Constructing Digital Habitats
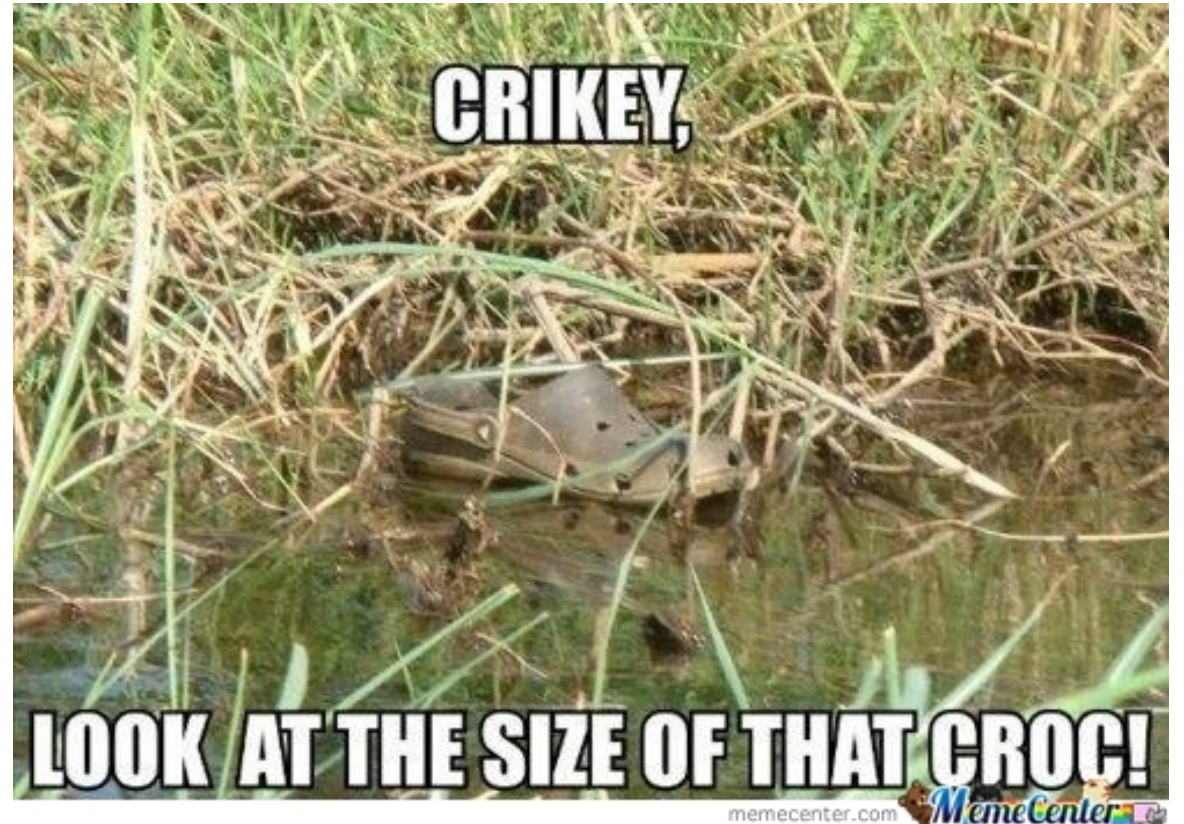
ENSE 805 with Tim Maciag

Outline

- Constructing digital habitats
- Constitution of the habitat
- Integration of the habitat

Habitats, CoPs, & the digital variety

- A definition

Habitats, CoPs, & the digital variety

- A definition
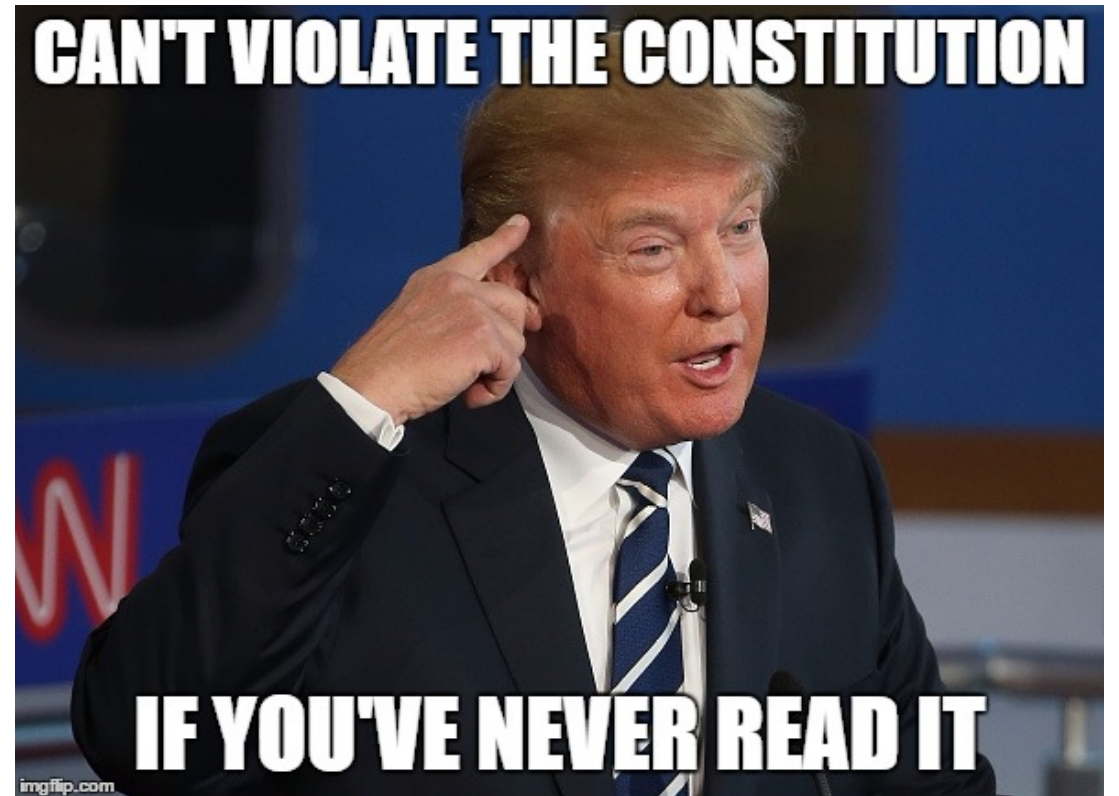- The habitat of a community of practice (CoP)

Habitats, CoPs, & the digital variety

- A definition
- The habitat of a community of practice (CoP)
- Digital habitats

Constitution of the habitat

- Four interrelated perspectives
  - Tools
  - Platforms
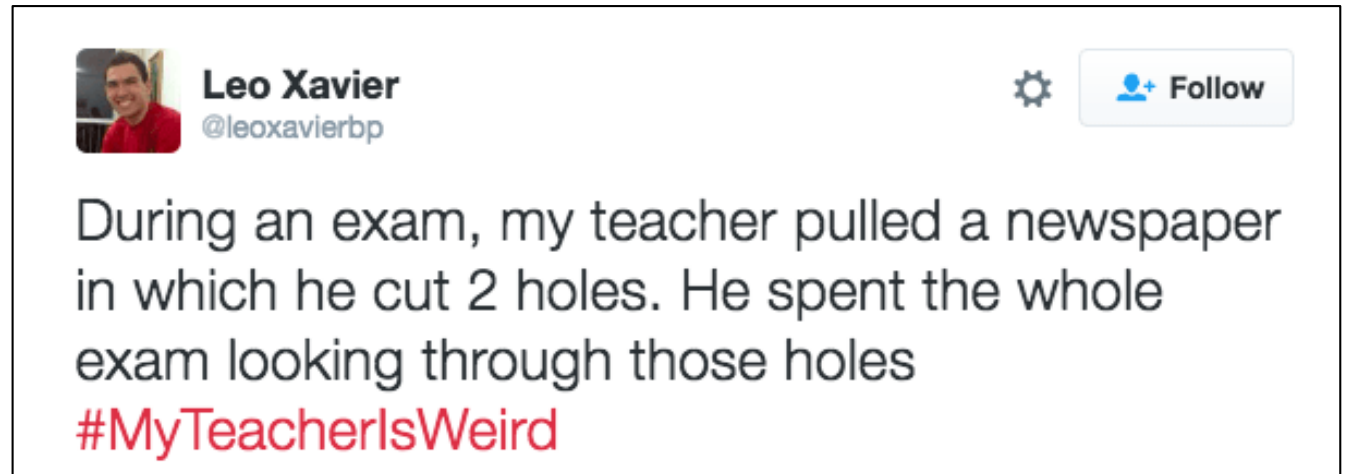 - Features
  - Configuration

CAN'T VIOLATE THE CONSTITUTION
IF YOU'VE NEVER READ IT

Constitution of the habitat

- Four interrelated perspectives
  - Tools
  - Platforms
  - Features
  - Configuration
- "Modern" examples
  - Facebook

Constitution of the habitat

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Constitution of the habitat

- Four interrelated perspectives
  - Tools
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  - Configuration
- "Modern" examples
  - Facebook
  - Twitter
  - Drupal (or Wordpress, Joomla, SharePoint, etc.)

Learning curve for popular CMS

- ModX
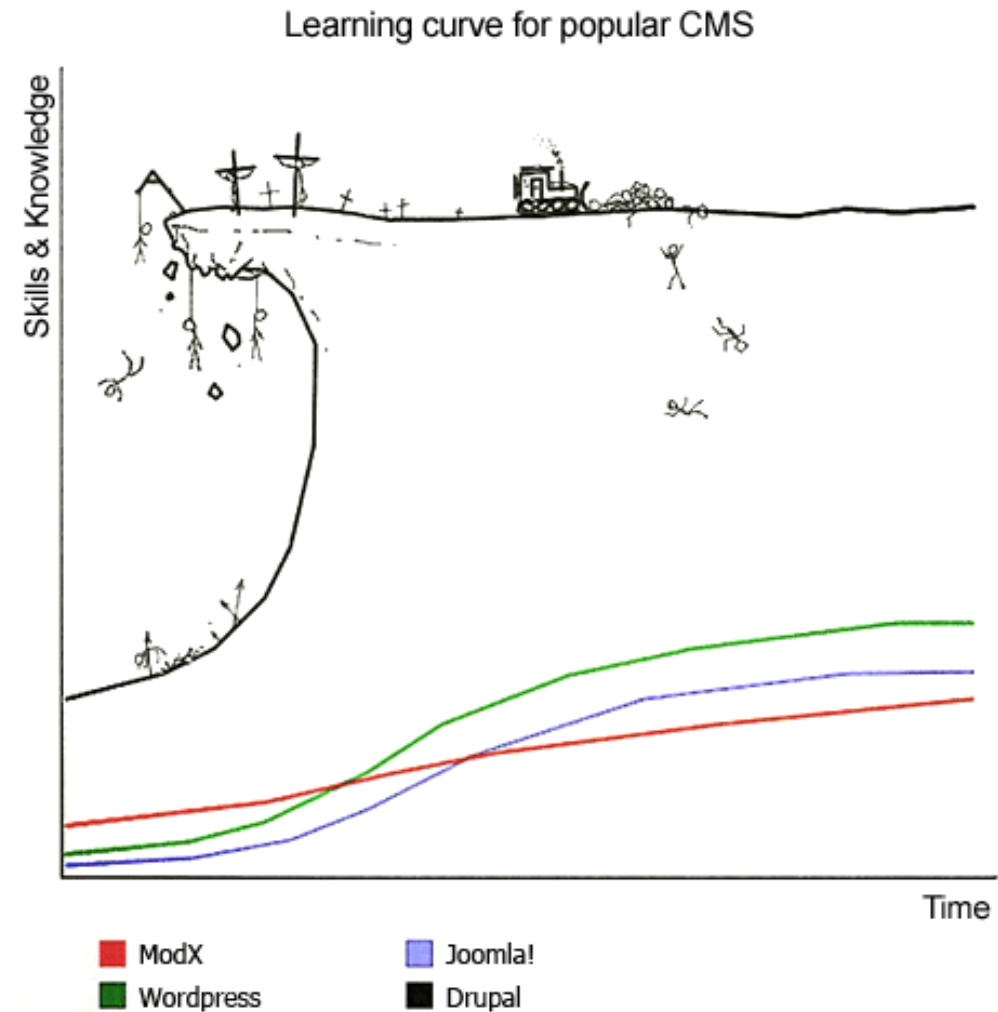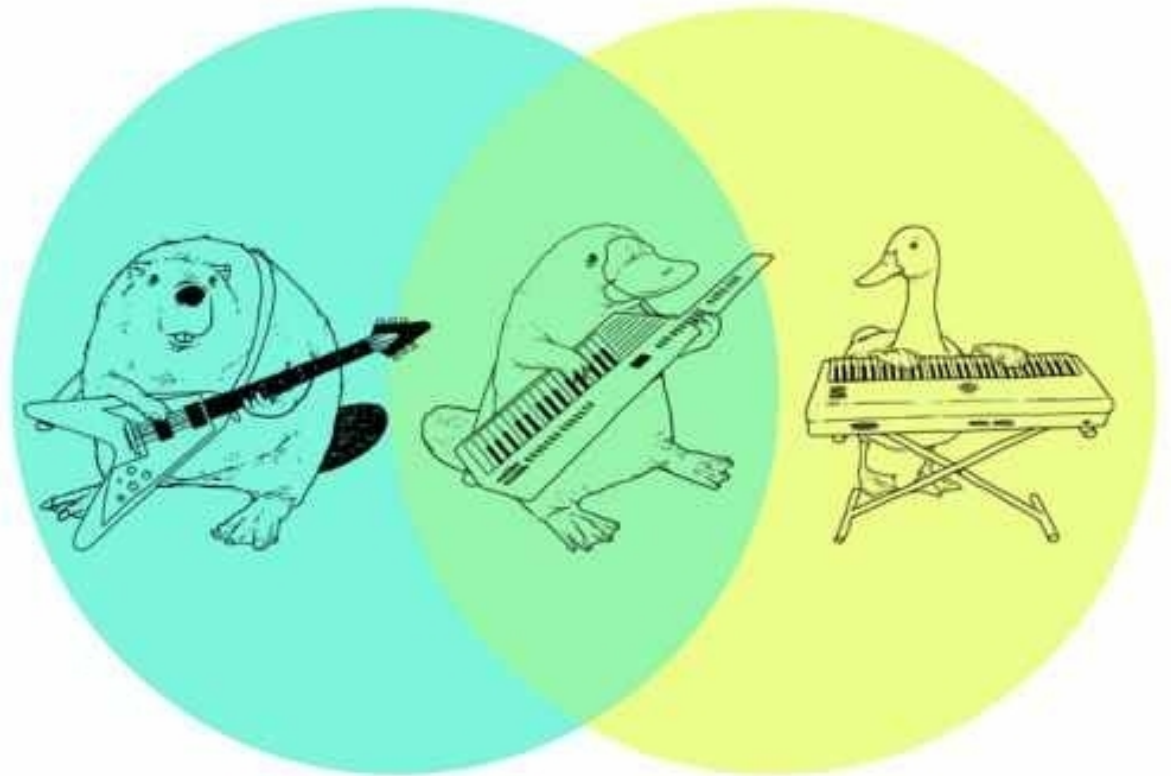- Wordpress
- Joomla!
- Drupal

Constitution of the habitat

- Four interrelated perspectives
  - Tools
  - Platforms
  - Features
  - Configuration
- "Modern" examples
  - Facebook
  - Twitter
  - Drupal (or Wordpress, Joomla, SharePoint, etc.)
- Keyword – Interrelated!
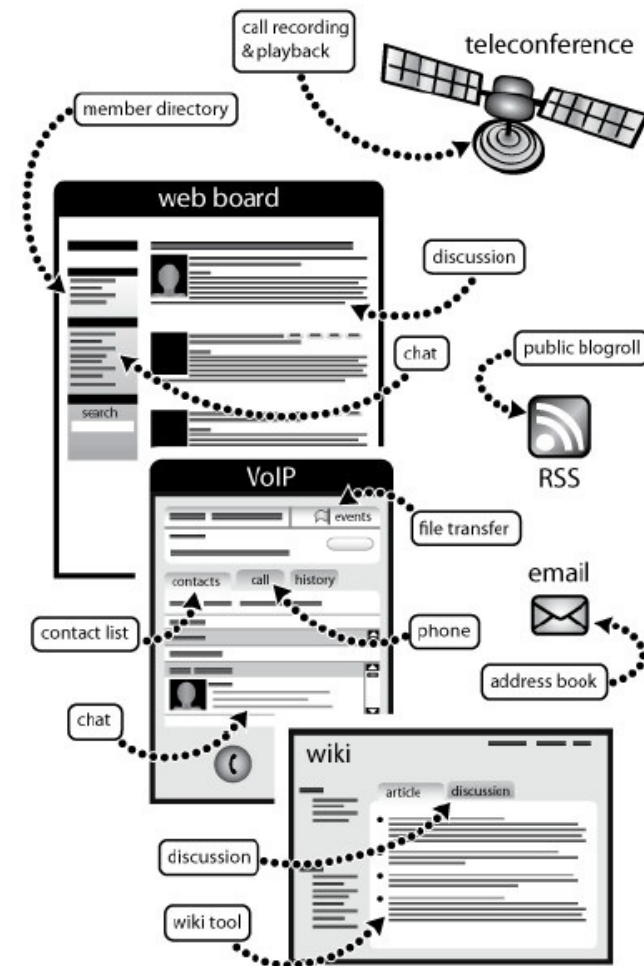
Tools, habitat enabling activities

- Diving deeper into the meaning

- D.B. Austina and D. Fletcher. Scenario-Focused Engineering. Microsoft Press. 2014

Tools, habitat enabling activities

- Diving deeper into the meaning
- Activities
    - 1-to-1 activity mapping
    - Multiple activity mapping

- D.B. Austina and D. Fletcher. Scenario-Focused Engineering. Microsoft Press. 2014

Figure 4.1 - The tools view. Tools support specific community activities

Tools, habitat enabling activities

- Diving deeper into the meaning
- Activities
  - 1-to-1 activity mapping
  - Multiple activity mapping
- Design questions

- D.B. Austina and D. Fletcher. Scenario-Focused Engineering. Microsoft Press. 2014
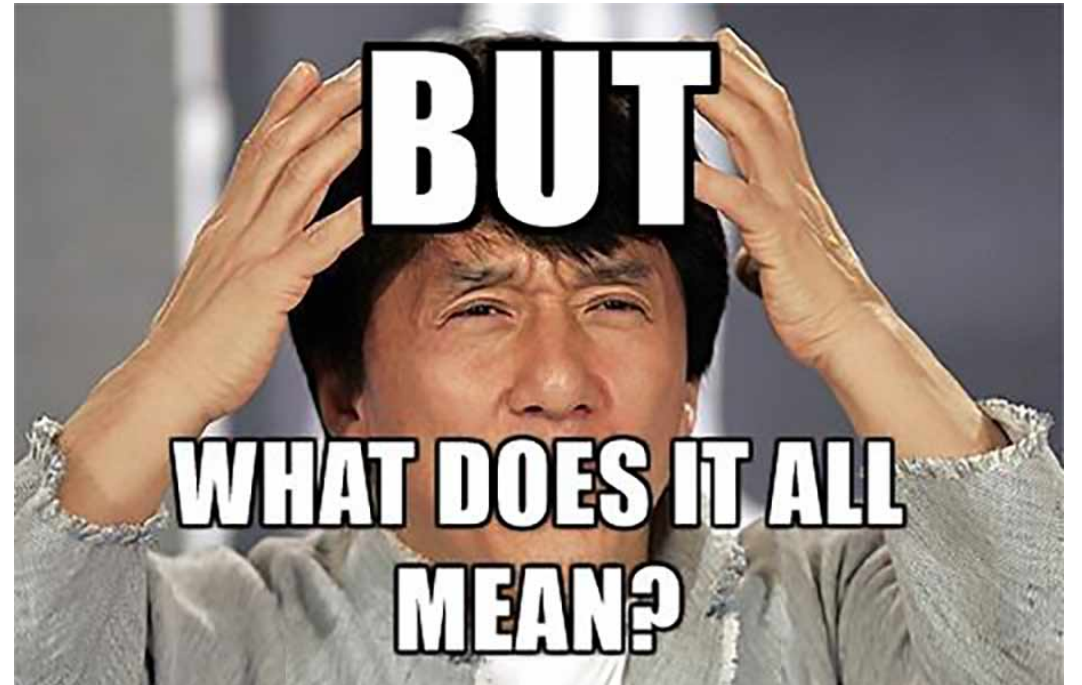
Tools, habitat enabling activities

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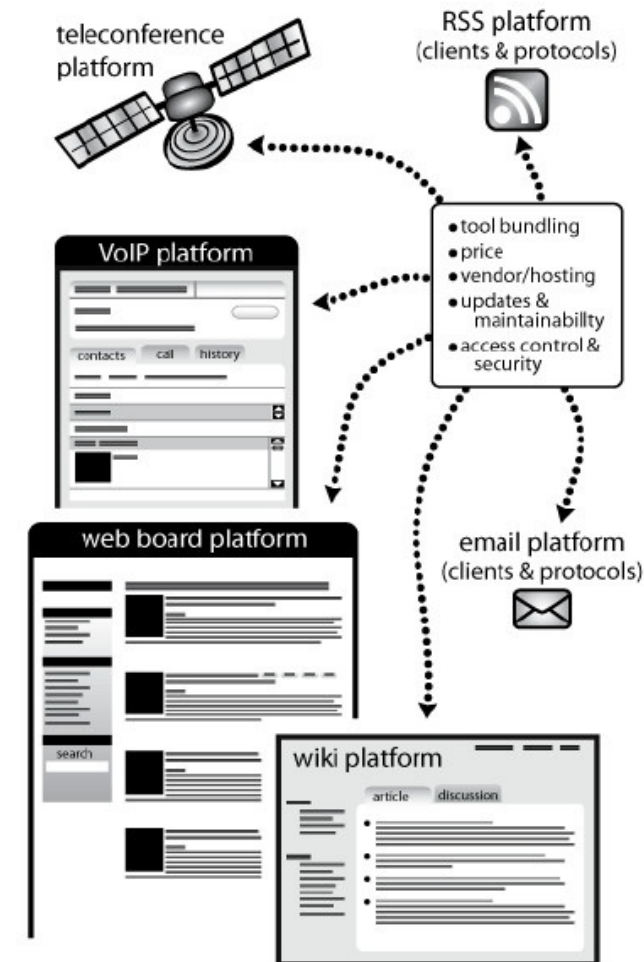- Design questions
- The tool perspective

- D.B. Austina and D. Fletcher. Scenario-Focused Engineering. Microsoft Press. 2014

Platforms, a habitat's packaged suite of tools

- Diving deeper into the meaning

Platforms, a habitat's packaged suite of tools

- Diving deeper into the meaning
- Single vs. multiple tool platforms

4.2 - The platform view. Vendors and developers package tools into platforms

Platforms, a habitat's packaged suite of tools

- Diving deeper into the meaning
- Single vs. multiple tool platforms
- Design questions

Platforms, a habitat's packaged suite of tools

- Diving deeper into the meaning
- Single vs. multiple tool platforms
- Design questions
- The platform perspective
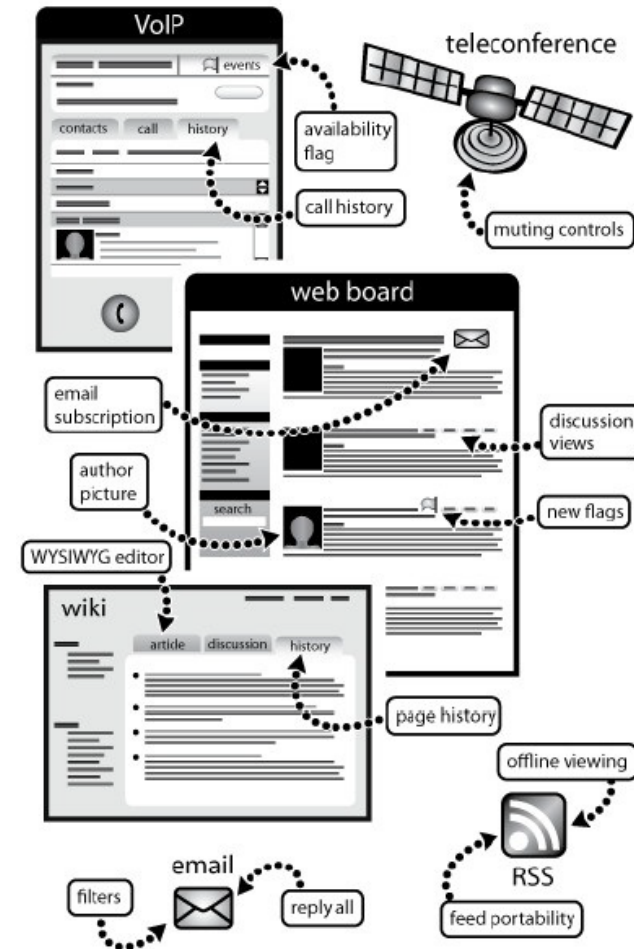
Features, creating livable habitats

- Diving deeper into the meaning

- D.B. Austina and D. Fletcher. Scenario-Focused Engineering. Microsoft Press. 2014

Features, creating livable habitats

- Diving deeper into the meaning
- Features & tools (& mini-tools)
  - Caution!

Figure 4.3 - The feature view. Features make technology usable

- D.B. Austina and D. Fletcher. Scenario-Focused Engineering. Microsoft Press. 2014

Features, creating livable habitats

- Diving deeper into the meaning
- Features & tools (& mini-tools)
  - Caution!
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Features, creating livable habitats

- Diving deeper into the meaning
- Features & tools (& mini-tools)
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- The features perspective

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Configuration, combining it all together

- Diving deeper into the meaning

Configuration, combining it all together

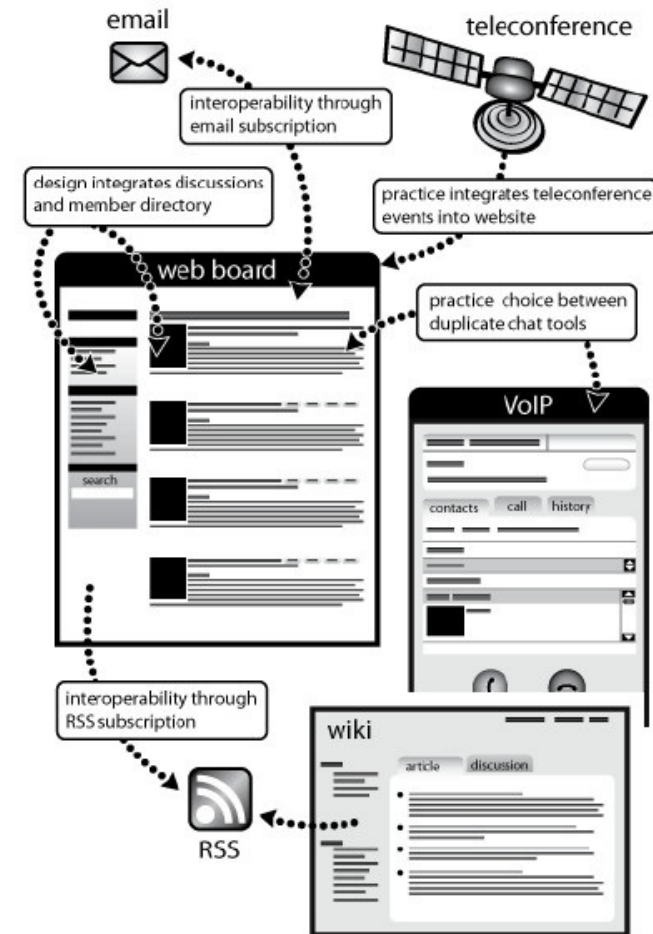- Diving deeper into the meaning
- Single vs. multiple platforms

Figure 4.4 - The configuration view. A complex configuration of technologies serves as substrate to a digital habitat
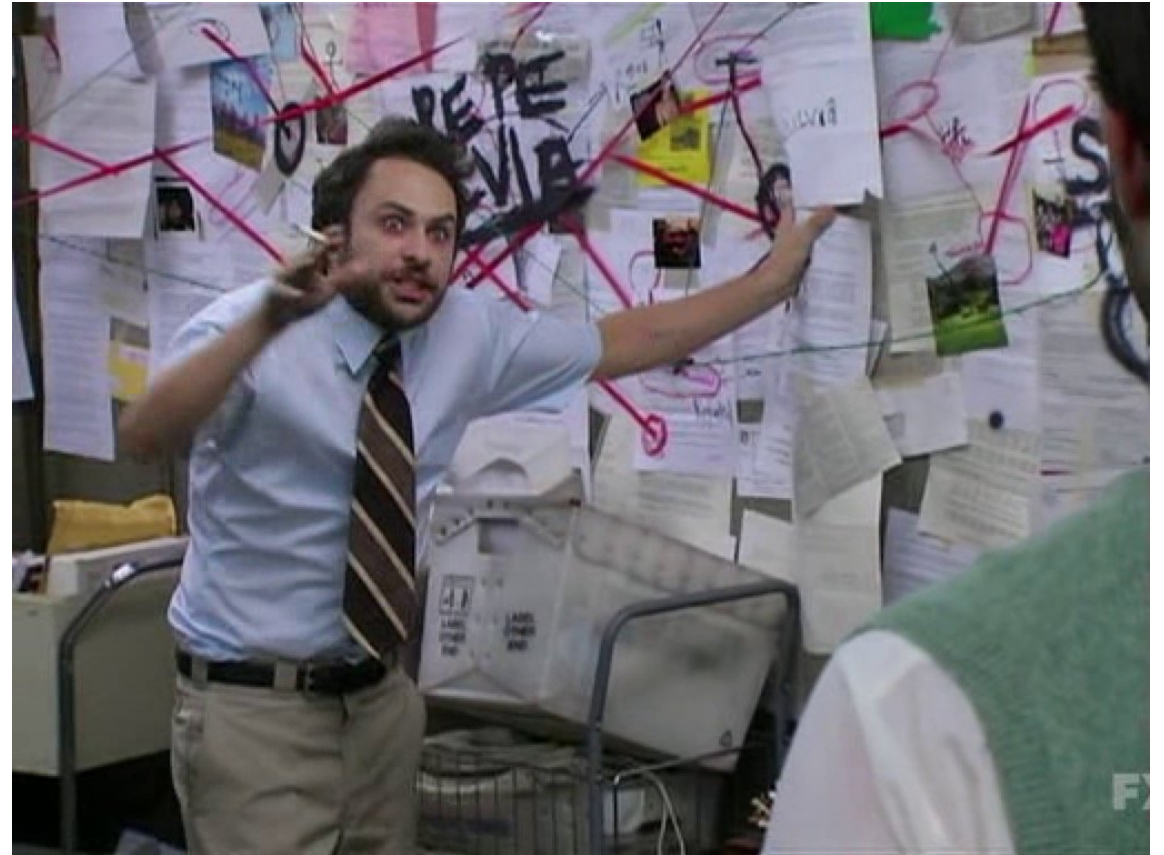
Configuration, combining it all together

- Diving deeper into the meaning
- Single vs. multiple platforms
- Design questions

Configuration, combining it all together

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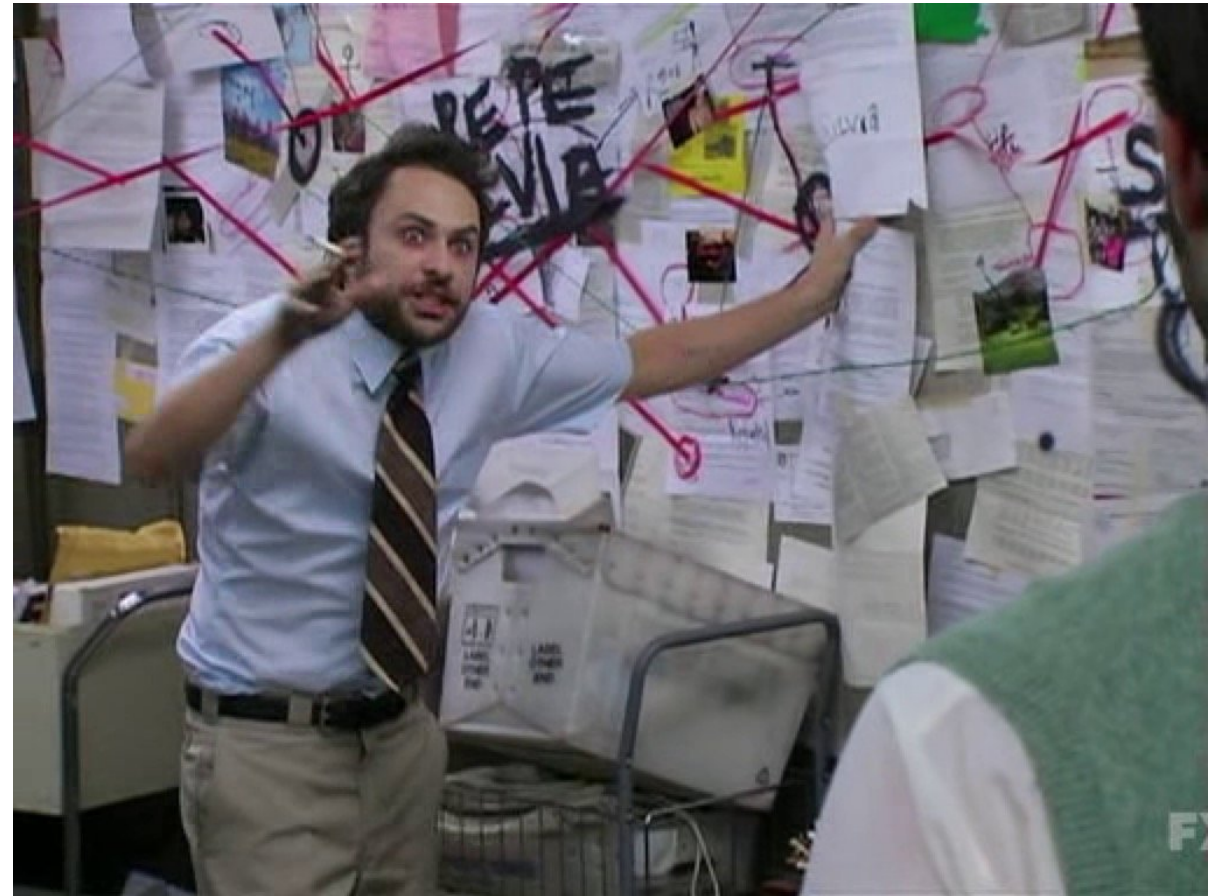- Design questions
- The configuration perspective

Integration of the habitat

- Design questions

Integration of the habitat

- Design questions
- Looking at integration through
  - Platforms
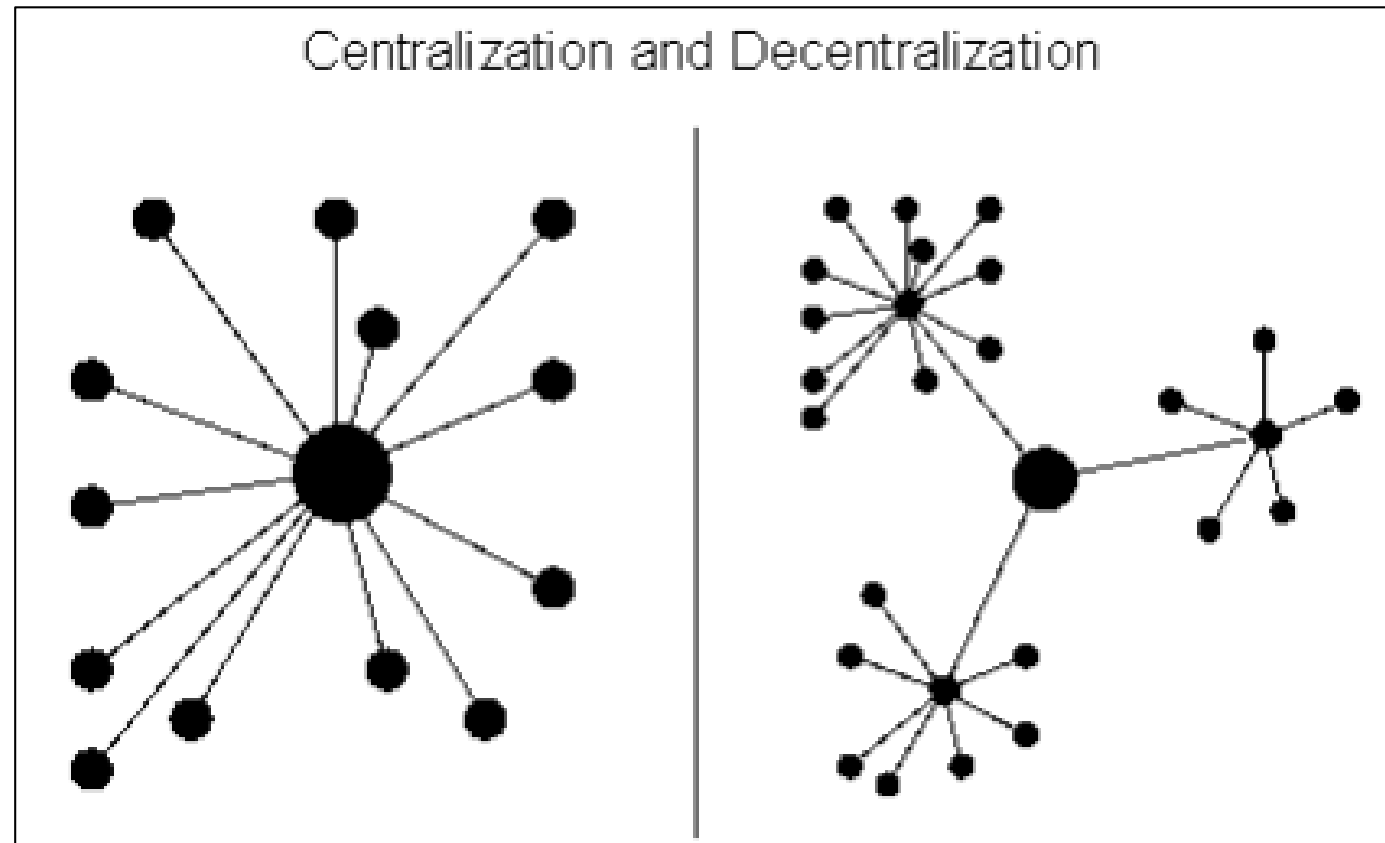 - Interoperability (features)
  - Tools
  - Practice

Integration through platforms

- Definition of a good platform

Integration through platforms

- Definition of a good platform
- Central vs. decentral

Centralization and Decentralization

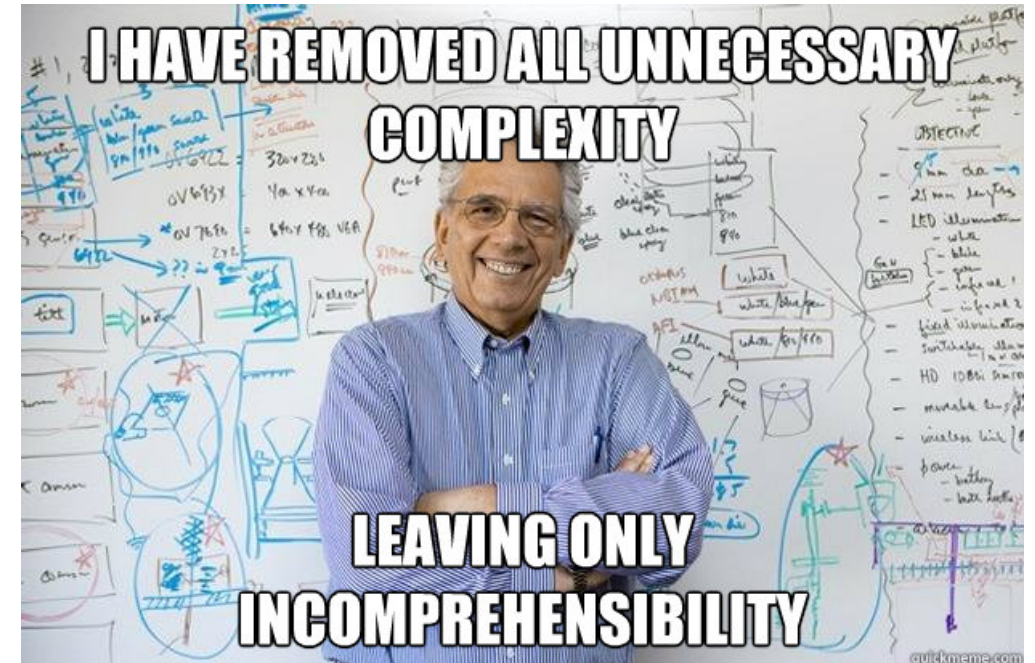# Integration through interoperability (features)

- Expandability/openness

- B. Sterling. Shaping Things. MIT Press. 2005
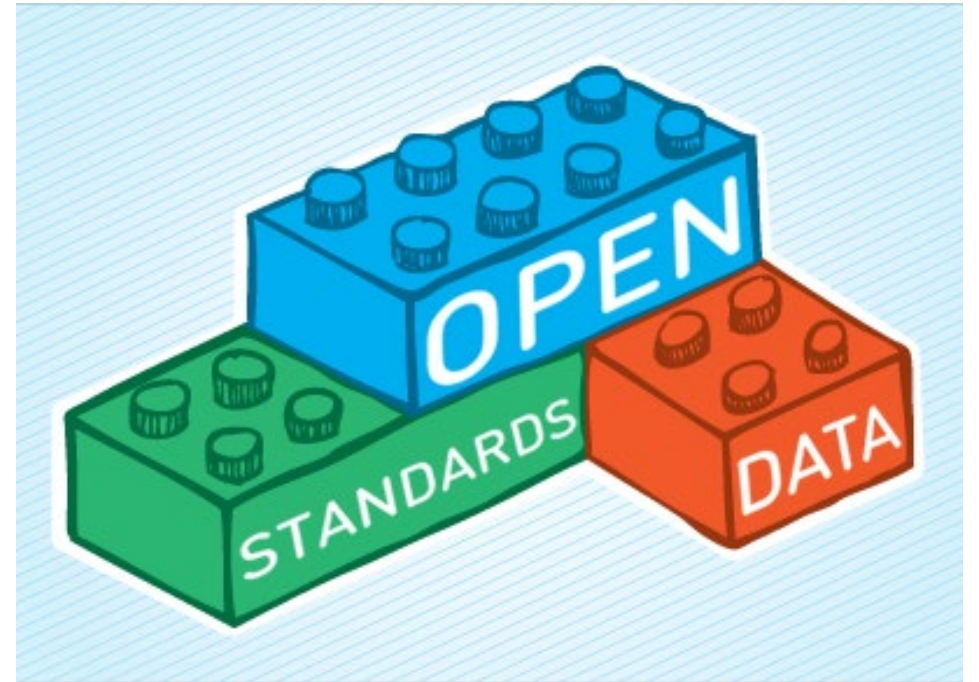
Integration through interoperability (features)

- Expandability/openness
- Adding complexity through constraints

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Integration through interoperability (features)

- Expandability/openness

- Adding complexity through constraints

- Pros/cons
  - Berners-Lee: <u>The next Web of open, linked data</u>
    - Evolution of Bruce Sterling's idea of *spimes* (space +time) & the idea of an internet of things
  - Tim Berners-Lee's <u>Solid</u>

SPIMES
are a shift in perspective

- B. Sterling. Shaping Things. MIT Press. 2005
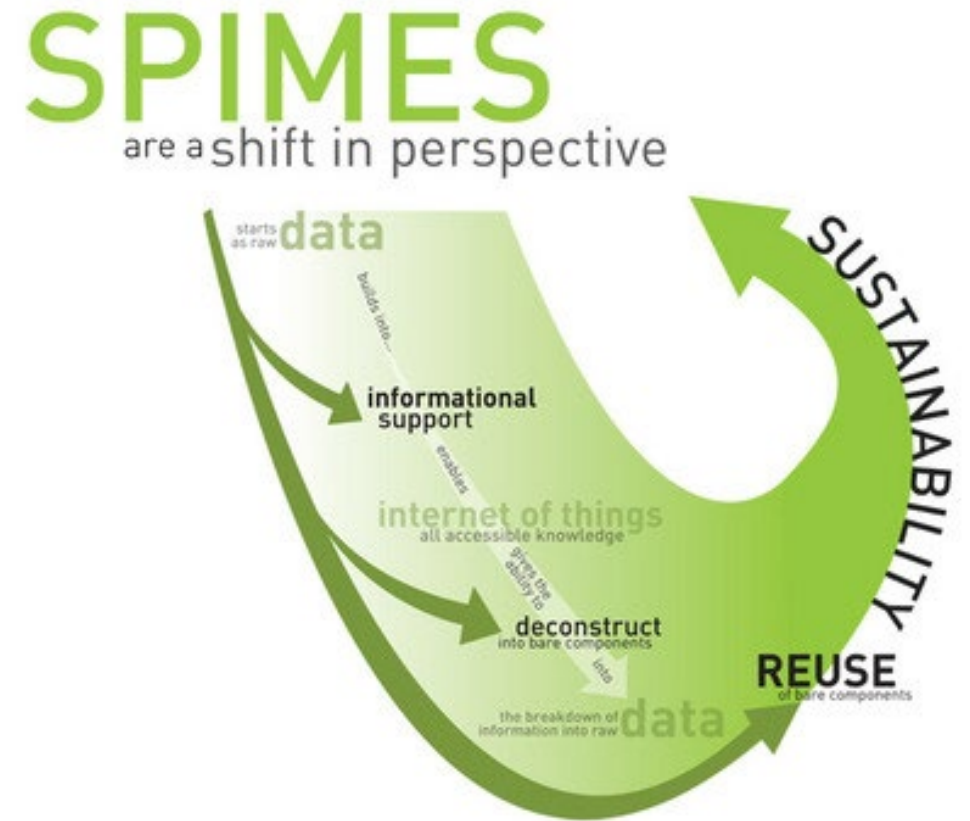
Integration through tools

- Navigation across tools & platforms

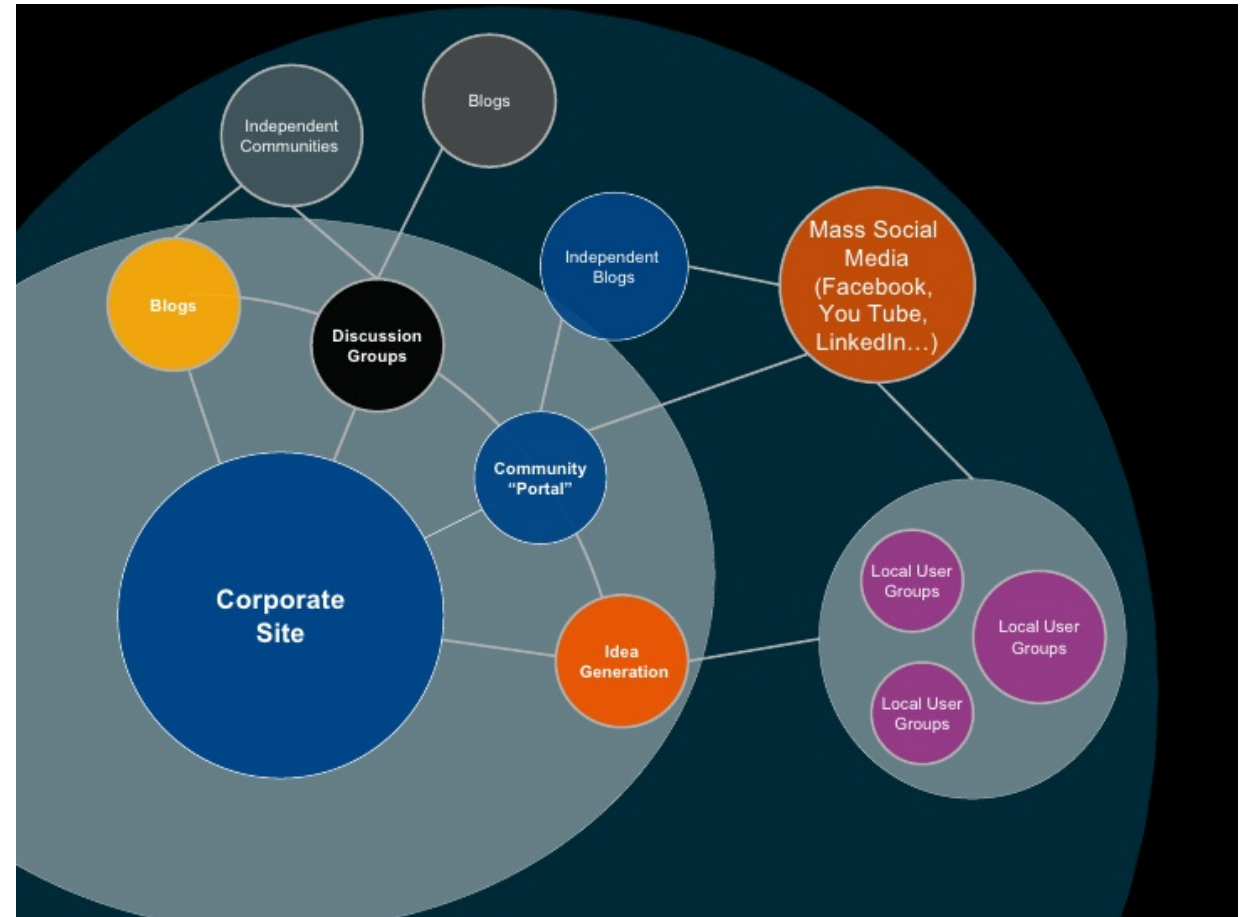# Integration through tools

- Navigation across tools & platforms
- Reflects the community's social ecosystem

Integration through practice

- Applied/ing skills

- D. Hendricks. 6 $25 Billion Companies That Started in a Garage (2014). Online: https://www.inc.com/drew-hendricks/6-25-billion-companies-that-started-in-a-garage.html (Accessed Sept. 2019)

Integration through practice

- Applied/ing skills
- Balance between integrated and non-integrated technology

Where it all started

APPLE   GOOGLE   AMAZON

HARLEY   DISNEY   MATTEL

- D. Hendricks. 6 $25 Billion Companies That Started in a Garage (2014). Online: https://www.inc.com/drew-hendricks/6-25-billion-companies-that-started-in-a-garage.html (Accessed Sept. 2019)

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- Open standards, http://www.openforumeurope.org/wp-content/uploads/2016/04/OStandards.png
- Complex, http://m.quickmeme.com/img/aa/aab05dd5de57f6aa638348aa48cd80d5b522f8c70a35d58044c03b56dfdc5391.jpg
- Social ecosystem, https://image.slidesharecdn.com/ecosystemslidesbw2-110119221723-phpapp02/95/social-media-ecosystem-diagram-template-1-728.jpg?cb=1295475471
- Applied knowledge, http://m.quickmeme.com/img/23/23b0705ab04ee1d76c7b2f4a603b333bac76abe6316a66604d73f444c61ff2d0.jpg