



"Codex Claustroneoburgensis 980" from College of Saint Benedict & Saint John's University via DPLA

Peter E. Murray – @DataG – <https://dltj.org/about>

Engaging With Open Source

Open Source Publishing
Technologies: Current Status and
Emerging Possibilities

NISO August Webinar

August 14, 2019

README.txt



3 years: Index Data, LLC
Open Source Community Advocate

5 years: LYRISIS (U.S. library consortium)
Assistant Director, Tech Services Development

5 years: OhioLINK (Ohio higher ed consortium)
Assistant Director, New Services Development

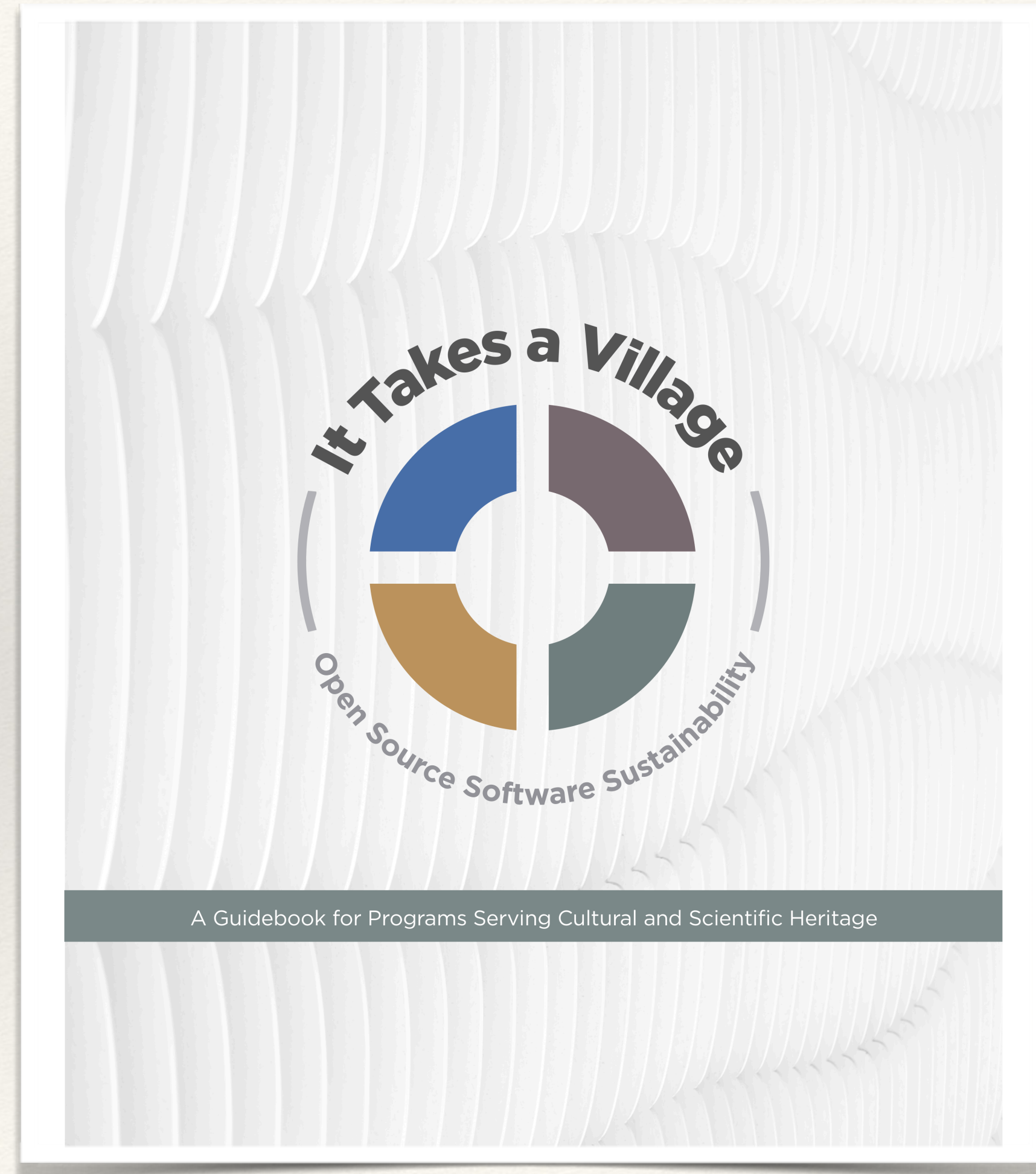
5 years: University of Connecticut
Law school library and main campus library

5 years: Case Western Reserve University
Systems Librarian

5 years: Miami University
Systems Librarian


Why Open Source

The tenets of OSS – that is, software that can be freely accessed, shared, used, changed and/or modified – fit well with the missions of organizations dedicated to documenting, preserving, and providing access to cultural and scientific heritage.



Why Open Source

The fear of enclosure is certainly not the only force driving open-source development.... There is also the hope, at least, of increased scale: a publisher or a library, interested to develop a bespoke tool, will find it difficult to justify the cost of development and maintenance if the only user will ever be itself. For many, the idea of open source implies a shared deployment model that distributes, if not the cost, at least the value, across a larger community.



Mind the Gap
A Landscape Analysis of Open Source Publishing Tools and Platforms

John W Maxwell, Erik Hanson, Leena Desai, Carmen Tiampo, Kim O'Donnell, Avvai Ketheeswaran, Melody Sun, Emma Walter, Ellen Michelle

Simon Fraser University
July 2019

The number of open source (OS) online publishing platforms, i.e. production and hosting systems for scholarly books and journals, launched or in development, has proliferated in the last decade. Many of these publishing infrastructure initiatives are well-developed, stable, and supported by a small but vigorous distributed community of developers, but promising new ventures have also recently launched.

The notable increase in the number of OS platforms suggest that an infrastructure 'ecology' is emerging around these systems. Distinguishing between systems that may evolve along competitive lines and those that will resolve into a service 'stack' of related, complementary service technologies will help potential adopters understand how these platforms can or should interoperate.

The “How” of Open Source

Fitzgerald noted that the rise of successful open-source software (which he called “OSS 1.0”) was characterized by self-organized, Internet-based projects that gathered loose communities around sheer willingness to participate....

MIS
Quarterly

ISSUES & OPINIONS

THE TRANSFORMATION OF OPEN SOURCE SOFTWARE¹

By: **Brian Fitzgerald**
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Keywords: Open source software, free software, IS development

Introduction

Just a few years ago, it would have seemed preposterous to suggest that the might of the proprietary software industry, as exemplified by Microsoft, could be threatened by the largely volunteer open source software movement. This movement, however, has altered the basic nature of the software industry. On the supply side, fundamental changes have occurred to the development process, reward mechanisms, distribution of development work, and business models that govern how profit can be achieved. On the demand side, the alternatives traditionally available to organizations for software acquisition—buy or build—have been supplemented with another credible alternative—namely, open source. Indeed, a type of Moore’s Law effect seems to be taking place as the amount of open source software available increases dramatically every 12 months or so. A range of issues arises also in relation to the altered nature of software support, the need for new models for total cost of ownership (TCO) of software, and perceptions of exposure to the possibility of intellectual property (IP) infringement.

Radical movements often mature to be accommodated into the mainstream. French Impressionist art in the 19th century is a good example. I contend that the open source phenomenon has undergone a significant transformation from its free software origins to a more mainstream, commercially viable form—OSS 2.0, as I term it.² This accommodation with the

Abstract

A frequent characterization of open source software is the somewhat outdated, mythical one of a collective of supremely talented software hackers freely volunteering their services to produce uniformly high-quality software. I contend that the open source software phenomenon has metamorphosed into a more mainstream and commercially viable form, which I label as OSS 2.0. I illustrate this transformation using a framework of process and product factors, and discuss how the bazaar metaphor, which up to now has been associated with the open source development process, has actually shifted to become a metaphor better suited to the OSS 2.0 product delivery and support process. Overall the OSS 2.0 phenomenon is significantly different from its free software antecedent. Its emergence accentuates the fundamental alteration of the basic ground rules in the software landscape, signifying the end of the proprietary-driven model that has prevailed for the past 20 years or so. Thus, a clear understanding of the characteristics of the emergent OSS 2.0 phenomenon is required to address key challenges for research and practice.

¹Ron Weber was the accepting senior editor for this paper. Giancarlo Succi and Richard Welke served as reviewers. The third reviewer chose to remain anonymous.

²Because this article focuses on the evolution and transformation of the open source phenomenon, terminology is an issue. I use the term FOSS to refer to the initial era of Free and Open Source Software. I use OSS 2.0 to refer to the

The “How” of Open Source

... Fitzgerald identified a newer mode, which he called “OSS 2.0,” characterized by “purposeful design” and institution-sponsored “vertical domains,” and much more likely to include paid developers.

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Participatory Open Source

- ❖ Early inclusion of subject matter experts
- ❖ Adopters and service providers
- ❖ Use of “agile software development” methods
- ❖ User-experience-first design

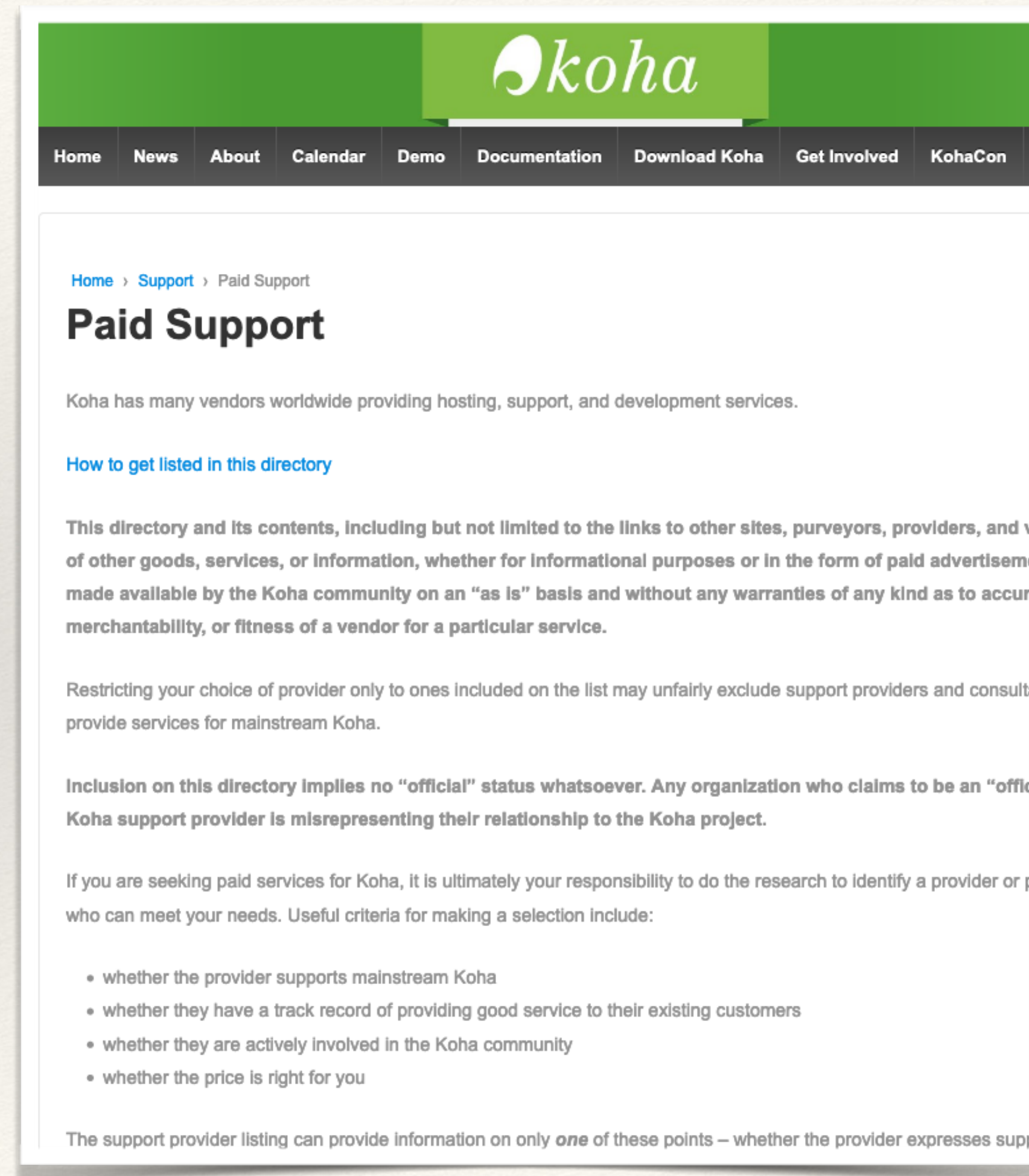
Early Inclusion of Subject Matter Experts

- ❖ Engage experts in the field
- ❖ Use “User Stories” to identify core requirements
- ❖ Empower functional teams

The screenshot shows the Kuali website's 'Open Library Environment' page. At the top, the Kuali logo is displayed with the tagline 'Software solutions for higher education'. Navigation links for 'Products', 'Foundation', 'Downloads', and 'Support' are visible. The page title is 'Open Library Environment'. A breadcrumb trail reads 'Kuali Home » Products » Kuali Open Library Environment » Overview of OLE'. A sidebar menu on the left lists various sections: Overview (highlighted), Functionality, Roadmap, Adopters and Partners, Organization, Test Drive and Download, Documentation, Support, Media, Blog, and Get Involved. The main content area is titled 'OVERVIEW OF OLE' and features a sub-heading: 'Open Library Environment (OLE) - An Extensible Service-Driven Library Management System'. Below the text is a photograph of two individuals, a woman and a man, sitting at a table in a library, looking at a laptop. Underneath the photo, a paragraph states: 'Kuali OLE is the first system designed by and for academic and research libraries for managing and delivering intellectual information.'

Adopters and Service Providers

- ❖ Level playing field for those using open source and those providing services for open source
- ❖ Draw users into the development process
- ❖ Service Providers: facilitate entry of customers into the community



The screenshot shows the Koha website's "Paid Support" page. The header features the Koha logo and a navigation menu with links for Home, News, About, Calendar, Demo, Documentation, Download Koha, Get Involved, and KohaCon. The main content area includes a breadcrumb trail (Home > Support > Paid Support), a title "Paid Support", and several paragraphs of text. The text discusses the availability of vendors, the purpose of the directory, and the responsibilities of users seeking paid services. A bulleted list provides criteria for selecting a provider, such as whether they support mainstream Koha, have a track record, are active in the community, and offer reasonable prices. The page concludes with a note that the listing only provides information on one of these points.

Agile Software Development

Agile Development Manifesto

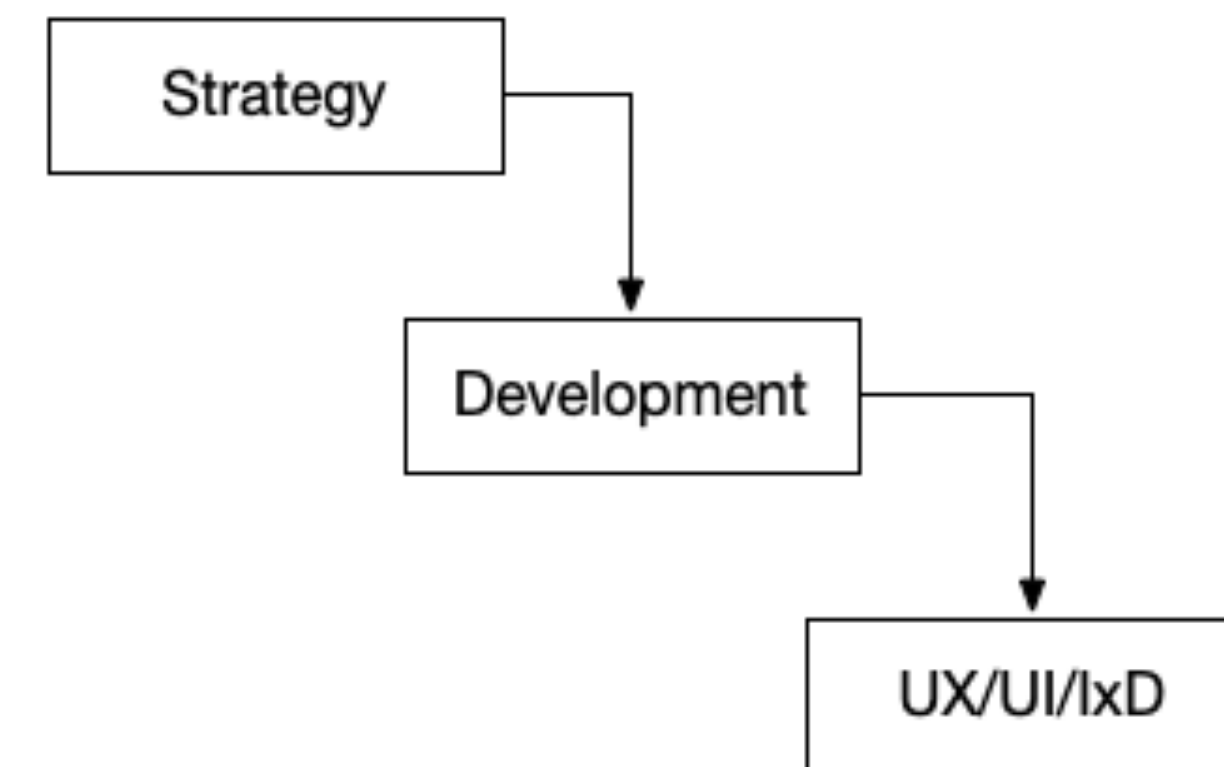
- ❖ *Individuals and Interactions* over processes and tools
- ❖ *Working Software* over comprehensive documentation
- ❖ *Customer Collaboration* over contract negotiation
- ❖ *Responding to Change* over following a plan



[“Agile Project Management by Planbox”](#) via Wikimedia Commons

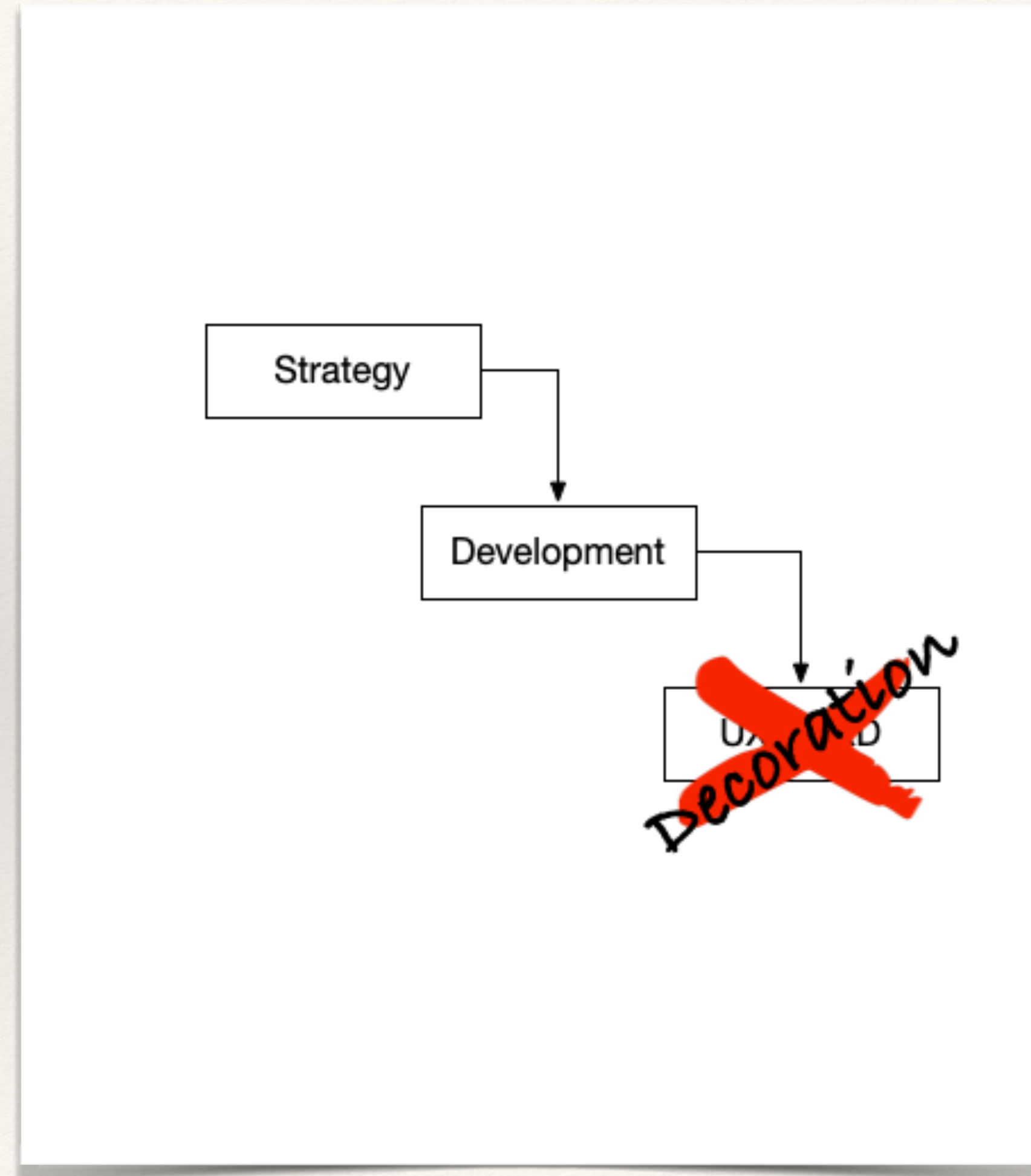
User-Experience-First Design

- ❖ Traditional “Waterfall” method



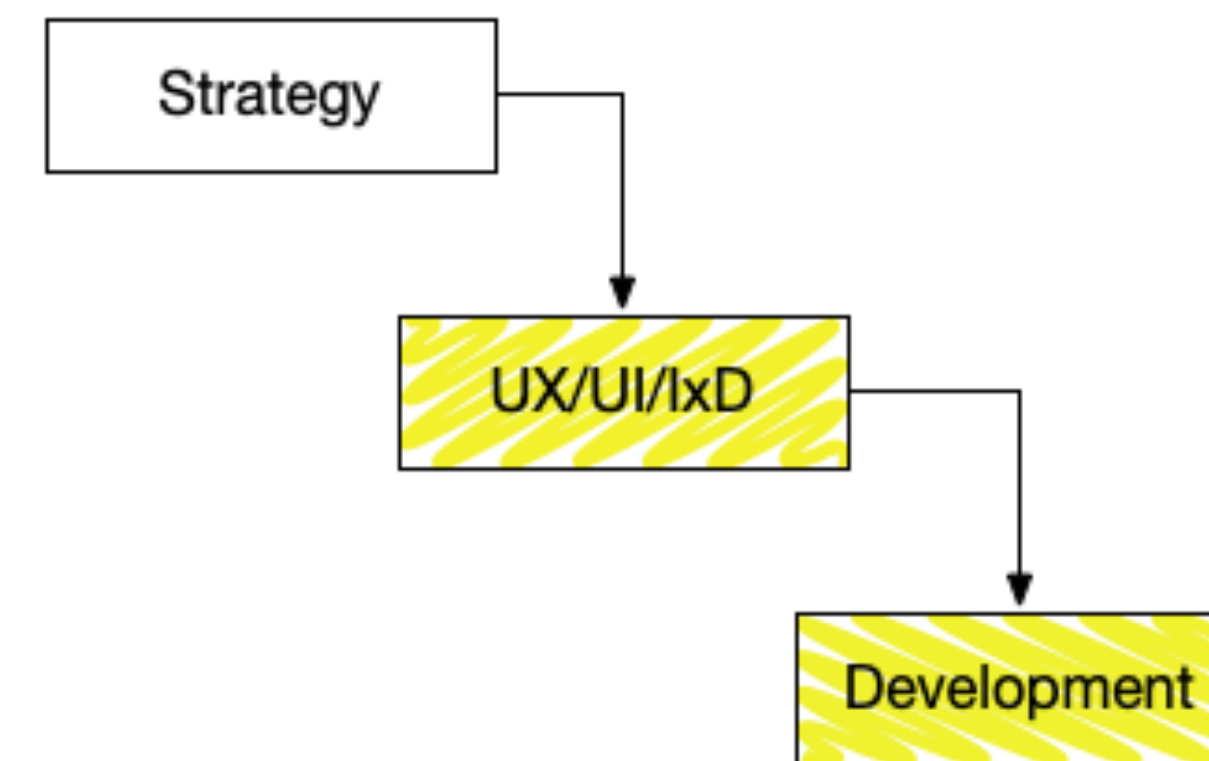
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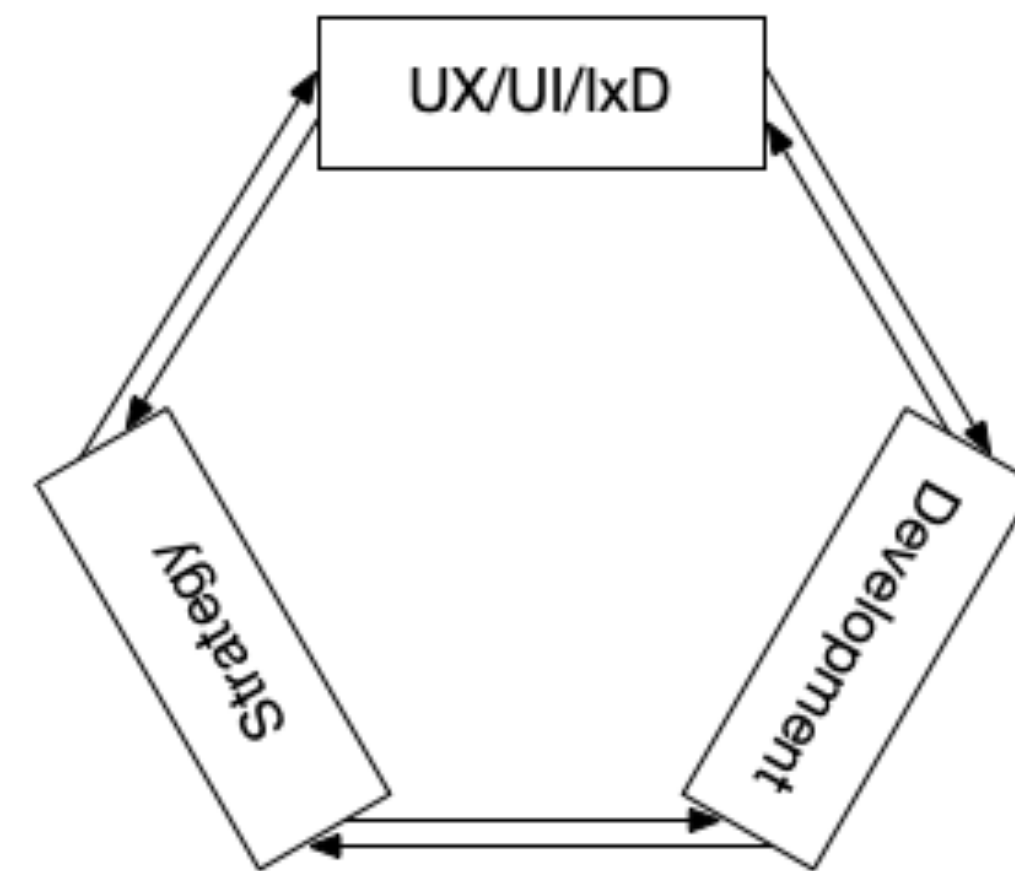
User-Experience-First Design

- ❖ Traditional “Waterfall” method
- ❖ Design before Development



User-Experience-First Design

- ❖ Traditional “Waterfall” method
- ❖ Design before Development
- ❖ User-Experience-First Design
 - UX/UI before Code
 - Involve users in design
 - Frequent reviews



Scratching an Itch



- ❖ Open Source 1.0
“Developers scratching an itch”
- ❖ Open Source 2.0
“Companies scratching an itch”
- ❖ Participatory Open Source
“Users scratching an itch”

“kiyomi gets chin scratches in PHX airport pet relief area” by Taro the Shiba Inu via Flickr

A photograph of a sunset over a field of tall grass. The sun is a bright yellow-orange circle in the center, partially obscured by the dark silhouettes of the grass. The sky is a deep red-orange color. The overall mood is serene and natural.

Peter E. Murray

Open Source Community Advocate

Index Data, LLC

<https://dltj.org/about>

Presentation Notes:

<https://dltj.org/article/niso-engaging-with-open-source/>

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“Sunset” from the National Archives and Records Administration via DPLA