Technology 7 Framework

Description

Caryn Anderson created this framework for investigating, discussing, and understanding technology. The list serves as a checklist for things to consider when diagnosing technology problems and/or making decisions. Technology tools should advance the primary purpose or mission of the organization and solve a clearly defined problem or meet a justifiable need. All considerations below should be made within that context.

Area	Element	Questions to ask
Components	Hardware	What hardware is necessary or involved in this technology? (or specifications for hardware)
	Operating system	What type of OS is needed or involved? What adjustments to the OS might be needed?
	Application software	What type of program(s) is(are) necessary or involved in this technology?
Agents	Data	What data are involved in this technology? Specific formats? Types of content?
	Standards	What standards are involved? International? Organizational?
	Action	What types of actions are performed by this technology? (exchange, storage, transformation, creation, reading, updating, deleting) What kind of interaction occurs with data in other systems?
Filters	Access	What controls are there over access to the data? (authentication issues, permissions/protection, selection, data views, backups/history)
	Organization	How is the organization of the information affected by the data or the system? Is a certain type of organization of the data or system important to the functioning of the technology?
	Presentation	How does the presentation of data affect its usability? What options are available for how things look?
People	Creators	Who is building the technology? Who will maintain it and provide help?
	End-users	Who will use the technology? What is their function or role? What are their proficiencies and preferences for interacting with information?
	Beneficiaries	Who benefits from the technology? Do they need the output/benefit in a certain form? (e.g., reports for senior leadership)
Costs	Cash	What are the direct cash outlays for the technology? Future costs? Costs to implement? Updates? Technical assistance? Training?
	Labor	What labor costs are associated with the technology?
	Auxiliary	What hidden costs are there? (e.g., climate controlled rooms? Plug-ins?)
Implementation	Steps	What are the key stages of implementation? (e.g., testing, promotion)
	Challenges	What problems might be expected during implementation? What ways are available to avoid or overcome these problems?
	Maintenance	What problems might arise or be overlooked in regards to maintenance? Other systems in place already? Old data stores to be integrated?
Evaluation	Measures	What measures will be used to evaluate the success of the technology? (quantifiable, achievable)
	Plan	What would be an effective plan for evaluating these measures? What obstacles might there be to executing the plan? Are resources needed?
	Results	What constitute "good" results and how should the evaluation results be used?