Week 10 Assignment: Information Dashboard

Information Visualization Theory and Techniques (2022)

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Information Visualization Theory and Techniques

Context

Boston University supports a custom WordPress website framework to assist its faculty, staff, students, and various schools, colleges, and departments in maintaining high-quality, professional web presences which are in-brand and easy to create. There are two primary users of the framework: technical users, who use it as a base to develop highly customized websites and extend its functionality, and end-users with no technical knowledge who use the framework primarily for its content management system capabilities. Various aspects of the framework which a product owner must be concerned with to provide an ongoing successful experience include the general usability of the custom tools built by the product team, opportunities to improve extensibility and flexibility of the tools for technical users, the alignment of ongoing project development cycles to new product features, and whether or not users of the product feel updates are being delivered in a timely manner.

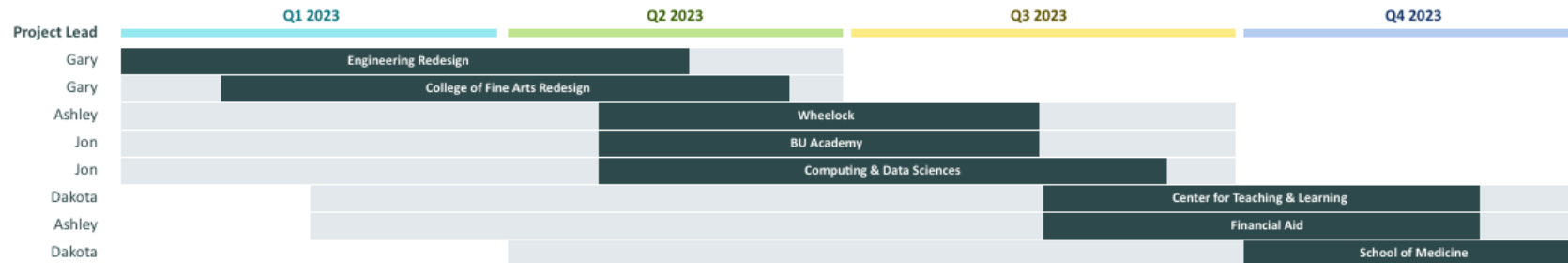For context, I am currently the product owner for this framework.

Data Selection

Datasets for this dashboard consist of the following to make informed decisions about the roadmap:

- **10000ft Project Portfolio:** The product primarily serves as the baseline for all custom development in Interactive Design, and must support the projects it uses above all. This dataset provides the start and end dates of all projects currently ongoing or planned in the future.

- **10000ft Resource Availability:** Product team members share a percentage of time responsibility for project work in an agency-style environment. An ongoing challenge that the product owner must balance is if the team member with the right expertise is available to pitch in at the right time for new features. Product team availability drives possibility for the product manager.

- **ServiceNow Tickets:** These support tickets represent the issues reported from a non-technical user perspective, and help the product owner understand if there are any common themes in the end-user experience that need to be investigated by the development or user experience teams. These should be prioritized.

- **Github Discussions:** Github discussions contain bugs, features, and ideas from the technical user perspective. This includes designers, developers, and vendor partners who work with and build upon the product.

A display of the finalized dashboard, along with justifications of chart selection and techniques, follows.

Boston University Interactive Design Roadmap Planning & Resource Tracking Tool

Upcoming Development Cycles

Project Lead	Q1 2023	Q2 2023	Q3 2023	Q4 2023
Gary	Engineering Redesign			
Gary	College of Fine Arts Redesign			
Ashley		Wheelock		
Jon		BU Academy		
Jon		Computing & Data Sciences		
Dakota			Center for Teaching & Learning	
Ashley			Financial Aid	
Dakota				School of Medicine

Product Team Availability

	Q1 2023										Q2 2023										Q3 2023										Q4 2023									
Alana	0	0	0	0	75	75	75	75	55	55	55	55	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	30	30	55	55	60	60	60	60	60	60	60	60
Jamie	100	60	60	60	60	60	60	60	60	60	60	60	30	30	30	30	30	30	30	30	100	60	60	60	60	60	60	60	60	60	60	60	30	30	30	30	30	30	30	30
Russell	75	50	10	10	60	60	60	60	60	30	30	30	30	30	50	75	75	75	75	75	75	50	30	30	60	60	60	60	60	10	10	10	10	30	50	75	75	75	75	75
Steve	100	100	100	25	0	0	0	0	0	0	0	0	0	100	100	100	100	75	75	75	75	55	55	25	0	0	0	0	55	55	60	60	60	60	60	60	60	60	75	75

🎧 Support Tickets

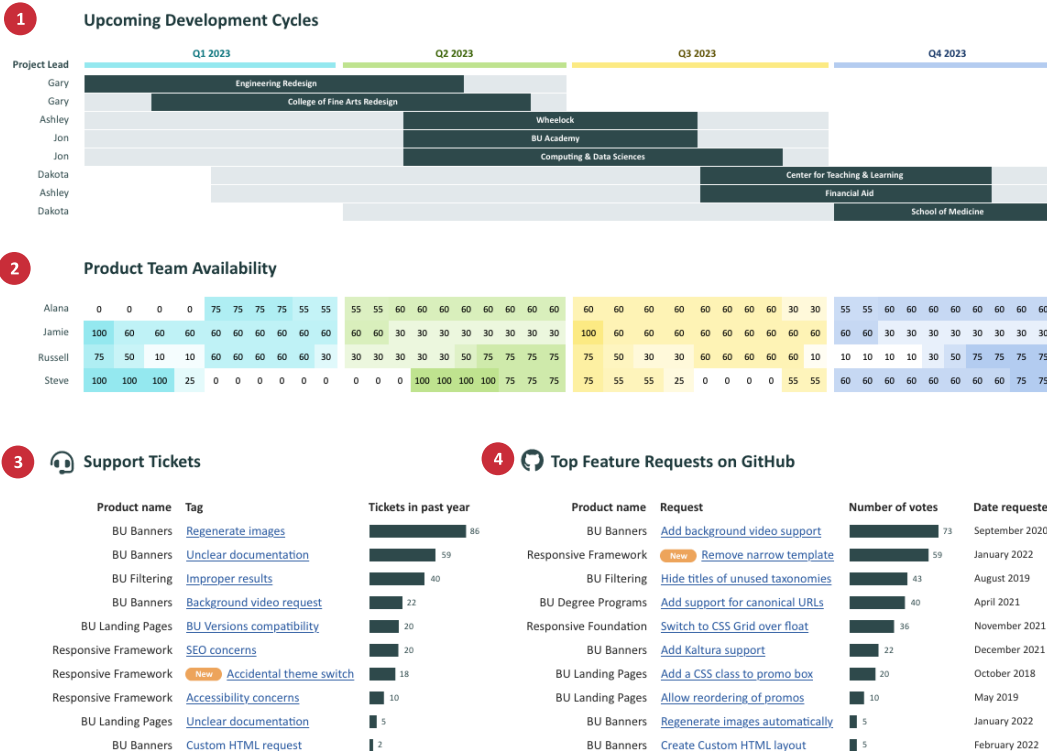| Product name	Tag	Tickets in past year
BU Banners	Regenerate images	86
BU Banners	Unclear documentation	59
BU Filtering	Improper results	40
BU Banners	Background video request	22
BU Landing Pages	BU Versions compatibility	20
Responsive Framework	SEO concerns	20
Responsive Framework	New Accidental theme switch	18
Responsive Framework	Accessibility concerns	10
BU Landing Pages	Unclear documentation	5
BU Banners	Custom HTML request	2

⬛ Top Feature Requests on GitHub

Product name	Request	Number of votes	Date requested
BU Banners	Add background video support	73	September 2020
Responsive Framework	New Remove narrow template	59	January 2022
BU Filtering	Hide titles of unused taxonomies	43	August 2019
BU Degree Programs	Add support for canonical URLs	40	April 2021
Responsive Foundation	Switch to CSS Grid over float	36	November 2021
BU Banners	Add Kaltura support	22	December 2021
BU Landing Pages	Add a CSS class to promo box	20	October 2018
BU Landing Pages	Allow reordering of promos	10	May 2019
BU Banners	Regenerate images automatically	5	January 2022
BU Banners	Create Custom HTML layout	5	February 2022

Finalized Dashboard Design
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Boston University Interactive Design Roadmap Planning & Resource Tracking Tool

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Russell	75	50	10	10	60	60	60	60	30	30	30	30	30	50	75	75	75	75	50	50	30	30	60	60	60	60	10	10	10	10	10	30	50	75	75	75	75
Steve	100	100	100	25	0	0	0	0	0	0	0	100	100	100	100	75	75	75	75	55	55	25	0	0	0	0	55	55	60	60	60	60	60	60	60	60	75	75

③ 🎧 **Support Tickets**

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Note: this dashboard contains fictional data and is only intended to demonstrate what I've learned in this class.

Charts & Techniques Used

① A gantt chart quickly demonstrates how upcoming development cycles align with each quarter (Ferdio, 2018). The color palette assigned to quarters uses soft tones, while darker emphasis colors are reserved for data and the "new" tag (Few, 2013). The project lead is listed to assist the product manager in identifying which stakeholders will be directly affected by the roadmap.

② A set of heatmaps reduces the cognitive load to understand which product team members are available for each week of each quarter (Knaflic, 2015). This information allows the project manager to make quick decisions about feature feasibility and alignment with development cycles. The color scales match each quarter above, removing the need for repeated labels.

③ A table of support tickets shows priority themes in customer feedback by displaying a list of the most frequently used ticket tags, and the number of tickets assigned to that tag in the past year, from most to least. Direct links to each tag allow the product manager to dig deeper and scan individual ticket titles. Following best practices, the most critical information in the table uses an inline chart (Wong, 2013).

④ A table is also used for feature requests to make comparison with support tickets easier, and give both types of data equal footing. To help prevent confusion of these two very similar looking tables, an icon is added to the title to help differentiate the data sources visually.

References

Ferdio. (2018, January 11). *Gantt Chart*. Data Viz Project. https://datavizproject.com/data-type/gannt-chart/

Few, S. (2013). *Information dashboard design: displaying data for at-a-glance monitoring* (2. ed). Analytics Press.

Knaflic, C. N. (2015). *Storytelling with data: a data visualization guide for business professionals*. Wiley.

Wong, D. M. (2013). *The Wall Street journal guide to information graphics: the dos and don'ts of presenting data, facts, and figures*. Norton.