SYSTEM ARCHITECT VS INFORMATION ARCHITECT

An Information Architect

- Assists business analysts to **identify user-based requirements**
- Is responsible for **how users interpret and interact with information**
  - freeing up visual designers to concentrate on visual design elements and programmers to concentrate on code
- Investigates **customers and their needs,** factors **business strategy and technology resources** into **solutions**
  - this is done long before programming begins
  - can minimise loss of business and wasting of resources
  - can increase and maintain revenue from customers

Conceptual

A System Architect

- Establishes the structure of the system
  - Specifies the essential core design features and elements and provides the framework for all that follows
  - Provides the architect's view of the users' vision for what the system needs to be and do
- They strive to maintain the integrity of the vision as it evolves during the detail design and implementation

Logical

User Driven Approach

- The fundamental questions an IA seeks to answer is:
  - Who is the user?
  - What do they need?
  - What will they see?
  - How will they interact with the system?
  - How will they get value from the system, accomplish their goals/tasks, etc?

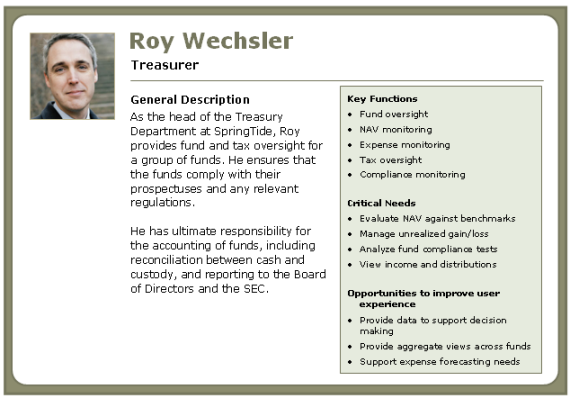
IA DELIVERABLES

IA Deliverables

- To answer such questions, IAs have a number of tools and techniques that they employ. These include:
  - Developing User Personas
  - Identifying and prioritizing their needs
  - Mocking up Wireframes
  - Showing the sequence of interaction through Walk-throughs

Personas

User archetypes to help to guide decisions about product features, navigation, interactions, and even visual design



Roy Wechsler

Treasurer

General Description

As the head of the Treasury Department at SpringTide, Roy provides fund and tax oversight for a group of funds. He ensures that the funds comply with their prospectuses and any relevant regulations.

He has ultimate responsibility for the accounting of funds, including reconciliation between cash and custody, and reporting to the Board of Directors and the SEC.

Key Functions

- Fund oversight
- NAV monitoring
- Expense monitoring
- Tax oversight
- Compliance monitoring

Critical Needs

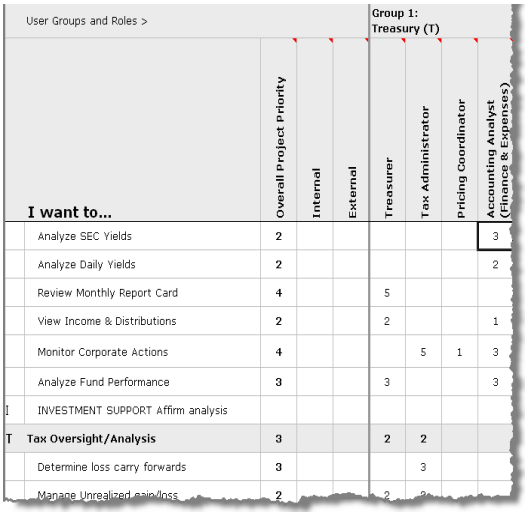
- Evaluate NAV against benchmarks
- Manage unrealized gain/loss
- Analyze fund compliance tests
- View income and distributions

Opportunities to improve user experience

- Provide data to support decision making
- Provide aggregate views across funds
- Support expense forecasting needs

- **Demographics**
- **Psychographics**
- **Environmental**

User Needs Matrix



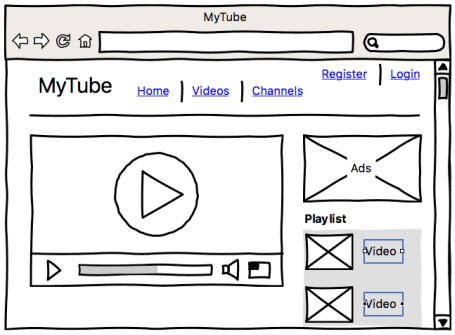
User Groups and Roles >				Group 1: Treasury (T)			
I want to...	Overall Project Priority	Internal	External	Treasurer	Tax Administrator	Pricing Coordinator	Accounting Analyst (Finance & Expenses)
Analyze SEC Yields	2						3
Analyze Daily Yields	2						2
Review Monthly Report Card	4			5			
View Income & Distributions	2			2			1
Monitor Corporate Actions	4				5	1	3
Analyze Fund Performance	3			3			3
I INVESTMENT SUPPORT Affirm analysis							
T **Tax Oversight/Analysis**	3			2	2		
Determine loss carry forwards	3				3		
Manage Unrealized gain/loss	2			2	3		

A document to **capture user needs** of **various site users** and **prioritize** them accordingly.

- **Ensures that all user requirements are captured**
- **Helps to prioritise user needs and therefore helps to prioritise page elements**
- **Creates a snapshot view of the user eco-system**

Wireframes

- Depict how an individual page or template will look from an architectural perspective. They are the intersection of the site's IA and its visual and information design.



- **Saves lot of time**
- **Ideas can be presented without coding**
- **Helps to validate page elements and structure with the user**

Drawing Wireframes

- **Start by Sketching**
- **Focus on Communication**
  - Keep the wireframe simple, abstract, but representative
  - Number / label components
  - Explain the functionality of each component
  - Map features to system specifications / requirements

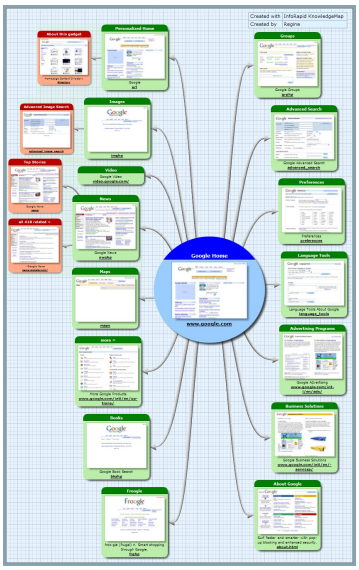
Drawing Wireframes

- **Document and record your wireframes**
  - See how your design evolves, shows what you have considered
- **Use common elements**
- **Get feedback on your design**
- **Iterate, and improve**
- **Use a good prototyping tool to formalize your design**
  - Try app.diagrams.net – it is pretty good, and its free
  - More heavyweight alternatives, e.g. Figma

Drawing Wireframes

- **Use real content** – to show clients what to expect and what they will see
- **Develop a site map** – to show the context of the wireframe, and to plan out navigation
- **Consider using a grid layout**
  - Determine layout of the main components with boxes
  - Add in information using text size/highlighting to differentiate between the level/importance of the information
- **Wireframe with the team in mind** – what can be successfully developed?

Site Maps



- Blueprints that show how the site is going to be organised
  - **Provides the high level snapshot view and relationship between pages of the site**
  - **Helps with restructuring the deep hierarchies**

Site map of Google

URL Design

- Translating the site map into a coherent and logical URL design is an important part of site design

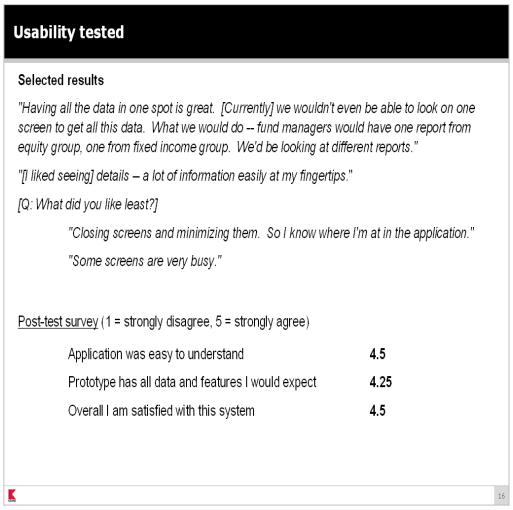
URL Design Tips

- **URLs should be obvious, and inferable**
  - e.g. www.bbc.co.uk/sport/football
  - URLs should use keywords, where possible
  - Shorter URLs are better
  - Try to avoid too many folders / too much depth
  - Use lowercase characters and avoid special characters in URLs
- **Use static URLs when you can**
  - This lets users revisit the information / page
  - Means that crawlers can index the content

HTTP vs HTTPS

- Extension of the Hypertext Transfer Protocol (HTTP) for secure communication (HTTP Secure)
- Communication protocol encrypted using Transport Layer Security (TLS), or Secure Sockets Layer (SSL)
- Protects against man-in-the-middle attacks
- Historically, HTTPS connections were primarily used for payment transactions on the World Wide Web
- Uses long-term public and private keys to generate a short-term session key, which is then used to encrypt the data flow between client and server
- Especially important over insecure networks such as public Wi-Fi access points

Usability Testing



Usability tested

Selected results

"Having all the data in one spot is great. [Currently] we wouldn't even be able to look on one screen to get all this data. What we would do -- fund managers would have one report from equity group, one from fixed income group. We'd be looking at different reports."

"[I liked seeing] details – a lot of information easily at my fingertips."

[Q: What did you like least?]

"Closing screens and minimizing them. So I know where I'm at in the application."

"Some screens are very busy."

Post-test survey (1 = strongly disagree, 5 = strongly agree)

Application was easy to understand	4.5
Prototype has all data and features I would expect	4.25
Overall I am satisfied with this system	4.5

- **Preparing materials**
  - **task sheets**
  - **feedback questionnaires**
- **Conducting tests**
- **Reporting results**

- **Saves unnecessary effort and time**
- **Helps to convince the clients**

Summary

1. The **art** and **science** of shaping information products and experiences to support **usability** and **findability**
2. Aims to overcome the **communication chasm problem**
3. Responsible for bringing together the **user**, the **context** and the **content** to provide a "good" solution
4. There are numerous **IA Deliverables** that help to **understand** the **needs of users** and **produce good solutions**
5. Need to cater for **Bottom-Up** and **Top-Down** usage