IA Signatures of Information Overload

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Information Architecture Heuristics for Building Strategy Against Information Overload

Pending further investigation and documentation, DSIA Research Initiative asserts that the following *signatures* represent related domain behaviors to an information overload (IO) *event*.

Plans that attempt to mitigate these signatures in advance can improve an IA strategy and add value to any targeted user interface and interactive user experience.

DSIA Research Initiative recognizes two types of information overload events. These observations were contributed in 2011 by Nathaniel Davis, founder and curator of DSIA Research Initiative.

Macro Information Overload
Where the abundance of information becomes a quantitative obstruction to an underlying **intention of a system**.

Micro Information Overload
Where the abundance of information becomes an obstruction to an underlying intention of an **agent interacting with a system**.

Root IO Signatures

IO Signature	Description	IA Heuristic	Helpful questions to ask
Literacy Gap	The degree of education that a user needs in order to effectively use and contribute to a knowledge system and information architecture	Keep the gap between what users know and what they need to know to effectively manage their information to a minimum.	What affordances have you provided to promote digital literacy for information management among the users of your target domain? To what degree have you automated the creation of navigation, information organization, and content relationships on behalf of your users?
Volatility	Increased rate of information flow	Estimate the current and potential frequency of information interaction that a domain will produce.	Does your information architecture consider the frequency with which people or organizations create, consume, and distribute information?
Filter Failure	Ineffective controls for determining content quality and relevance	Enable strategies that promote content filtering. Relevancy of information is paramount.	Have you seeded your information architecture with sound information organization and techniques for enabling associative relationships between content? Did your information architecture consider the impact of a user-managed architecture?

Observations
- Root IO signatures can be addressed through direct action.
- Root IO signatures that persist over time appear to create conditions for other IO signatures.

Conditional IO Signatures

IO Signature	Description	IA Heuristic	Helpful questions to ask
Abundance	An excessive amount of information and content	Understand the potential volume of information that your strategy will enable. Then assess the value of such abundance.	Have you estimated content growth and its future impact within a domain?
Utility Gap	The amount of unused and unusable information that is stored within a domain	Avoid enabling information that goes stale. Unused and unintelligible information puts a strain on users and the systems on which they're stored.	What efforts have you made to improve the usefulness of the information that people use often versus the content they'll use rarely?
Feedback	Undesirable human performance or behavioral response as a consequence of an information overload event	Understand how people interact *with* and react *to* computing interfaces.	Have you tested the effectiveness of your recommendations? Have you recommended analytics and future review cycles for spotting signs of anxiety among users?

Observations
- Conditional IO signatures are addressed through indirect action.
- Conditional IO signatures surface as a result of root IO signatures
- Abundance can be present in any IO event. Because of this, it's considered to be the *key* signature of information overload and is why it is highlighted in the two information overload definitions.

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