

Preparing for the Systems Integration Experience



What is a Systems Integrator?

A systems integrator is a unique animal that finds pleasure in connecting unlike systems to produce a system or solution of superior functionality. Often multi-disciplined, an Integrator should demonstrate superior expertise in particular chosen technologies and often employ carefully developed processes and approaches to implementation and design. It is this systems' engineering approach and capability that often differentiates an Integrator from product suppliers and consultants.

THE INPUTS INCLUDE THE OUTPUTS

Good design starts with the end in mind. Of course, clear requirements are paramount to building the right infrastructure, but what we don't always do naturally is set up criteria for measuring the performance of what is delivered. The end result should also be built upon clearly defined objectives; objectives, which should have been cost justified and explained in a business case or design brief. Setting high performance requirements which are over and above the basis of the core design, is also a trap to be avoided. This can be seen in design requirements that have conflicting interests. For example, as system may specify high availability but fail to specify system availability. Extending this concept further, system availability may be specified but there may not be budget or resources set aside to conduct Reliability, Availability and Maintainability studies at the outset.

To empower a service provider to become a part of the solution, they need to be a part of the objective based outcomes. The review process should be founded on regular checks of the key indicators built on these mutually agreed client objectives. The objectives are more important to the success of any integration exercise than the project specification itself and they should influence decisions made throughout the entire project life cycle.

What is the most appropriate engagement model for systems integrators? Ethical Systems Integrators survive by performing certain processes efficiently over and over. Those processes may be business processes that ultimately manage an engineering task. What occurs by performing according to the well-established process is predictability for all parties involved. If engineers "show up" engaged under body hire arrangements, then they fully rely on the customers engineering management practices and governance to drive the results. There could be a conflict of interest here which most service providers would dare not mention. Essentially this model transfers the responsibility for outcomes back to the customer. This may be suitable for certain "find out" or investigation elements of consultancy, but in terms of turnkey delivery this should not be necessary if the requirements are solid and agreeable.

WHAT DOES A SYSTEMS INTEGRATOR EXPECT?

When projects are scoped and costed, unless otherwise specified, it is normal practice to only expect to perform a task once. This means Systems Integrators will expect the following:

- Clear structure of client-side stakeholders. i.e. decision makers / drivers
- Fast Decisions
- No decision reversals
- Quotation for additional supply based on all the information and not ideas that require review and further consultation
- Timely provision of Information
- Timely supply of equipment and access to site
- Prompt feedback on Design Submissions when the information is still top of mind

WHAT CAN CUSTOMERS DO TO BE PREPARED TO MANAGE SYSTEMS INTEGRATORS' EFFECTIVELY?

- Understand your system, how it is and how it will become. This is about being clear about current state and future states of the system.
- Know your own people well and isolate the Systems Integrator from the internal organisational culture, unless of course they need to be a part of it to provide the intended services.
- Work with the Integrator to form a partnering team. This may be at the conceptual / preliminary stage where consultancy is required to understand viability of future state and technological suitability.
- Anticipate information and data requirements and be sure to supply it as required.
- Request workshops and additional training to overcome technology and process learning curves.
- Allow the Integrator to become a part of the change management process as early as possible. This includes ensuring scope of the soft side of change such as culture change objectives are understood.