



## SharePoint Information Architecture

*Architecture: “The fundamental organization of a system, embodied in its components, their relationships to each other and the environment, and the principles governing its design and evolution”\* (ANSI/AEEE definition)*

What is Information Architecture in the first place? Let's break this down. Information is nearly synonymous with data, but is different from knowledge. Knowledge is largely what you know but you cannot document – like the taste of chocolate ice cream. In contrast, information is normally what can be documented, much as data on a computer.

Information can be in two basic structures, structured and unstructured. Structured information is largely like an Excel workbook with words and

numbers neatly organized in rows, with clearly defined column types. Structured information can normally have mathematical functions performed against it like addition or have organizational pro-

### SharePoint Areas of Information Architecture

- Content Management
- Records Management
- Knowledge Management
- Project Management

cesses performed like pivot charts.

Unstructured data is what you have in your basic email, Word or PowerPoint documents. There are no neat columns and rows to query, and no mathematical functions to apply. And like your inbox it tends to accumulate over time. How you organize it is subjective to your personal preferences.

Together, these two types of information can be referred to as content.

Information architecture is the organization of this content by defining it, categorizing it and placing it in specific locations, created for specific content. Information architecture also defines how specific information is related to other information much as how rooms in a house relate to another, by function, purpose, content and various other enterprise aspects. As an analogy, it may make more sense to connect a bathroom to a bedroom than the living room, but a half bath off the mud-room makes sense too.

Staying with the house analogy, when designing the architecture for your house, deciding where the bathrooms go before you start building can be critical. Along with the bathrooms, water lines and drains also need planned. Deciding after the house is built to add an additional bathroom is a lot more complicated as installing the plumbing in an existing house is an expensive, invasive and complicated undertaking impacting more than the new bathroom. Planning ahead with a well-designed architecture insures all the supporting infrastructure is in place.

Much like the architecture of a house, the Information Architecture for SharePoint is how all of the content stored within the lists and libraries is structured, how it interacts with itself and other

data, why it is put where it is, and the structure utilized to define it.

## **Why do you need Information Architecture?**

Like the architecture for your house, a proper Information Architecture sets the foundation for resolving structural, organizational and some design issues well in advance of actual development.

Consider terabytes and terabytes of documents - Word files, Excel files, PowerPoints, videos, audio recordings, corporate documents, finance documents, stuff, stuff and more stuff. Imagine putting all of this in one huge box. Your folder list would scroll to infinity, and most "stuff" would be lost in the black hole of storage. Or, let's create layers upon layers of sites and subsites, each with a specific subset of content within. In either scenario, how would you find anything?

Counting on search is widely viewed as a poor solution to poor IA because unless you are familiar with the site, searching a large site collection or performing an enterprise search will present a large return and require systematic filtering to achieve a useable subset.

Without a well thought out architecture, the net result is a wild wild west rodeo show where everyone is following their own methodology, there is no overall organization and things just end up everywhere with no properly added metadata. Imagine, if the plumber, carpenter and electrician building your home didn't have an architectural plan, what ends up being built would just be a disorganized mess with no rhyme or reason where anything is located. In this scenario, the core functionality of SharePoint is totally unused. You just end up with

a different file system that you search to find what you are looking for. This is not unique to SharePoint, it is an issue all content management systems have in common.

*Key to this governance strategy is the content steward, an individual to oversee the SharePoint content to police the complete and proper use of metadata.*

## How SharePoint Does It?

Information Architecture is managed within SharePoint utilizing a combination of SharePoint structures - tools in our house analogy.

**Sites:** Loosely think intranet sites. These intranet sites can contain pages much like web pages, libraries much like file shares, lists much like excel sheets and other business structures like business intelligence reports

**Site Collections:** Pretty much what it sounds like, (unusual for Microsoft). They are groupings of sites that are normally associated by department or business process, and are linked programmatically by SharePoint. Among other things, site collections are groups of sites that share similar or related content, business purpose and/or metadata parts.

**Terms:** SharePoint terms are master meta-data that can be applied across multiple sites in a site collection, or when added at the farm level shared across multiple site collections. Terms are used to tag documents and list items with searchable, hierarchical meta-data.

**Content Types:** Content types are a form of meta-data that can be linked to documents and document templates for things such as contracts or spreadsheets. Content types are also searchable.

*Deciding on the granularity of the Site Collections and the individual subsites within is critical and needs to be well thought out. Too many sites yield too many places to look and too many decisions to make. Not enough, and a different issue – too much in a single spot – that adds its own brand of confusion. All of this detracts from the user experience and the platform and rollout tends to falter. And experience has proved that resolving these two issues with search simply doesn't work.*

So back again to our house, the site collection could relate to the entire house, the sites could be the rooms, the content types could be types of items that are in each room and terms could describe particular attributes of items in the rooms, or the rooms themselves.

The site collection and site content strategies are resolved in focus groups with leadership, department heads and users. This facilitates the process of compartmentalizing the content and platform into a structure friendly to the organization. Compartment size is designed for optimum organizational structure and is tempered by content volume and SharePoint performance. Much again like the house, the bathrooms may be pre-designed, and the family gets together to decide how many and the best places to put them. You may then also decide how many towels the linen closets need to accommodate. Then the electrical and plumbing is added in to the architecture to accommodate these needs, before the house is

built. When built, everything is in an optimum location with all the connections in place.

The managed metadata term store within SharePoint will transcend both the SharePoint structure and the organization structure and can generate hierarchical content management and navigation that is more tolerant of organizational change. The term store can cross site collections to enable a consistent metadata vocabulary that is controllable by the business. Content types can be added to libraries items and folders and set with default data to reduce the amount of effort required to populate the metadata when new content is added.

The information architecture can also set base plans for growth. By structuring site collections, content databases and externalized storage, the foundation is laid for growth. Much as with your house, when you build in the main water supply, you may choose a larger pipe size. This will enable you to feed the in-law suite addition for your mother in-law when it is added at a later date. When it is all put together in the blueprint, the developers have a clear understanding of what they are building, and the users will have a clear structure when using SharePoint.

- *Robert J Walch (Senior Project Manager)*

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