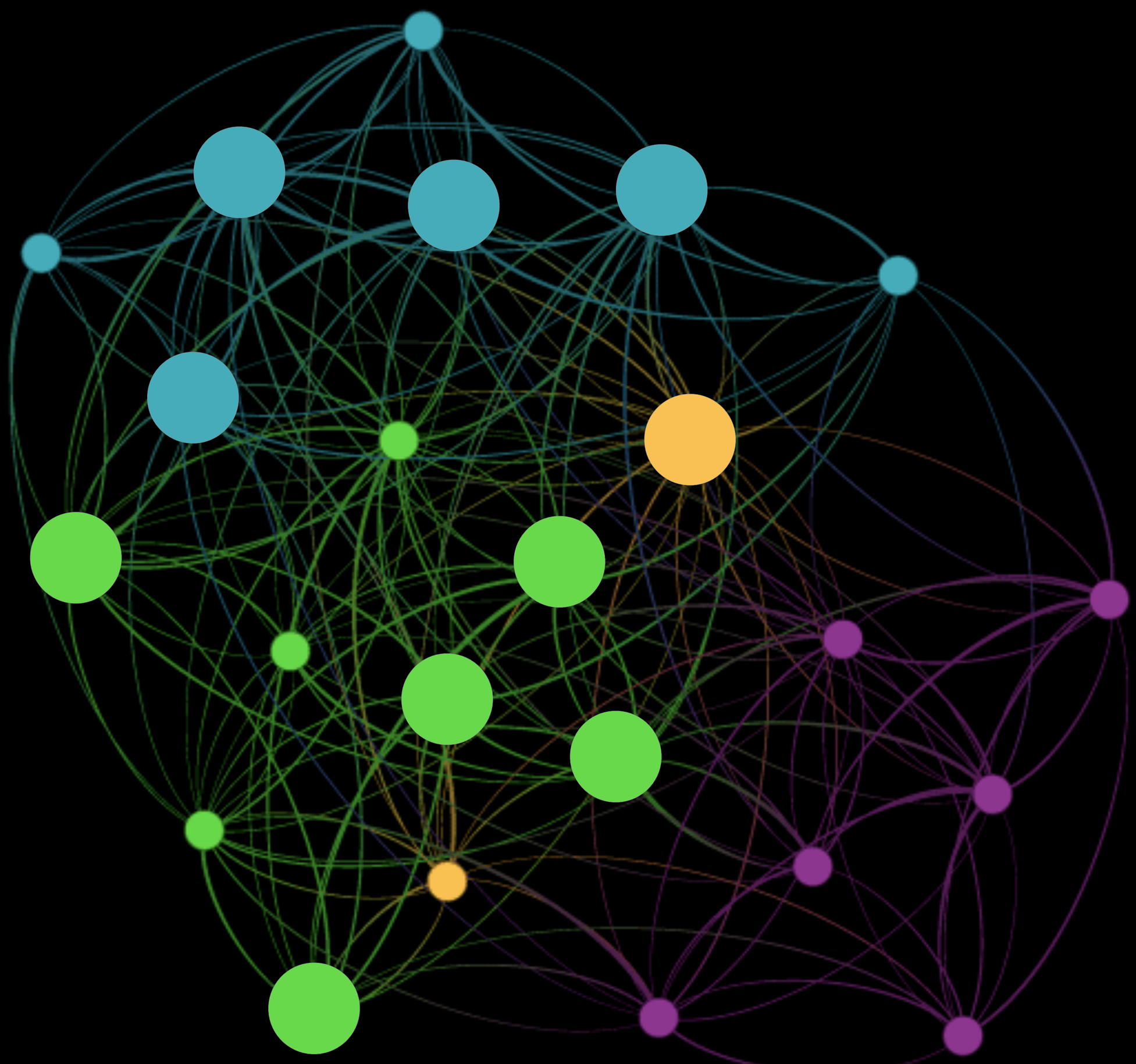
www.wethedata.org
&
www.hi-project.org



We The Data and the hi:project

We The Data used an ecological network approach, developed by Vibrant Data Labs, to identify Grand Challenges for catalyzing positive change from the explosion of data we generate everyday.

These are challenges that if solved could help solve many others, but have comparatively few things weakly helping them.

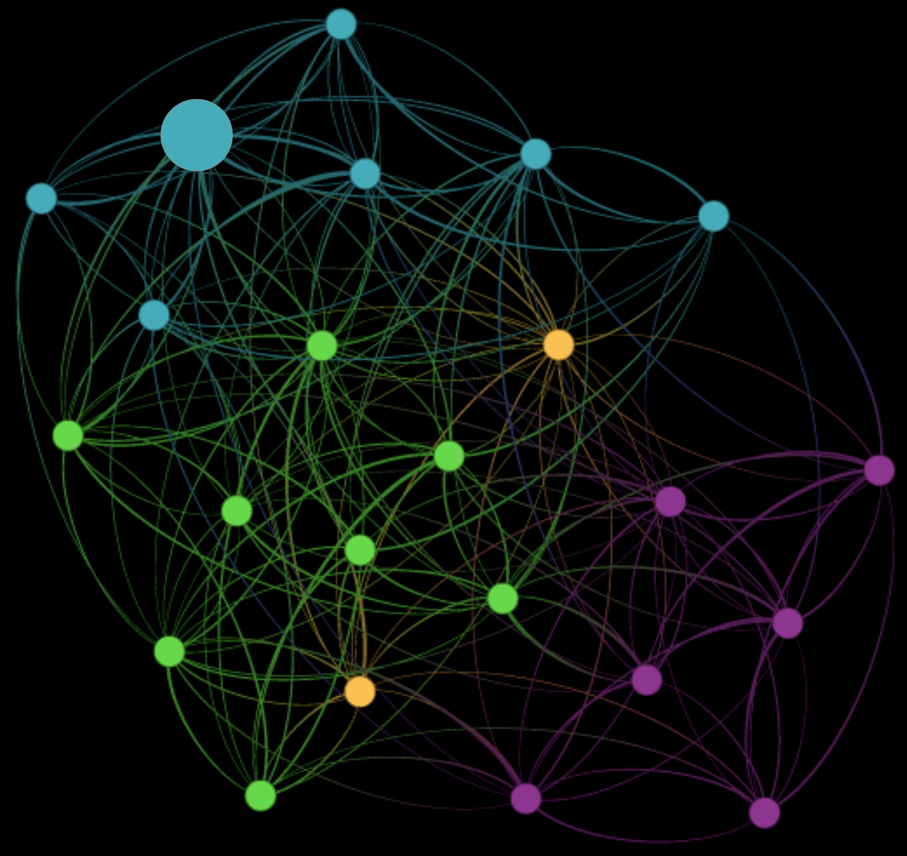
http://wethedata.org/about/how-was-this-done/

This document identifies those Grand Challenges the hi:project helps address. We refer to Alice throughout, our name for the citizen.

Philip Sheldrake
19th June 2015

Degree to which UI design enables participation by diverse groups

UI design is an important element in making the power of technology fit with the ways of learning, the language, the visual skills and other characteristics of real people.



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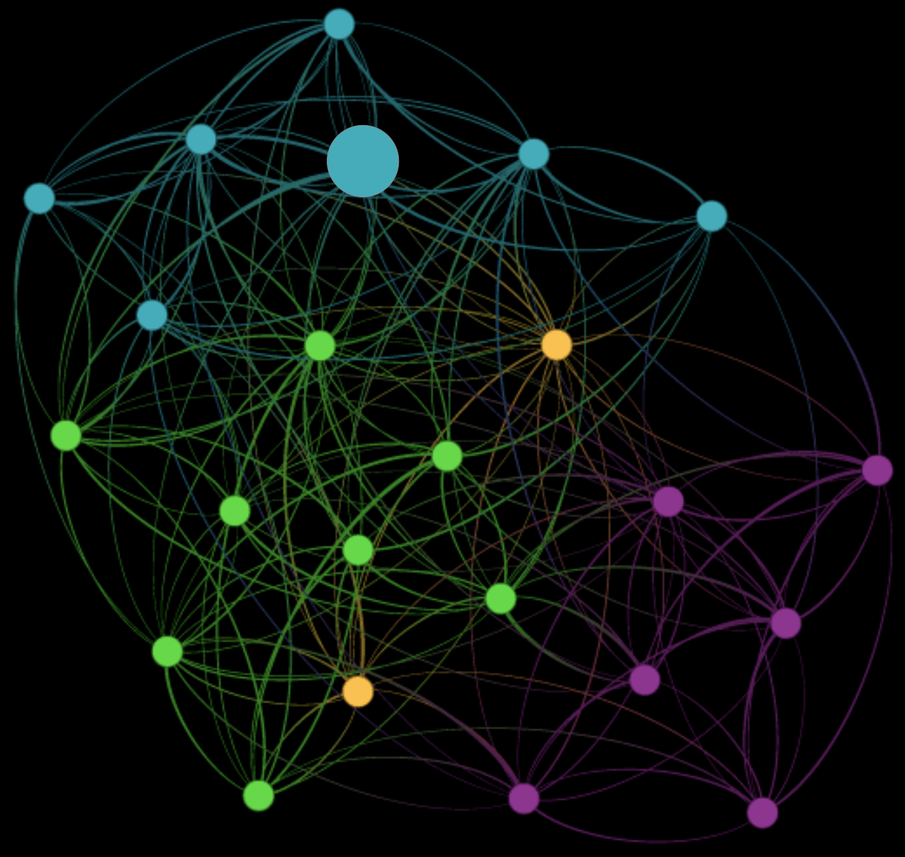
UI will never enable participation by *all* diverse groups, let alone attempt to tailor the interface to each and every individual. This is however a fundamental objective of HI.

http://hi-project.org/faqs/what-do-you-mean-by-human-interface/

Proportion of the population that is functionally data literate

Finding patterns and meaning in data will be simplified with the development of new analysis and visualization tools.



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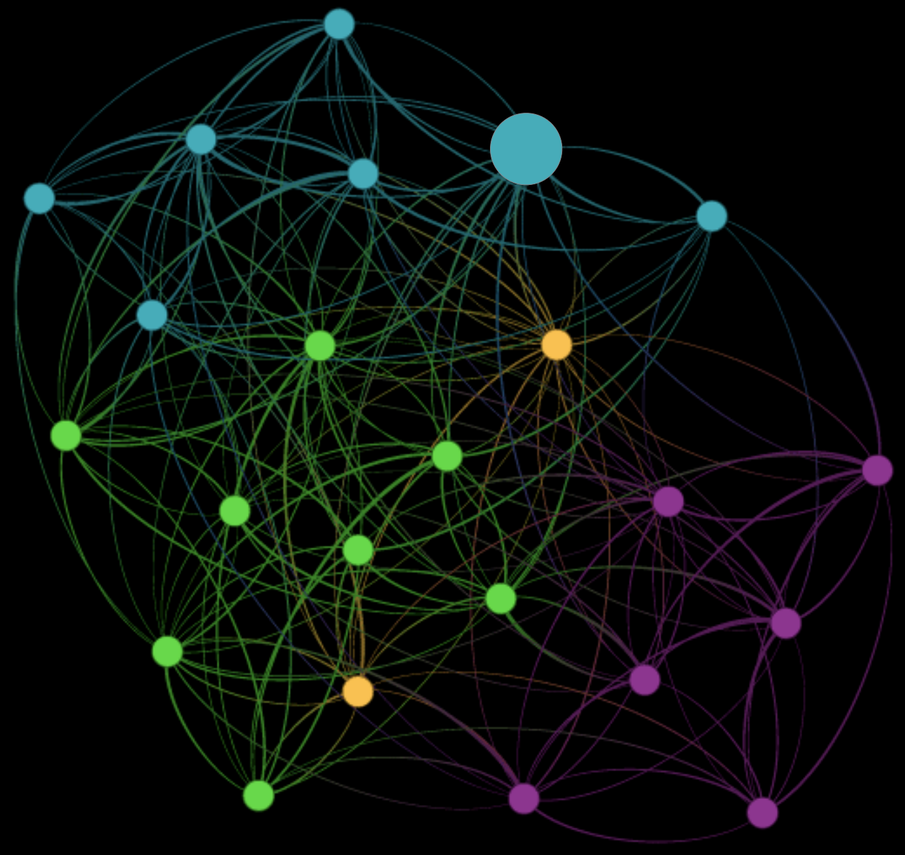
Alice doesn’t get data. She gets when she’s overdrawn. She gets when her diabetes is erratic. She gets when she’s in too many meetings. In other words, she gets information, not data, and she requires a personal interface that can paint this picture for her and facilitate sense-making.

http://hi-project.org/2015/05/questions-of-vrm-privacy-and-consent-advertising-and-technology/#epitome

Degree to which underlying technologies and data are invisible

Design plays a key role in enabling novices to immediately understand the use of a given technology or data set, while enabling deeper explorations over time.



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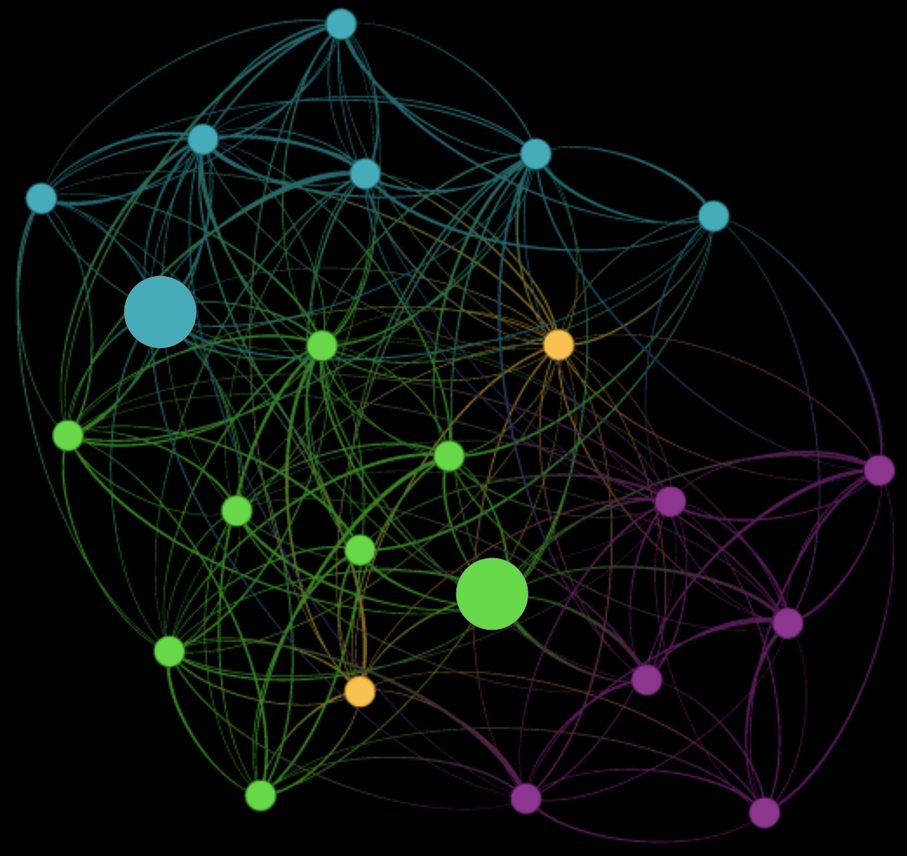
The hi:project aggregates Alice’s personal data and aspires to deliver the interface that is perfectly hers. The mere pursuit of this vision will improve the facility for Alice to better understand all facets of her life. It also provides the perfect platform to communicate the underlying algorithms (aka black boxes) as and when this language emerges.

Ease to users of managing / controlling personal data access permissions

The importance of putting flexible tools for assigning data access permissions in the hands of people, not large institutions.



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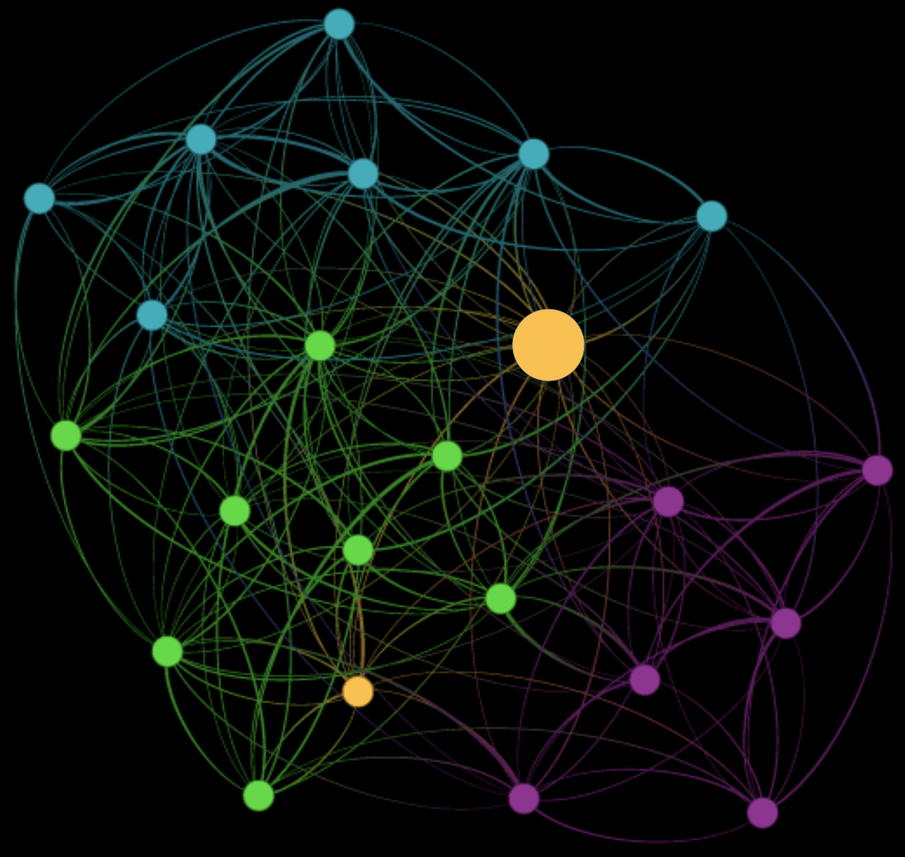
Alice considers the interface the locus of personal data and the nexus of privacy parameters. Placing the interface in her domain places data access permissions in her domain irrespective of organization / service provider. This assists with compliance with pending European data protection regulation (GDPR) and similar regulations elsewhere.

http://hi-project.org/2015/05/open-up-to-the-gdpr-and-the-iot

Degree of platform openness (copy and modify)

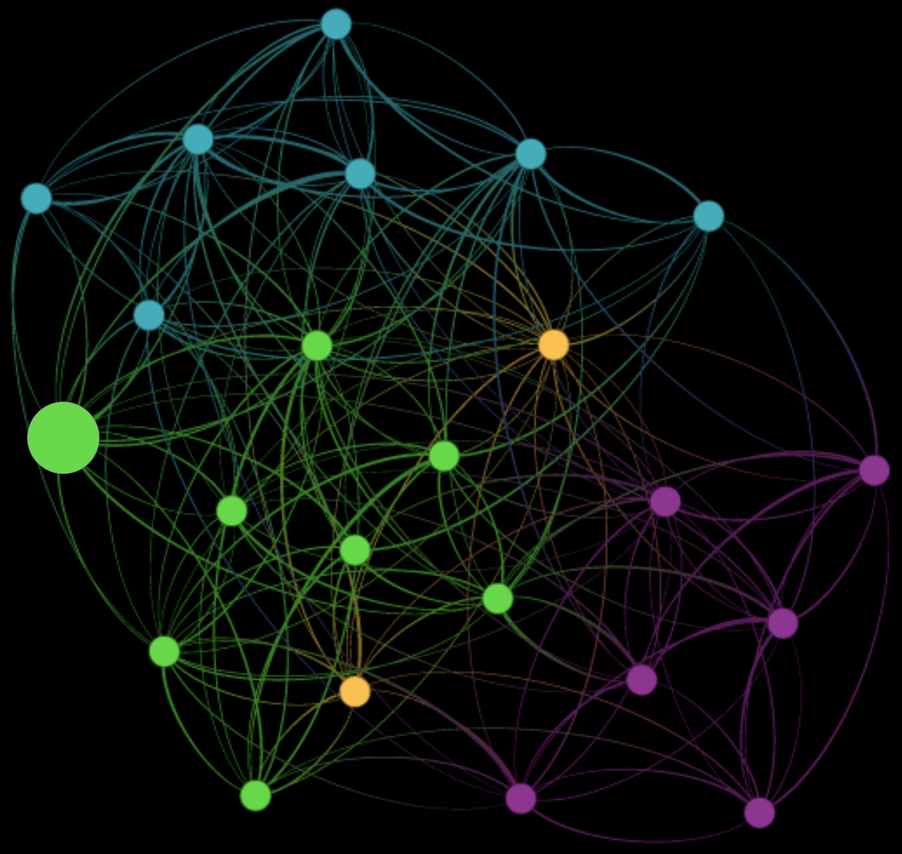
Open source … enables innovation and local cultural relevancy; people adapt tools and technologies to local needs.



The hi:project is open and decentralized. The project re-imagines the UI as a lightweight artefact that can be shared within a community-based ecosystem. They can be hosted on the individual's own devices as an application, a pluggable component of a custom browser, or integrated within web applications provided by third parties. The participants are able to freely copy, modify and share improved or customised components.

Legal/policy framework for personal digital rights management

People will not be willing to openly share their personal data unless they have assurances that their privacy will be protected. … Legal and policy frameworks that return control over privacy to individuals, along with technology tools to help individuals manage those protections, will be vital for data vibrancy.



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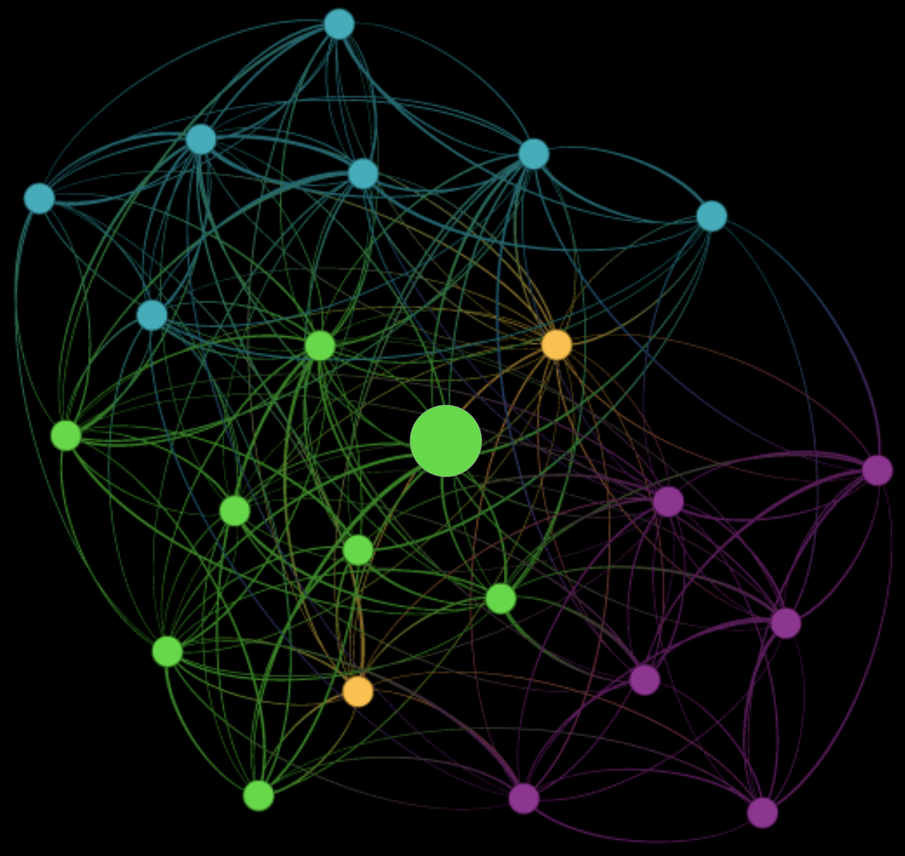
Our focus on privacy facilitates openness. Personal data must be allowed to breathe for it to be of most value to the individual and society, and the corresponding parameters are best set by the individual in question with clear appreciation for the mutual value thus realised or suppressed.

Proportion of data from large institutions that is accessible

… large firms and institutions have the means to gather information about individuals (for advertising, or surveillance). Real data vibrancy will only occur when this one-sided approach to data gathering and possession gives way to much broader circulation of data.

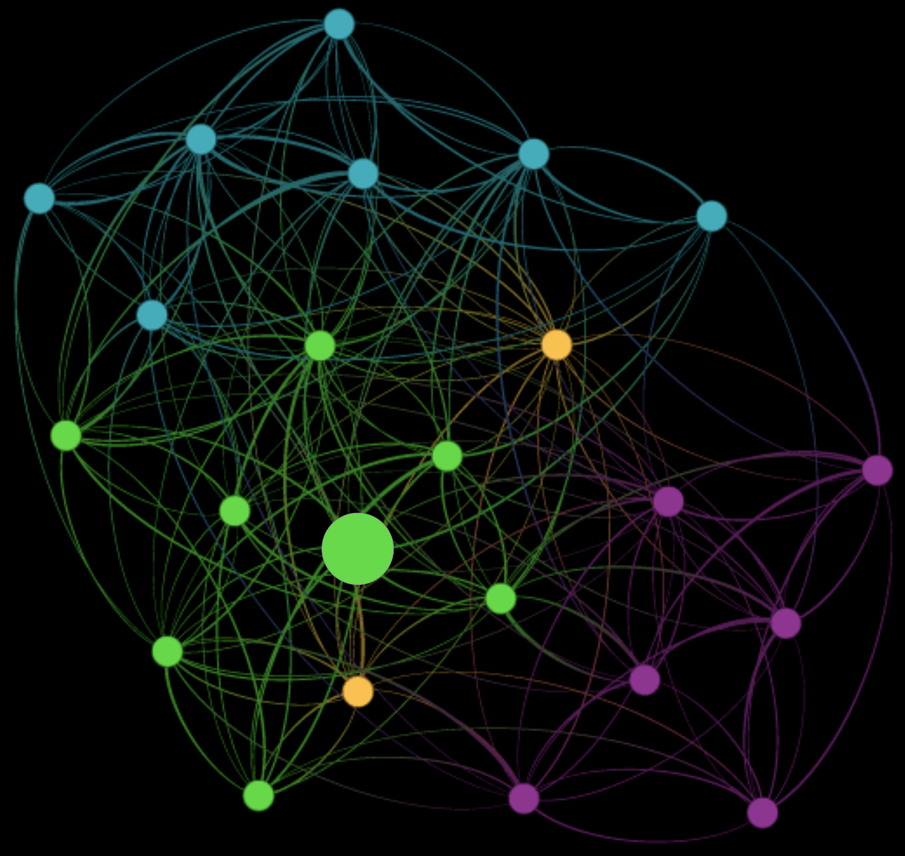


The hi:project has been acclaimed by one of our champions as the epitome of VRM. Data access is symmetrical, and analysis of Alice's behaviors is restricted to API analysis.

http://hi-project.org/2015/05/questions-of-vrm-privacy-and-consent-advertising-and-technology/#epitome

Concentration of data and access to data in few corporations

Large, consumer-facing companies guard consumer data they collect. … this hoarding of data reduces the chances for people to discover unexpected new meaning and value.

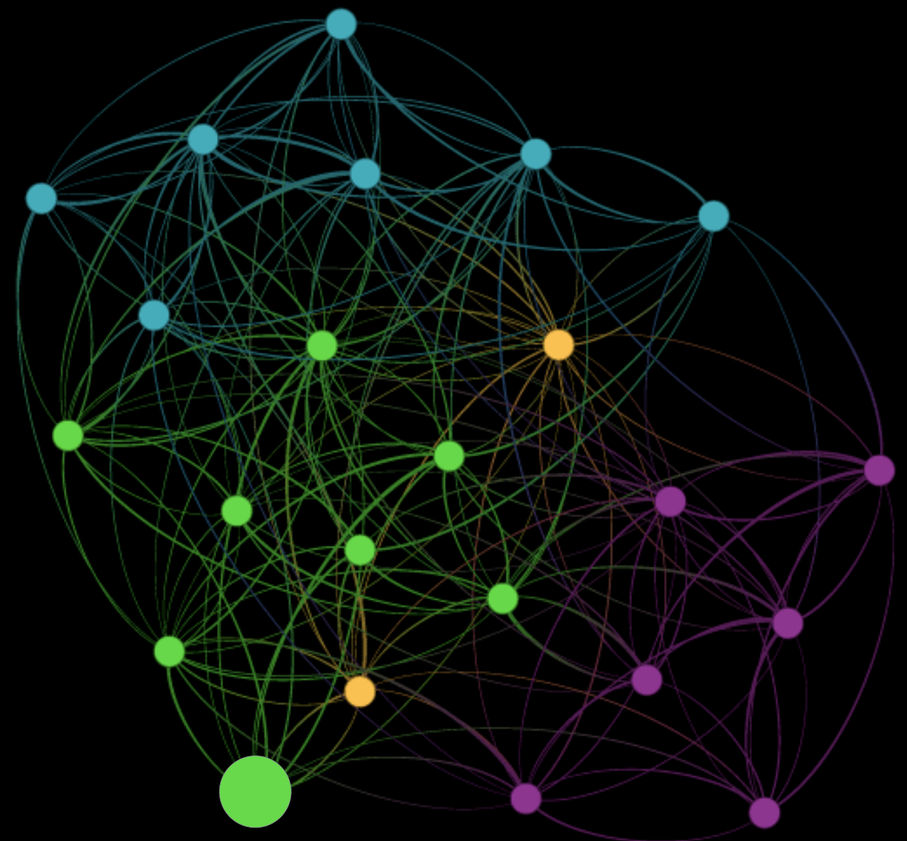


Such companies have centralized data flow to their advantage. The hi:project's architecture re-decentralizes, helping many other organizations disintermediate the relationships they aspire to build with all variety of stakeholders; and each of us with each other. We help avoid a brand-centric IoT. A citizen-centric IoT is enabled when everything gets an interface because Alice brings her own.

Tools to anonymize sensitive data

Tight legal restrictions limit peoples' ability to work with and build on the data of others.

… require a balance between openness and individual protections, without those protections becoming a tool for abuse by powerful interests.



The hi:project architecture facilitates peer-to-peer innovation, allowing communities of interest to collaborate. This may entail third parties specialist in reflecting back aggregate statistics to those contributing data while protecting personal privacy (with homomorphic encryption for example).