

ITIL® Poster Series #27

Design is Driven by Constraints

All design activities operate within many constraints. These constraints come from the business and service strategy and cover many different areas, as illustrated in the diagram below.

It is a rare organization that has no constraints on its design activity. The most desirable solution may not be acceptable because of the constraints in place in the organization, as shown in the diagram. The utility and warranty desired by the customer will be the primary constraints that determine the boundaries of a service solution design. The service provider will attempt to fulfil everything requested by the customer in these areas, but other additional constraints may result in carefully considered compromises. The most obvious additional constraint is the financial one. There may be insufficient budget available for the most appropriate or the preferred solution, therefore a cheaper alternative service would have to be identified and agreed with the business.

Green IT concerns have become more and more important to organisations. This means that solutions must have the capability to meet environmental targets, such as sustainability, recyclability and ethically sourced. A solution designer needs to be aware of the organisational concerns to ensure that suitable solutions are produced.

Although all organizations are likely to want the very best that they can get, the designer will be managed by the currently known constraints. It may be possible to try lifting or renegotiating some of the constraints – for instance, by obtaining a bigger budget, but the business decision will be final. The service provider and the customer must both recognize the fact that they are free to design solutions but that they are working in an environment where many external factors can influence the design.

“Design is the Art of gradually applying constraints until only one solution remains.”

