IT Enabling Small and Medium Enterprises

Challenges and Solutions

Small and medium enterprises in India face several unique problems in IT (Information Technology) enabling their systems and services. Many of the observations are applicable to large industries also. This brief write-up attempts to identify the challenges and suggest a roadmap to the solutions.

Some basic facts

- Every enterprise is interested in *solutions* that will directly or indirectly improve their bottom line either immediately or in the foreseeable future.

- End users look forward to *optimum* and *cost effective* solution (as opposed to the best or cutting-edge).

- Each enterprise has its own challenges and business needs. There is no '*The Solution*'.

- The business needs are best known and understood by the management of the enterprise.

- In any sequential process defects left in one stage gets carried over to next stage making it more difficult and expensive to correct at a later stage than at an early stage. In our case first stage is '*Requirements Definition*'.

Handicaps faced by organisations

- Inability to precisely define and convey their requirements to solution providers, which require knowledge of both business and technology.

- It is not feasible to employ full time IT managers with requisite knowledge and experience due to the fact that there is neither full time requirement nor it is affordable.

- Even if willing to setup an in-house IT department, it is almost impossible to get right people

- COTS (Commercial off the shelf) solutions are not always the best or most effective. Issues like selection of right solution, implementation and training needs to be addressed.

- Selection of vendors for custom solution has its own share of problems. Best software vendors find Indian market not lucrative enough thanks to huge disparity between real purchasing power of $ & € and their exchange rate.

- Most vendors who cater to Indian market lack expertise in requirement elucidation and management.

- [According to Watts Humphrey](#) . The CMM guru, topmost reason for failure of software projects is unrealistic schedule. Third topmost reason is changing requirements during development. The culprit is poor requirements definition and management.

- Software vendors who quote without fully understanding the requirements get into vicious cycle of escalating staff costs, inability to convince customer, poor patched up work to somehow complete the task at minimum cost; harming the client and themselves in the process.

- Senior management of the organisation find it difficult to devote sufficient time and energy to review the progress.

How to overcome the handicaps?

Engage a consultant for the duration of the project. But wait! Not everyone can fit into the slot. A fill understanding and diagnosis of the problems goes more than half way to the solution.

The consultant should be

- Experienced in both business and IT domains.
- Capable of understanding clients business needs, both stated and implied.
- Independent of any software vendor / developer.
- Capable of interacting with all levels of the user and software vendors.
- Use right language at right level. Should not use wrong jargon at wrong place.
- A keen observer capable of understanding even new domains he is never exposed to.

Responsibilities of the consultant

- Requirements elucidation. Define requirements in clear terms with necessary details.

- Interact with vendors, assist client in selecting right vendor.

- Closely coordinate with client and vendors to ensure that requirements are met to the satisfaction of the client.

- To act as the client's representative.