

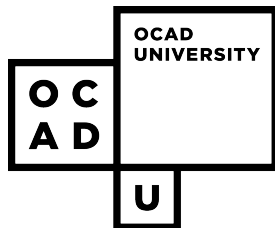
Visual Analytics and collaborative design processes

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Summary

- The interdisciplinary nature of Visual Analytics
- Aspects of:
 - Interdisciplinary collaboration
 - Iteration

Visual Analytics, definition

Visual Analytics (VA) is the [young] science of analytical reasoning facilitated by interactive visual interfaces.

(Thomas & Cook, 2006)

Is it:

- a design process (within organizations)?
- an analytical process?
- an artistic, or visualization, process?
- an organizational process designed to support decision-making?

VA is inherently interdisciplinary

- VA requires programmers, database experts, designers, analysts, artists, managers, etc.
- Typically, these cultures are quite different
- People need to learn to collaborate within organizations (with minimization of 'silos')

(Heer & Agrawala, 2008)

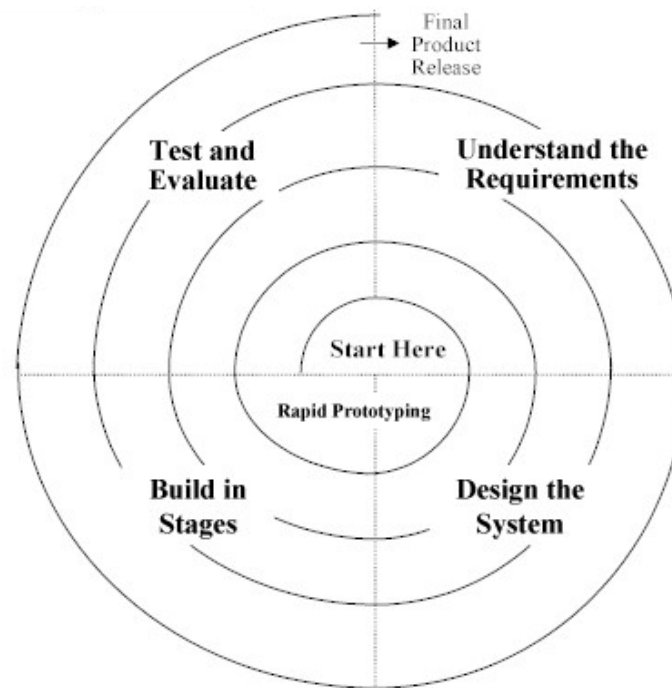
VA: similarities to collaborative design processes

- Normally iterative
(Schön, 1983)
- Sets of expertise required to solve complex problems
- Need to build 'common ground' to enable communication
(Clark, 1996)
- Use of 'boundary objects' between disciplines
(Bowker & Star, 2000)

Design iteration

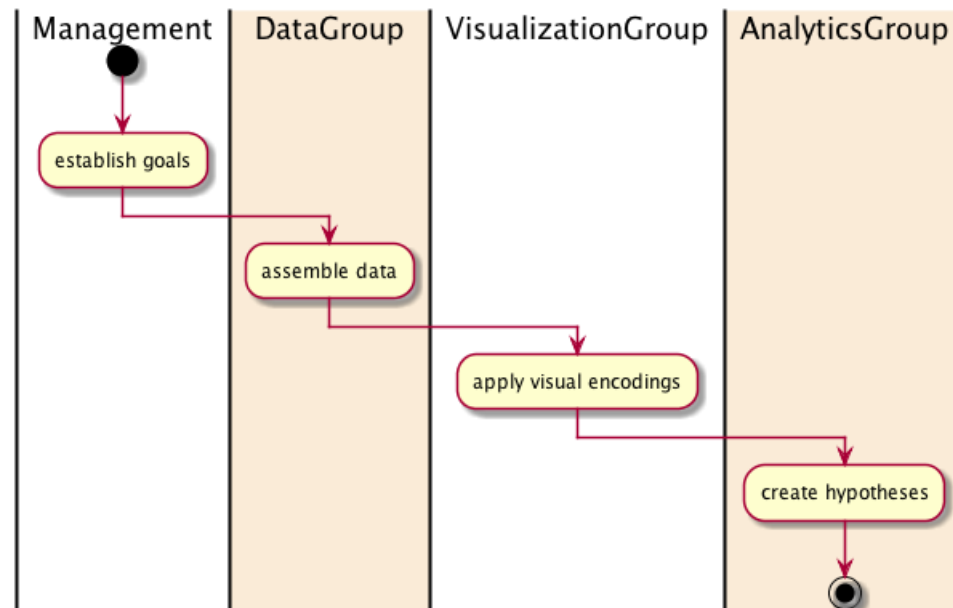
- Most design problems are too difficult to solve, or make sense of, without iteration

(Schön, 1983) (Bucciarelli, 1994)

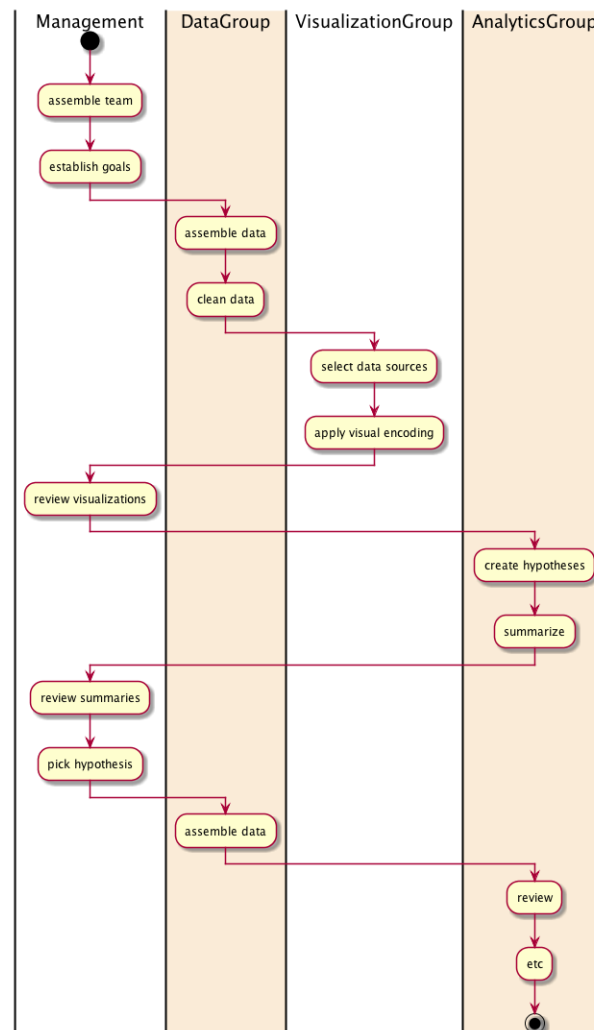


Waterfall model

- Waterfall models: only possible with simple, routine design problems



More realistic



Research questions

- How can interdisciplinary VA teams best work together?
- How can organizations facilitate communication between disciplines?
- Where would these teams fit into existing organizational structures?

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Thanks for your attention!

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