Using Systems Thinking as an aid to project evaluation in the private, public and voluntary sectors

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About me

- Degrees in Engineering and Management
- Area of work: Energy Consultancy
- Primary interests: startups and new business development

In this presentation

- My route to Soft Systems Methodology
- What happens when you mix drawing, programming and business
- Using SSM to help organisations on their sustainability journey
- Some geeky stuff

What to take away

• Computers are good and, when used right, can supercharge SSM

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Drawing a story



Introduction to Soft Systems Methodology



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The lightbulb moment



A few years later...



What makes a project go ahead?



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Case Study Work

Context

Sheffield Renewables (SR) is a community and social enterprise that develops, funds, builds, owns and operates renewable energy schemes.

it has successfully delivered on its original vision — but is now trying to define what it should do next.

More of the same, or something entirely different?

Two other case studies involve large, global organisations looking to become more sustainable as they tranform to becoming low-carbon businesses while also managing costs.

Can SSM help?

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What have we observed?

1. Emergence: Using a computer that acts like an infinite sheet of paper allows us to capture much more detail in a rich picture, resulting in conceptual structures emerging from the workshop session.

2. Fried egg shapes and curved arrows: The point about hand-drawn models is that they undermine "apparent certainty" but this work also suggests that looking at the models as a programming exercise, effectively "coding a model" can help with an iterative approach and mindset.

3. A route from general to specific: As we zoom into areas of interest the link between general and specific areas remains clear and strong, resulting in going from exploring the problem situation to specific action steps in as few as two sessions.

4. Separating front and back end development: Soft Systems helps a team understand a situation but to persuade others to accept the results we need to present the result using a different approach.

5. Avoiding Errors: There are two types of errors — errors of commission and errors of omission and SSM helps avoid the former particularly well.

Observations

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Emergence



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Emergence





Emergence



Finding out about a problem situation



Rich Pictures: Session 1

Identifying problematic areas



Coming up with relevant purposeful activity models



Rich Pictures: Session 2

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Formulating a purposeful activity model



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Fried-egg shapes and curved arrows



Coding a model



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Case notes



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Developing work packages



Collaborative exploration and identification of problematic areas

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Presenting work to a wider audience

Commercially Confidential Confidential please contact more please for details

Creating a viable commercial model

Commercially Confidential Confidential Confidential Confidential please please for more details

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Do we have something here?



How about here?



Summing up

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Any questions?

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