

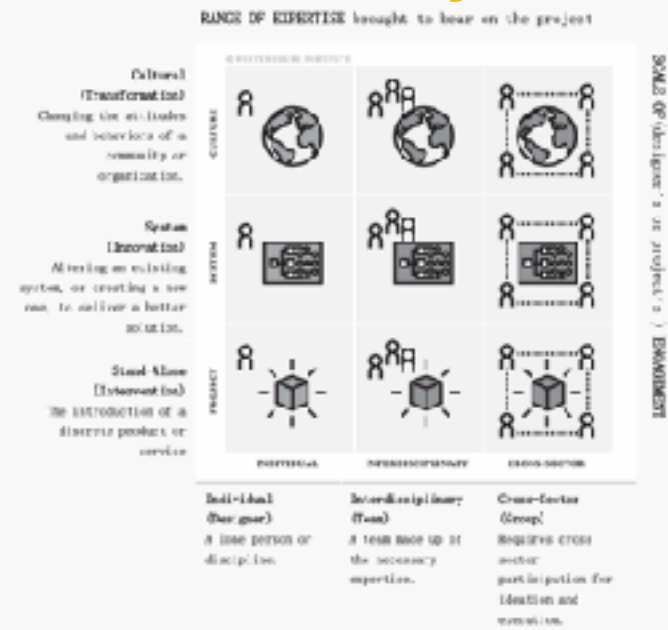
Mapping techniques

Nick 21-02-2023

Mapping techniques

- Can be used to map out the intervention space,
- or can be used to locate and note existing aspects, structures, relationships, problems
- Often the techniques come from other fields, (transition studies, business management etc)
- Many are intended to map changes after they have occurred
- May need to be modified/ focused to suit various stages in projects or differing types of projects.

Social Innovation Pathways



<http://www.winterhouseinstitute.org/pathways>

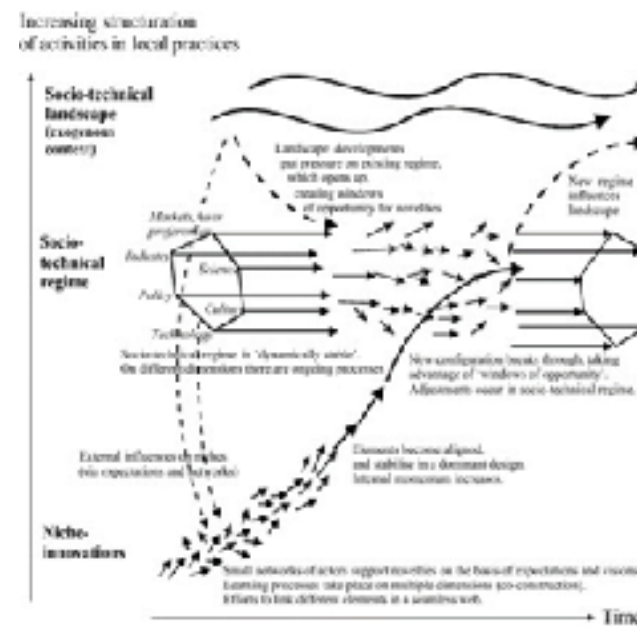
Social Innovation Pathways

Example: Project Mapping

Cultural Transformation System Innovation Stand-alone Intervention	Bring public attention to the larger problem. Jamie Clinton's Food Revolution	Change district food purchasing policies.	Implement an organic food standard	How can we address childhood obesity? A lone designer may redesign a cafeteria tray to suggest portion sizes (a stand-alone design). She may collaborate with the cafeteria staff to change the display of food drawing on behavioral psychology (a system innovation).
	Change the food display in the cafeteria line. N. Hays	Integrate staff efforts in a single school as students can eat what they grow Edible Schoolyard	Linking local farms to school cafeterias Farm2School	She may engage a celebrity to help bring public attention to the larger cultural problem (a cultural transformation) That same designer may integrate staff efforts in a single school so that food grown on site can be eaten by the kids that grew it (a system innovation requiring a team).
	Redesign a cafeteria tray to guide portion control. Peggy Hirstein	A farm-supported community Jordan Hills Road Farm	Support local farmers' gardens SourSide Community Land Trust	Or work across schools to link farm-fresh produce to cafeterias (a system innovation requiring cross-sector approval). Moving from a single school, the designer may work to change district food purchasing policies (a cultural transformation driven by an interdisciplinary team) And perhaps, work with her state government to implement an organic food standard.

<http://www.winterhouseinstitute.org/pathways>

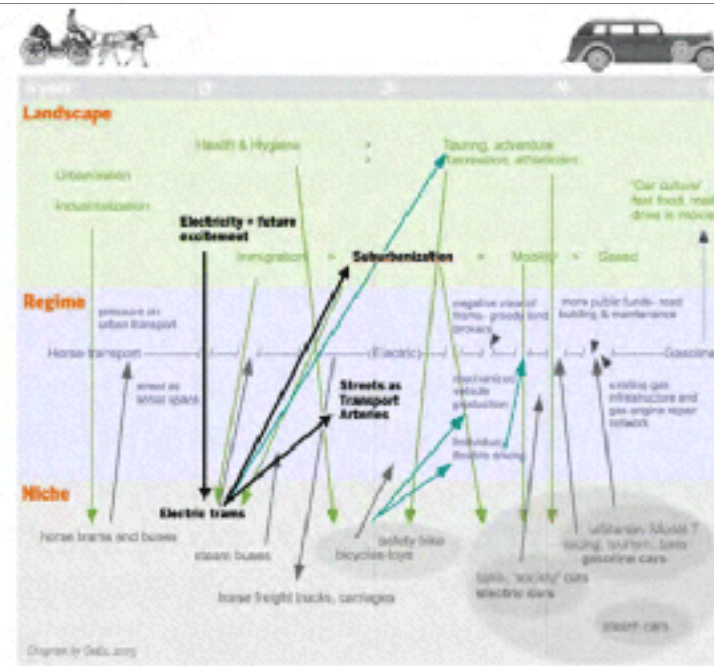
MLP



https://www.researchgate.net/figure/A-dynamic-multi-level-perspective-on-technology-transition_fig2_337085400

<https://transitiondesignseminarcmu.net/assignments/#1483988152344-831f4c16-c48a:~:text=Mapping%20the%20Evolution%20of%20a%20Wicked%20Problem%20Using%20the%20MLP>

MLP



Large, slow moving events:
social, economic, political,
cultural, environmental

Networks & groups bound by
norms and rules that become
'entrenched'

Small, informal groups of
innovators who take risks and
challenge norms

Iwabuchi, M. and Mizuno, D. (2020) Speculation of the Purpose of Life in 2050 from Kyoto: Case Study on Transition Design in Japan, in: Leitao, R., Noel, L. and Murphy, L. (eds.), Pivot 2020: Designing a World of Many Centers - DRS Pluriversal Design SIG Conference, 4 June, held online. <https://doi.org/10.21000/pivot2020.001>

GigaMapping

The image shows a hand-drawn map titled "GIGA MAPPING WORKSHOP". The map is a complex network of red and blue lines connecting various locations. The legend on the left lists the following locations:

- 1. GIGA
- 2. GIGA
- 3. GIGA
- 4. GIGA
- 5. GIGA
- 6. GIGA
- 7. GIGA
- 8. GIGA
- 9. GIGA
- 10. GIGA
- 11. GIGA
- 12. GIGA
- 13. GIGA
- 14. GIGA
- 15. GIGA
- 16. GIGA
- 17. GIGA
- 18. GIGA
- 19. GIGA
- 20. GIGA
- 21. GIGA
- 22. GIGA
- 23. GIGA
- 24. GIGA
- 25. GIGA
- 26. GIGA
- 27. GIGA
- 28. GIGA
- 29. GIGA
- 30. GIGA
- 31. GIGA
- 32. GIGA
- 33. GIGA
- 34. GIGA
- 35. GIGA
- 36. GIGA
- 37. GIGA
- 38. GIGA
- 39. GIGA
- 40. GIGA
- 41. GIGA
- 42. GIGA
- 43. GIGA
- 44. GIGA
- 45. GIGA
- 46. GIGA
- 47. GIGA
- 48. GIGA
- 49. GIGA
- 50. GIGA
- 51. GIGA
- 52. GIGA
- 53. GIGA
- 54. GIGA
- 55. GIGA
- 56. GIGA
- 57. GIGA
- 58. GIGA
- 59. GIGA
- 60. GIGA
- 61. GIGA
- 62. GIGA
- 63. GIGA
- 64. GIGA
- 65. GIGA
- 66. GIGA
- 67. GIGA
- 68. GIGA
- 69. GIGA
- 70. GIGA
- 71. GIGA
- 72. GIGA
- 73. GIGA
- 74. GIGA
- 75. GIGA
- 76. GIGA
- 77. GIGA
- 78. GIGA
- 79. GIGA
- 80. GIGA
- 81. GIGA
- 82. GIGA
- 83. GIGA
- 84. GIGA
- 85. GIGA
- 86. GIGA
- 87. GIGA
- 88. GIGA
- 89. GIGA
- 90. GIGA
- 91. GIGA
- 92. GIGA
- 93. GIGA
- 94. GIGA
- 95. GIGA
- 96. GIGA
- 97. GIGA
- 98. GIGA
- 99. GIGA
- 100. GIGA

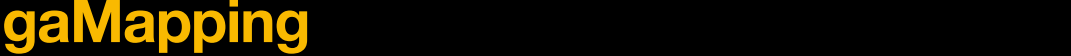
The map is titled "GIGA MAPPING WORKSHOP" and includes a legend on the left and a title box on the right. The legend lists the following locations:

- 1. GIGA
- 2. GIGA
- 3. GIGA
- 4. GIGA
- 5. GIGA
- 6. GIGA
- 7. GIGA
- 8. GIGA
- 9. GIGA
- 10. GIGA
- 11. GIGA
- 12. GIGA
- 13. GIGA
- 14. GIGA
- 15. GIGA
- 16. GIGA
- 17. GIGA
- 18. GIGA
- 19. GIGA
- 20. GIGA
- 21. GIGA
- 22. GIGA
- 23. GIGA
- 24. GIGA
- 25. GIGA
- 26. GIGA
- 27. GIGA
- 28. GIGA
- 29. GIGA
- 30. GIGA
- 31. GIGA
- 32. GIGA
- 33. GIGA
- 34. GIGA
- 35. GIGA
- 36. GIGA
- 37. GIGA
- 38. GIGA
- 39. GIGA
- 40. GIGA
- 41. GIGA
- 42. GIGA
- 43. GIGA
- 44. GIGA
- 45. GIGA
- 46. GIGA
- 47. GIGA
- 48. GIGA
- 49. GIGA
- 50. GIGA
- 51. GIGA
- 52. GIGA
- 53. GIGA
- 54. GIGA
- 55. GIGA
- 56. GIGA
- 57. GIGA
- 58. GIGA
- 59. GIGA
- 60. GIGA
- 61. GIGA
- 62. GIGA
- 63. GIGA
- 64. GIGA
- 65. GIGA
- 66. GIGA
- 67. GIGA
- 68. GIGA
- 69. GIGA
- 70. GIGA
- 71. GIGA
- 72. GIGA
- 73. GIGA
- 74. GIGA
- 75. GIGA
- 76. GIGA
- 77. GIGA
- 78. GIGA
- 79. GIGA
- 80. GIGA
- 81. GIGA
- 82. GIGA
- 83. GIGA
- 84. GIGA
- 85. GIGA
- 86. GIGA
- 87. GIGA
- 88. GIGA
- 89. GIGA
- 90. GIGA
- 91. GIGA
- 92. GIGA
- 93. GIGA
- 94. GIGA
- 95. GIGA
- 96. GIGA
- 97. GIGA
- 98. GIGA
- 99. GIGA
- 100. GIGA

<https://systemsorienteddesign.net/what-is-gigamapping/>

<https://systemsorienteddesign.net/gigamap-exemplars/>

<https://systemsorienteddesign.net/how-to-gigamap/>



GigaMapping

FUTURE SCENARIO MAP

GISMAP-EXCH-PLAND-GIGAMAP-TYPE-FUNCTIONAL

Has showing a possible future scenario for existing planning of development. Based on reference: Suzanne UMO 2005a, 2005b, 2005c and 2006, Haiman Parkland, 2006 and 2007, Studio 2.0/2007. Over the image for details. Click to view the full-size image.



GENERAL MAPS

GISMAP-EXCH-PLAND-GIGAMAP-TYPE-STRUCTURE

These maps do not contain a balance of use of information types with depicting relations.

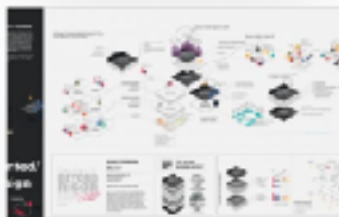


IMAGE MAPS

GISMAP-EXCH-PLAND-GIGAMAP-TYPE-CONTENT

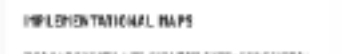
Image maps for complex process and time. Devices suggest using images instead of abstract symbols. This intention is to add a greater level of detail, emotions and associations. The use of images will also support sense-sharing from a workshop at the University of...



IMPLEMENTATIONAL MAPS

GISMAP-EXCH-PLAND-GIGAMAP-TYPE-FUNCTIONAL

Ideally, Implementation is an integrated part of a systems process from the beginning. If the



LAYERING

GISMAP-EXCH-PLAND-GIGAMAP-TYPE-CONTENT

A map that is interesting in the way it creates sub-views of layered information covers. Using the layered. Rebecca H. Larson, Winifred Anderson, 2002. 2.00 GigaMap over the image for details. Click to view the full-size image.



MAP BASED ON SYSTEMS DYNAMICS MODELLING



<https://systemsorienteddesign.net/what-is-gigamapping/>

<https://systemsorienteddesign.net/gigamap-exemplars/>

<https://systemsorienteddesign.net/how-to-gigamap/>

ZIP

- Z: Zoom is used to mark areas or points on your map that need more research. It is a reminder for you that you lack information, and it is an initiator to make additional maps by zooming into this area.
- P: The P stands for potential, problem, problematic or pain point. If there is an obvious problem, this is a potential for improvement. If you spot a potential problem but you don't know what to do with it, this would be a P-point. A P-point does not need to be a problem. There could be big potential in things that work very well. One could also use the P as inspiration to improve things that do not work so well. Also, you can think of the P-points as potential actors, for example, in the sense of 'enablers' and 'blockers'. Also, think of them as leverage points. As described by Donella Meadows [1].
- I: I stands for innovation, intervention and idea. If you find something new you can do, find a solution to a problem or link things in a new way by creating new relations, these are I-points. Interventions are not changing the system structurally; they are more about tweaking the system, for example, removing bottlenecks.

STEEP

- Social: The social developments include factors like consumer behavior demographics, religion, lifestyles, values, and advertising.
- Technological: The technology aspect of STEEP analysis focuses highly on technological advancements. It includes factors like innovation, communication, energy, transport, research and development, patent regulations and life-cycle of products.
- Economic: The economic condition is strongly associated with the consumers' buying position. In this step, factors such as interest rates, international trade, taxes, savings, inflation, subsidies, availability of jobs and entrepreneurship are considered.
- Environmental: Environmental developments involve ecosystem factors such as water, wind, food, soil, energy, pollution and environmental regulations.
- Political: The Political developments can highly influence individuals and organizations. It is important to be aware of likely upcoming shifts in power. Political developments can affect environmental, antitrust, financial markets, trade, and other kinds of laws. Factors to be considered include political stability, regulation of monopolies, tax policies, price regulations consumer protection, jurisdiction and trade unions.

Tips

- Work rough initially
- Mix it up, with timelines, text, images, sketches, problems
- Work over time, and initial session, then update along the way
- Look at relationships and scales.
- Do not brainstorm and add multiple post-its within a single systems level. Rather, add an event in one level and then ask what it connects to or caused in the other levels.
- Think about relationships between things as much as objects themselves
- Included everything (initially)
- Explore different types of maps
- Consider before showing them to others

GigaMapping



<https://systemsorienteddesign.net/what-is-gigamapping/>

<https://systemsorienteddesign.net/gigamap-exemplars/>

<https://systemsorienteddesign.net/how-to-gigamap/>