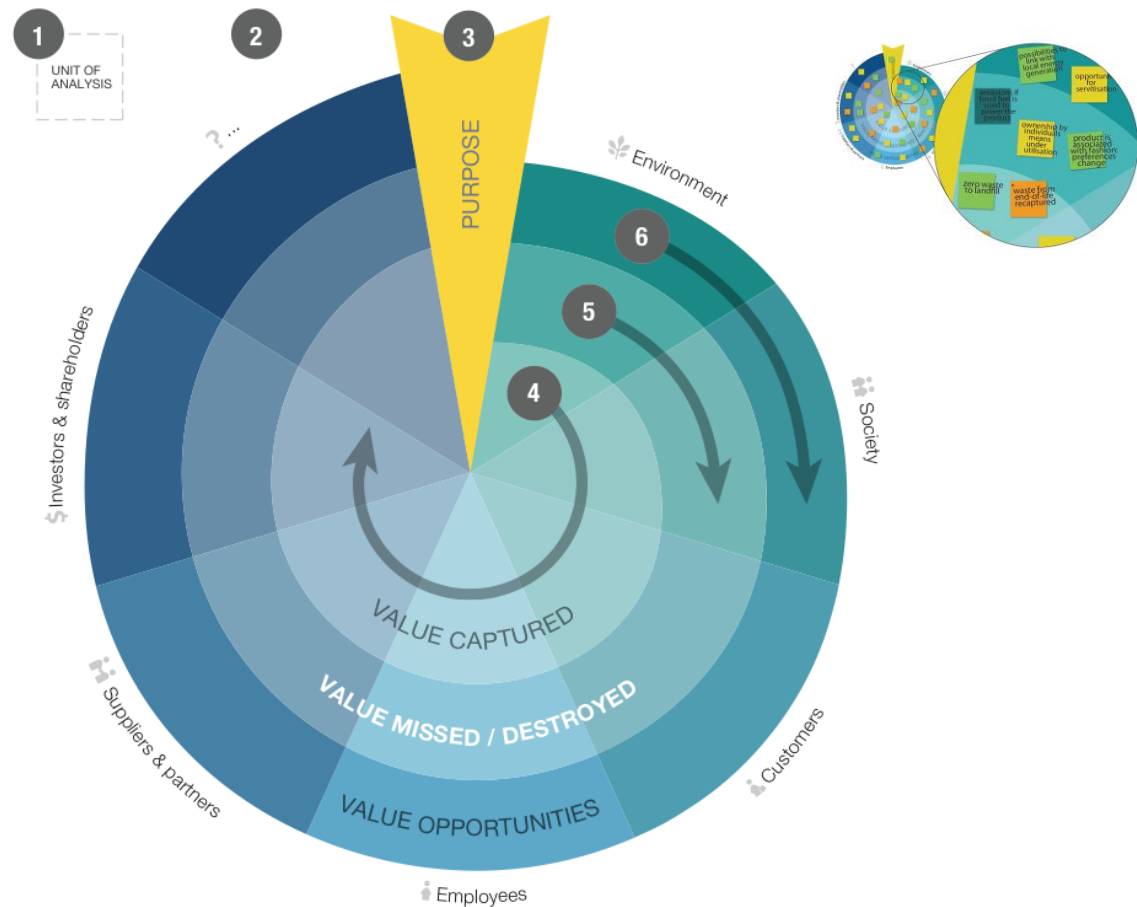
Osterwalder and Pigneur, business model canvas (2005)

Sustainable business archetypes

IfM roadmapping tool

Sustainable Value Analysis tool

Business Transformation tool



Value Mapping Tool Copyright © EPSRC Centre for Innovative Manufacturing in Industrial Sustainability 2014 - All rights reserved

Quick guide: http://www.industrialsustainability.org/media/43468-Value_Mapping_Tool.pdf

Structure

- Form a group
- One person in the group to represent one or more of the following stakeholders (few examples):
 - Customers
 - Suppliers
 - Environment
 - Society
 - Investors and shareholders
 - Employees
- 6 Step process
- Prompt questions for each step
- 2-3 hours to run

Workshop

*Demo workshop at
CIS conference – 6-8
July*

*CISL Course – 16/17
July*

*ECS Course –
Autumn / Winter 2015*

Where next?

- Tools continue to evolve
 - New versions set for release in June
- Deployed in multiple CIS member engagements
- Under consideration by UN
- Parts are in development outside of Academia
 - Plan C – Netherlands
- Training for in business Practitioners
 - CISL – ECS – iema
- Licensing to accredited consultancies

Thank You

FIND OUT MORE

- Speak to Ian Bamford or Prof Evans
- Visit the website:
 - www.industrialsustainability.org/tools
- Contact:
 - Info@industrialsustainability.org
 - se321@cam.ac.uk

Thank You

- Define the **unit of analysis** (Company, business unit, or product/service)
- Add or modify any missing **stakeholders**

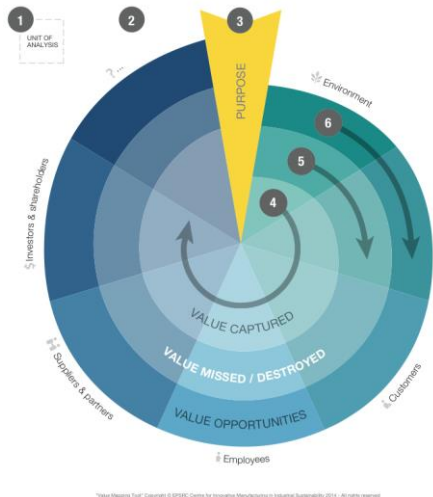
Prompt question:

- Which entities, organizations or individuals have influence or involvement in your business operations, or are influenced/ impacted in any way by your business?

- Identify the **business purpose** of the unit of analysis

Prompt questions:

- What is the primary reason(s) for the existence of your business?
- Consider why should any of your stakeholders, particularly the customer, care about the existence or continuation of the business?



Steps 1, 2, 3

○ Map current value captured for each stakeholder

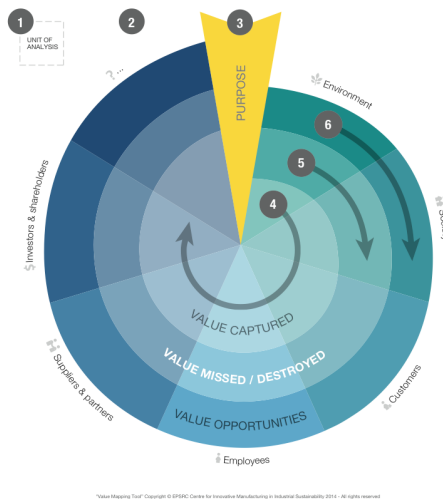
Prompt questions:

- What positive tangible and intangible value is created for each of your stakeholders? For example, why does your customer buy from you?
- Does the business network mitigate or offset some negative outcomes in full or in part (such as carbon emissions)?

○ Map value missed and destroyed for each stakeholder

Prompt questions:

- What are the negative outcomes of the business for any of your stakeholders? *E.g., environmental impacts such as pollution*
- Is there a potential or perceived risk of value being destroyed by continuing 'business as usual' practices – *for example, risk of reputational damage, loss of customers*
- How might the business be missing an opportunity to capture value, or wasting value in its current operations? *E.g., customer needs not satisfied, under-utilized capacity and capabilities*
- Is the business creating value in some form, but failing to capture value from the customer or society for this?



Steps 4 & 5

○ Generating solutions for enhancing sustainability

Prompt questions:

○ Eliminate value destroyed

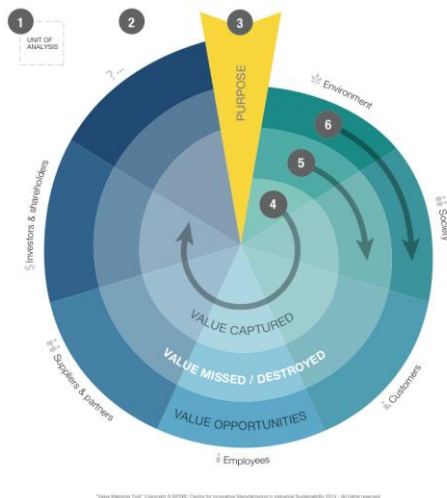
- Where is their conflict of interests between stakeholders? (i.e. where does positive value for one stakeholder destroy value for another stakeholder(s))? how can it be resolved?
- Relevant stakeholders should try to seek alignment (win-win), rather than compromise or trade-offs.

○ Utilise value missed

- Identify opportunities there might be to capitalise on currently missed value to create new forms of positive value.

○ Look for new value opportunities

- What further innovations might be possible to extend the value proposition in new and radical ways?
- How can greater value be captured from the existing business (increase the value-added content)?



Step 6