# Realizing the business benefits of Enterprise IT

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**Abstract**
The development and implementation of IT/IS systems inherently requires a deep understanding of user requirements. However, experience shows that a key barrier to the success of an IT/IS system, is the manner by which it is adopted by end users. As such, this viewpoint article presents an overview of those typical enterprise IT user traits as experience by the author. These traits are placed in the context of the steps that need to be taken in terms of a lifecycle approach to business systems implementation. Thus, the paper describes those drivers which inhibit the adoption of enterprise IT/IS projects from a user expectation point of view. By outlining key benefits of such systems, the author presents a 6-stage approach to benefits realisation, known as the acronym, ASSIST. By applying such an approach, the management of business process change and delivery of IT/IS should be more achievable, by addressing the specific needs and expectations of different types of users, as identified in the text of the article. In doing so, the definition of those key IT/IS benefits as outlined in the ASSIST phase approach described is therefore a useful addition to existing project management and business analysis tools and techniques, that can be utilised by enterprise IT system delivery managers as well as Senior IT/IS management.

**Summary:** User adoption of enterprise IT/IS systems is notoriously difficult to achieve, and can define the success of failure of a project. By understanding characteristic user traits and user types of such business systems, this paper proposes a 6-stage approach to overcoming this issue. As a result, this approach thereby allows the business benefit of IT to be realized.

**Keywords:** Enterprise IT/IS, Benefits realisation, User adoption, Information Management, Requirements Engineering, Change Management

**Word count:** 2272

**Category:** Viewpoint

**Pullout quotes**:
"Balancing the requirements of the organization as a whole with the needs and expectations of its employees is vital and crucial, to ensuring the success of any IT/IS application."

"The IT/IS organization is faced with overcoming the issue of getting business professionals who are averse to technology, to own and adopt a technology solution"

"Through addressing the needs and understanding motivations of enterprise IT end-users in such a way, the ASSIST approach presented provides a powerful method for realizing the business benefits of IT."

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A question that often arises within many modern organizations these days, is the thorny issue of adoption of new technology – and specifically, adoption of Information Technology and / or Information Systems (IT/IS). How do you get people to learn and use an Information System? CIOs and IT managers are routinely presented with the tricky scenario of essentially selling computer software or hardware solutions to the "business" (i.e. the core operating component of an enterprise), in order for projects to get off the ground and succeed. If it were not already enough to convince management to invest in such endeavors, the IT/IS organization is then faced with overcoming the issue of getting business professionals who are averse to technology, to own and adopt a technology solution.

The benefits of an IT/IS implementation can either be viewed in terms of tangible and intangible components. In terms of the former, a technology solution may increase the productivity of a knowledge worker by reducing the amount of time taken to do a task – thus allowing for a definitive and quantitative measure of efficiency gain. On the other hand, an information system (IS) may also provide and facilitate the flow of tasks within a business process (such as in a sales order matching process, for example). The benefit derived from such a workflow process, may not be directly measurable but may be perceived to be a benefit in terms on an intangible increase in ease of use. Balancing the requirements of the organization as a whole with the needs and expectations of its employees is vital and crucial, to ensuring the success of any IT/IS application. However, when dealing with users of such IT/IS solutions, it readily becomes apparent that the measurement and tracking of benefits in either of these forms is difficult. This is because it requires some level of subjective reasoning about how the IT/IS has achieved its prescribed goals or not. In presenting the case for the business benefit of an IT/IS solution, there are some essential people-focused issues to bear in mind, which drive adoption of technology. The author believes that for any business or IT/IS-led change, people tend to expect:

*Less change, more innovation*: improvement as opposed to replacement;

*Processes and tools to assist productivity*: use the right tools for the job;

*More tightly integrated , yet less cumbersome applications*: have access to a suite of context-specific applications, as opposed to bolt-on, disparate solutions;

*Feature rich applications*: provide users with the ability to innovate and be creative if and when they need to be;

*Performant, stable and reliable IT/IS*: systems should always be available and reliable;

*Less division between the IS organization and the business*: is there a "single voice" which declares and defines the IT/IS strategy for the company?;

*Greater adherence to the needs of end users rather than to convoluted processes / systems*: listen to and address user community needs;
*Transparency of IT delivery*: governance, responsibility and sponsorship for IT/IS initiatives should be visible;

These factors are further compounded when target users of an IS either refuse to use or take an inordinate amount of time to interact, adopt and / or own a system. Traditional strategic IS planning, highlights the fact that IT/IS implementations should always be presented in the light of potential realizable benefits that can be gained. This is at the expense of organizational, team and individual change. Nevertheless it is usually the case that many users of IT/IS applications, tend not to adopt such technological solutions readily: either as a result of their expectations not being met; as a result of fear of failure (not being able or indeed competent enough to use the facilitating technology); or as a result of fear of technology (being comfortable with existing manual or labor-intensive tasks and processes which require little or no machine intervention).

These are, of course, extreme conditions – but how can the CIO or IT manager overcome the barrier of being faced with laggard and / or luddite end users?  In order to understand this, it is perhaps useful to outline the two main forms of user that fall into this category and identify those characteristics that define their relationship with information technologies:

> *The Neophyte Luddite*: this type of end-user can also be classified as being a "power" user in the sense that they are highly proficient and adept at their day job. They tend to realize and recognize the need for productivity and efficiency improvements in what they do (but are usually too loathed to do anything about it). When presented with any sort of office automation system (from a simple spreadsheet through to a full-blown enterprise web application), they will seek to find holes in its existence. In general, such a user will be comfortable with technology but will be averse to too much change in their working practices. A typical example of such a user would be a nominated individual who is a "reference" user of an IT/IS system (i.e. someone who is taken to be a model end user). Typical responses from such users are of the form:
>> *"This system is ok, but I much prefer the tool I currently use"*
>> *"Performance is not so great – so I don't think I will use it"*
>> *"If I am going to be the only person using it, then what benefit has it got to the rest of the company?"*
>> *"Its going to take too long to learn, and I can make do with what I currently have thank you"*

> *The Qualified Luddite*: this type of end-user can be classified as being a senior manager or equivalent, whose contact and use of technology as a whole is extremely limited. In this instance, the individual has almost made it a point not to use IT/IS within their day to day job, as the effort required in order to understand and use it would place a far too great demand on their time. A typical example of this type of user, would be a manager or senior business sponsor who extols the virtues of using IT/IS within the organization, but may not necessarily have a PC on their desk. Furthermore, such an individual may also be characterized by their preference for drafting emails in longhand and giving them to their secretary to be sent out on their behalf. Typical responses from such users are of the form:
>> *"Information Technology is vital to this company and we fully recognize the benefits that such systems can bring to the organization"*

> *"I'm far too busy to get involved with Technology – my focus is the business"*
> *"Speak to IT about this – its not really under my remit"*

In general both forms of user who are not keen to adopt a given IT/IS system, may choose to defer responsibility for their own actions to figures of seniority (or even subordinates), in order to avoid having to justify their own decisions and reasons. Furthermore, as can be seen from the range of responses shown, there can be a dichotomy of views, or even confusion, over how a user perceives their own relationship with technology. As such the key drivers for such users can be said to be their reliance upon the following reasons:

*Their job and their importance*: their role does not immediately require them to be a user of the system (even though they may support and sponsor the initiative at large);

*Lack of time*: they may not have enough time to learn and appreciate the benefits of the system because of their day job;

*Productivity gain*: a user may insist that because of the lack of time that they have available, any productivity gain arising from using an IT/IS system will be at the expense of neglecting their daily work;

*Lack of integration*: power users may be tech-savvy enough to want "the world on a plate" – i.e. they may require the capability, for instance, to carry out their work in any place, at any time, hence requesting IT/IS integration with personal digital assistants (PDAs); cellular phones etc; or access to a multitude of internal and / or external data sources (e.g. MIS reports, planning and scheduling information, client information).

Hence, in order to address such potential end-user behavior, it is useful to outline and present the following fundamental aspects of enterprise IT/IS solutions:

▪ *Ubiquity*: IT/IS is now such a vital part of working life in all major organizations in the world, that it cannot be ignored. It also pervades almost all aspects of an organization: Finance, Marketing, Human Resources, Management Reporting, Manufacturing / Production and down to other subordinate business functions and areas. This is realized through systems such Enterprise Resource Planning (ERP), Customer Relationship Management (CRM) and Supply Chain Management (SCM);

▪ *Communication:* where would many modern businesses be without the ability to have email and internet access? Within the space of 10 years since the advent of the World Wide Web, such technologies have become the vital lifeblood of an organization. More recently, the power of IT/IS has now lead many organizations into looking into using internet technologies to carry voice data (so-called Voice over IP, or VOIP). Whilst it is true that few would dispute this statement, the fact

that such fundamental tools exist, are due to the enormous communication benefits they offer – and the manner by which they have been realized;

▪ *Knowledge*: the concept of an organization having the capability and capacity to learn has long been seen as an integral component of a modern, agile business. Likewise, IT/IS has been well placed to facilitate the management of information and data, which is available to all individuals within an organization. In such a way, individuals within companies now have the ability to harness and add to such organizational "wealth" through mechanisms such as intranet portals, knowledge management systems and other information repositories.

These preceding factors, are key to understanding and persuading those end-users who are unconvinced of the benefits that IT/IS can bring to organization. In order to overcome and address the issue of IT/IS system adoption, a 6 stage approach to benefits realization, known as the acronym, ASSIST is presented:

*Accessibility*: provide easy and simple access to the IS with a shallow learning curve;

*Stability*: the work environment must be amenable to the evolution of work practices - and people, processes and systems should consistently address these needs in terms of support procedures and personnel (i.e. available help and training);

*Simplicity*: the aim and goals of any such IT/IS initiative should be easily understood, non-lengthy, and non-verbose. Communication and documentation should be to the point and reflect the organizational imperative and goals that drive the implementation;

*Innovation*: any IT/IS should provide, as far as possible, the ability to allow the end user to approach and address their work tasks in a novel or productive manner: either via process automation or information access;

*Sophistication*: any IT/Is which is presented to the types of user defined, should at least be an improvement upon existing or historical processes and systems (improvements in terms of efficiency and productivity);

*Transparency*: there should be a business and / or an IT sponsor who is accountable, accessible and responsible for managing not only the IT/IS project scope and focus, but also be available to address user needs and on-going expectations.

Noting that the preceding ASSIST steps all ultimately focus upon ensuring that people, process *and* technology issues are fully encapsulated within any IT/IS implementation, it is therefore also important to recognize and connect with specific end user expectations, and manage them accordingly:

*Manage expectations*: Be pragmatic about user's roles, responsibilities and requirements;

*Provide Reflective feedback and support to individuals impacted by technology*: listen first and respond - be there to overcome fears;

*Introduce business process improvement (BPI) concepts as early as possible*: before any IT/IS concept is discussed, the chance to improve business processes through an analysis of existing tasks and procedures, should be highlighted. As such, IT/IS can facilitate such changes via the realization of streamlined and optimized business process flows;

*Identify "quick wins":* if there is a problem which has an easy solution, it should be fixed sooner rather than later, thereby building trust and showing competency amongst the user population;

*Empower users to be more in control of their IT/IS environment*: provide accessible conduits for training and build in application functionality for navigability (the ability to get around the system); and personalization (the ability to customize the view of information based upon a specific user's information requirements);

*Identify points of low and high level integration*: outline and discuss where and how information can and / or might be shared between other dependent and independent enterprise IT systems for the productive benefit of the user (e.g. email, HR systems, CRM systems, MIS reporting systems);

*Remove distinction between business and IT projects*: ensure clear lines of communication exist between both business and IS organizations to the user, where any such initiatives are seen to have a "single voice" and point of responsiveness;

*System availability and Business Continuity Planning (BCP)*: be focused on ensuring IT/IS applications are stable and robust, and there are policies and guidelines to deal with business or IT crises: performance of an IS significantly improves trust for it, and therefore, directly encourages adoption.

Through addressing the needs and understanding motivations of enterprise IT end-users in such a way, the ASSIST approach presented provides a powerful method for realizing the business benefits of IT.