

Strategic Use in Information Technologies (S.U.I.T) – A Methodology to align I.T. to the Corporate Strategy

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Abstract

Business managers know about business, but are not keen to understand I.T. – nor are they supposed to. CIOs know about IT but at times do not understand Business – nor were they prepared to.

This is the main reason why in Corporate Latin America there is such a low penetration in the use of IT. Entrepreneurs do not understand IT, and IT vendors do not talk in business language. Therefore, Latin American businessmen have not found the payback of IT investments – in fact they still regard them as an expense rather than an investment.

The Strategic Use in Information Technologies (SUIT) is a very simple Methodology that allows Business people to align – with the help of a CIO and/or an external Consultant – the Corporate Strategy with a smart use of IT.

The first step is to produce the Corporate Strategic issues, and select those in which IT can help accomplish them. The second step is to identify which IT (and in what manner) can make this accomplishment possible, thus defining an Information Technology Profile (IT Profile) for the Corporation. The third step is to order the different IT selected into IT projects, in a way that a virtuous circle in the use of IT is produced. This makes the Plan of IT Incorporation (PITI) that suits the Strategy of the Corporation. The last step is to develop the organizational tools to make a follow up of the PITI and evaluate the possible incorporation of the last state-of-the-art in the Plan as it is carried out.

This Methodology is carried out with very simple productivity tools: a spreadsheet and a word processor.

The most important objective of the Methodology is to incorporate the IT issue within the Corporate Strategic Planning process and generate the best mix of IT used in the most suitable manner to match the challenges the Corporation has, and help to acquire strengths, take opportunities, overcome weaknesses and avoid threats. In the end, each Corporation will come out with its particular SUIT according to its Strategy, its culture, and the way it looks at the market.

A second objective for SUIT is to develop the skills within Corporate Management to understand IT as a business tool rather than a technical matter, and be able to “see” which IT used in what way can create value.

The third objective of SUIT is to generate a knowledge database as to which IT are the best suitable for the Corporation, given the performing records of each IT project within the SUIT framework.

SUIT can be otherwise used in many instances, not only Strategic planning. At any time and place where business issues are discussed – be it a new product, the fine tuning of a marketing plan, the selection of a new team to pursue a given objective – SUIT is a fast and easy approach to the smart use of IT in organizations. We use the term “organization” –sometimes identifying it with “corporation”- because SUIT is applicable to any organization – including a Government.

Therefore, with a very simple and understandable set of tools – mostly conceptual, businesslike, and un-technical - the Business management of any size of Corporation can develop the IT savvy that matches his business objectives and skills.

SUIT – an overview

Going straight to the point, SUIT requires as its first input a selected list of **issues**. If we want to use SUIT as a Strategic Methodology, then the issues must come as a result of making a Strategic Plan.

This list of issues is entered in a Spreadsheet, one for each row. Each issue is given a code number. It may be helpful, if the issues have been taken from a Business Tool as SWOT analysis, to identify each one according to the classification that the Business Tool provides for further understanding (i.e. Strength, Weakness, Opportunity, Threat)

For each issue a question is answered: what can IT do for this? A column in the spreadsheet is used for each IT identified, and in the intersection of the issue and the IT a phrase is entered containing a simple tag with the “what for”. For example, if the issue is to develop a new direct contact & sales channel with the consumers, we would have a column with “E-Commerce” and in the intersection, “Web Storefront”.

The outcome of this exercise is a grill with all issues identified and all IT involved that is named “Information Technology Profile of the Company” (IT Profile)

	ISSUES	ERP	OTHER SW	INTERNET	HW PLATFORM	LOGISTICS IT	IT "X"	IT "Z"
1	Reinforce contact with Customers (B2C)	e-Sales Module	CRM	Web Site	New Server			
2	Reduce costs in inventory management (Distribution Channel)	Inventories in Lorries		e-procurement	PDA WI-FI / mobile printers	RFID on Warehouse		
3	Issue 3		SW ISSUE 3		HW ISSUE 3		X ISSUE 3	
4	Issue 4	ERP ISSUE 4	SW ISSUE 4					
5	Issue 5			APP. ISSUE 5		LOGISTIC ISSUE 5		
6	Issue 6						X ISSUE 6	Z ISSUE 6
7	Issue 7	ERP ISSUE 7						
...	...		SW ISSUE	APP. ISSUE...				
n	Issue "n"	ERP ISSUE "n"						

Figure 1

All issues named in the list must at least have **one** IT connected. If there is none, that issue must be removed, since it is nothing where IT can help (strategic as it may be).

Once the “what” and “what for” is identified, the next step is the “how”. Trying to make just one “Mega IT Project” is not a good idea. Better to identify small steps that, according to issues such as the IT savvy of the organization, its culture and the fast results, may end in a Plan of I.T. Incorporation (named PITI) by which a virtuous circle is created. Therefore, the PITI will be materialized by many IT projects that help the Organization understand, use correctly, and create, value for themselves by using IT.

For example, in an organization where there is very little IT culture, perhaps Project #1 will be to give all an e-mail and change the way by which certain things are communicated (starting with the CEO): “do not ask me for a meeting to discuss it; send me an e-mail with your proposal, and let us contrast ideas through this media. Meetings are to decide; e-mails are to deliberate”. This way in which the organization uses IT will result in less time spent in meetings, a clear track of ideas discussed upon a certain matter, a more careful way to express ideas (what you say is gone with the wind; what you write is written on a wall) and a growth in the ability to communicate by all people involved. Learning to use e-mail is easy. The benefits are clear. The CEO will like it. He will ask for more.

In the same manner that all issues must have at least one IT connected, **all** IT identified in the IT Profile **must** be in one project at least. Once this is achieved, the deliverable is a Plan of IT incorporation that meets the exact issues by which we want to use IT. There we close de analysis cycle in this Methodology.

PROJECT 1: Get to consumers	PROJECT 2: Serve customers well	PROJECT 3: Improve Delivery	PROJECT 4: Lower purchase costs	PROJECT 5: Get on ISSUES 3, 7, n	PROJECT 6: Incorporate Tech. Z
e-Sales Module	CRM	Inventories in Lorries	e-procurement	SW ISSUE 3	Z ISSUE 6
Web Site		PDA WI-FI / mobile printers	RFID on Warehouse	HW ISSUE 3	
New Server		RFID on Warehouse	LOGISTIC ISSUE 5	X ISSUE 3	
			APP. ISSUE 5	X ISSUE 6	
				ERP ISSUE 7	
				SW ISSUE	
				APP. ISSUE...	
				ERP ISSUE "n"	

But things are done once they are working, rather than once they are designed. Therefore, it is necessary that each Project is assumed by someone, that it has resources allocated, that it has deliverables defined (clearly described and properly received), that it has a timetable. And that there is an organization, or at least a role, to which it must report. The projects must be written and then implemented. Someone must assume the role of coordinating the different projects that compose the PITI, as well as to be alert as to new state of the art use of the IT selected. That organization or role playing within the organization is something that, once started, must not stop. Just as it happens with, say, Quality Assurance (QA).

The results of the actions undertaken within each project will serve as an input to monitor how well the organization is doing in the smart use of IT; which IT are better understood and applied, where are Strengths built in generating value using IT. When this is done over and over within the Organization, IT begins to be a real support to value creation and knowledge-based development of the Corporation, since it develops the necessary skills to identify which IT are the better ones fit for the Corporate objectives, culture and competitiveness.

We have applied this methodology in Classes with business cases using the same Business Case for different students. In the overall math, the Technical Profile was more or less the same, but the Projects designed were different. This is because each one “felt” the Corporation in his own way, giving more importance to this or that issue.

SUIT becomes therefore a hand glove tool for business managers that want to incorporate IT to their organizations. It really becomes a taylor-made suit for their corporate needs. Therefore, it is business itself the main driver for IT rather than the other way around, and businessmen understand this language.

Stage I: Addressing the right issues

Practice in the use of SUIT has shown that SWOT is a good tool to deliver issues, but not the only one. Strategic Planning, which includes having made a SWOT analysis, is by far a more comprehensive approach. Balanced Scorecard techniques will help a lot, since they deliver measurable targets within the Strategic Plan.

Anyhow, IT are a powerful strategic tool to help acquire strengths, take advantage of opportunities, surpass weaknesses and avoid threats. It also helps to develop a good Customer Value Proposition, materialize a Vision of the Corporation, and accomplish the Corporate Mission. They definitively have something to say when it comes to the “how” of things, specially when the “how” deals with creating, delivering, distributing or mining knowledge that is useful for the organization. In the heart of processes there is IT to be counted on: Workflow, BI, ERP and the like are IT that help to the development of know-how.

Therefore, to produce the right issues for SUIT methodology an Organization needs to have a Strategic Planning tool, and a Strategic Plan that comes from the Strategic Analysis.

Once you have your Strategic planning tool, and you come to the issues this Plan has delivered, in each issue the same question must be made: how can IT help here? If there is a “somehow”, then that issue becomes a part of SUIT.

But SUIT may be used in any business decision, be it strategic or not. The question is always the same: is this something that IT can help to solve, or may give a value, or may support? When the answer is yes, then SUIT starts its process.

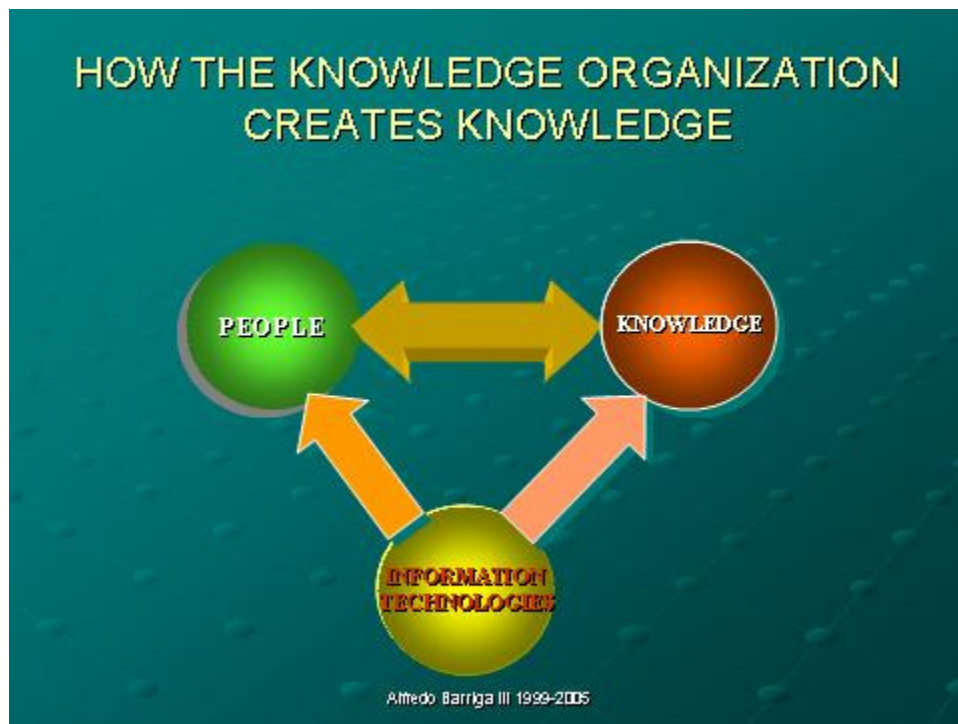
Another important matter: do not think of IT only in issues such as cost cutting and process betterment. Incorporate IT as part of your Strategic Planning. Even though your Strategic Planning has not named it, make the following two questions:

- a) What *other* businesses may we develop using IT? Internet is a Sales Channel, and more. It is the gateway to market intelligence, it tells you what does the market appreciate of you, it gives information on how customers perception of value varies through time, it tells you what is important now and here. IT for logistics may help you streamline your value cycle and add a new dimension to your actual business. IT for business processes may add up a completely new vision of your business and take you to new and more profitable roles in the value chain. And so forth...

- b) What *business model* may we adopt using IT that may become a competitive edge? IT are changing Business Models, because IT are a knowledge tool, and as such, they support new ways to do Business. Take Dell, and how it completely changed the value cycle of retail distribution of computers. It is the Business Model that gave Dell the competitive edge, based on IT. Not IT themselves. And it is the way they use IT within the Model that has kept “me too’s” out of sight. With a strong interaction between IT and Business Models, IT allow new Business Models to come true, and new Business Models strain the use of State-of-the-art IT. Likewise, they are a driver to conduct Industrial-based Corporations into becoming Knowledge-based Corporations.

Stage II: Finding the right IT and the right use of IT

The knowledge organization is an interaction between People, Knowledge and IT Tools. People create knowledge. But People also use knowledge. By using knowledge that has been previously created by other people, they “capitalize” or “leverage” their own knowledge capital. By doing so within an organization, they also contribute to the growth of the knowledge capital of the organization. That is how a knowledge-based organization works. And what makes this possible is the smart use of IT.



To gather knowledge, people need IT. To retain knowledge, IT is needed. To grow knowledge, IT is the tool. To distribute knowledge, IT makes it possible. A knowledge corporation *needs* IT. An Industrial corporation (meaning “from the Industrial Society”, not as a “manufacturing corporation”) *needs* transforming itself into a knowledge corporation, in order to survive. People in an industrial corporation *need* to become knowledge workers, to survive as well-paid workers.

Does *everything* in the Organization have to do with IT? Are all Strategic issues connected with IT? The answer will vary according to how much a knowledge organization the Organization is. The nearer it is to a knowledge organization, the more it will rely on IT for strategic issues. And the more intense it will be in IT use. Not “any” use, but *smart use*, that is, it is not IT in itself what matters, but what you do with it. A Corporation may spend billions in IT and come to nothing – worse still, it may come to bankrupt. Another Corporation may use IT in a more intelligent way, well below in figures than the latter one, and still be a winner.

What makes IT a winner is the killer application. That is already a paradigm of IT. It applies not only to IT manufacturers, but to any organization. Each Organization must find its own killer application(s).

Therefore, it is not only a matter of saying, “This issue may be helped by using that IT”. The focus is on “why” and “how”. IT is important to business managers as long as they are able to understand four business questions:

1. What *is* this IT?
2. What is it *used for*?
3. *How* is it used?
4. How much does it *cost*?

When you reduce IT to answering these four questions, any businessman will be able to understand IT as a strategic business tool and make decisions on what to use, what for to use it and how to use it. This is a language that business people are used to, and understand. It is therefore important for the CIO of the Organization, alone or supported by a Consultant, to be able to visualize which are the IT that align with the Business objectives and how can they be used. Then, the Business Manager will decide on how it must be used. It is this latter application that will go in the “Information Technology Profile” grill of the Organization. In a certain sense, the IT Profile incorporates all the “killer apps” the Corporation has for its particular needs.

IT vendors should understand this process and help both CIOs and Consultants in answering the four basic business questions described above. Businessmen do not need to purchase a “State-of-the-Art High Tech Platform incorporating an ERP with Client-Server Architecture under ASP in three layers and a Relational Database”. If IT vendors focus their speech on technological advantages, IT will be bought for... Technical reasons! How can IT vendors expect then that their products be visualized as business tools rather than technical issues? How can they expect businessmen to see the payback of IT?

But if the issue is “being able to have access to management tools 24 hours a day in any part of the world, activating at any time the business processes that are required as an answer for business events”, then most possible the CIO will say the answer is a “State-of-the-Art High Tech Platform incorporating an ERP with Client-Server Architecture under ASP etc. etc.” Being able to have access, etc. etc. is the Business issue, and the ERP is the IT that goes in the IT Profile, used for that particular objective. And if more business issues are connected with the use of an ERP, then the ERP will become a killer app by itself. That is how it works with business. Just as it does with consumer-based use of IT. Playstations would have meant nothing if “state-of-the-art” games wouldn’t have been demanded by teenagers. Demand for consumer based bandwidth and Webcams would

never have come to place if them teenagers would not have found it “cool” to make videoconferencing with friends across the world. Same thing in business! IT vendors must change the switch between SW (Short Wave) to FM, that is where customers *listen*.

Anyhow, following these criteria, Management and their IT staff must find out which is the best suitable IT for each issue and why. Wherever there is an issue with no IT applicable, that issue is not a part of SUIT. The outcome of this process is the “IT Profile”, and therefore, building the “IT Profile” is another filter to erase issues that are not a part of SUIT.

Stage III: Building the IT Incorporation Plan

Once we have found our killer apps, and defined which IT to use, how and why, there comes the stage to materialize this in a Plan to incorporate the IT selected. This in SUIT Methodology is named Plan for IT Incorporation (PITI), and it is the path from the actual IT reality to the reality described in the IT Profile. The point is, how to do it? Do we make a big Master Plan and deliver it by stages? Do we make small Projects and deliver them one by one at a time or during a period of time?

Clearly, experience once and again says it is better to have the “small steps” approach. Which does not mean you must forget the “big map”. In fact, IT Profile is always present, only it is “chopped” in smaller IT projects that are easier to manage and may be carried away with more support from the organization.

That *is* the critical point: IT incorporation *must* be good news to *all* the Organization. Management must be the greatest fan of IT incorporation, but not the only one. It is very easy for workers to highjack an IT project. All people in the Organization must go along in the process of incorporating IT to its work. For this to happen, the next things are essential:

- a) Consider the IT culture of the Organization
- b) Make an internal Marketing Plan, stressing the opportunities and challenges for the people in the Organization with the PITI
- c) Show how with the PITI knowledge capital for each worker may be achieved, being this the main benefit for people, since their contribution for the Organization is also a contribution to their own professional capabilities and professional career
- d) Beware: some people are not prepared to incorporate more than one IT at a time in their work. Being unable to walk and chew the chewing gum at a time is not drama in use of IT. It may be a fact, and one that can be amended.

Therefore, to achieve the IT Profile we must make IT Projects that take the Corporate IT cultural level into consideration. But that is not the only consideration, nor the first. The first consideration is typically technological, and can be called “Technological preference”. To put it straightforward, you cannot do an IT Project consisting of an ERP if you do not have Computers and a Server, and Databases, etc. Ok, you can make it a part of your ERP Project. But if you are to need that HW platform for ERP and for *other* projects, like managing your Corporate Virtual Storefront, then the HW platform is definitively a different IT Project, that must be undertaken in first place.

Using IT for business purposes means you must use business measurement tools to know if and how you have achieved your business goals where IT plays a part. IRR or NPV may be useful ratios but not necessarily the only ones available. Again, Balanced Scorecard may provide the way you will measure how well strategies that use IT have been achieved and to what extent this achievement has been directly related to the IT Project you have defined. Therefore, a third criteria to define your IT Projects is that they must be *measurable*.

You may object to the latter by asking: how do I measure the results in the case of a primary HW platform project, that will be useful for other IT Projects? Well, you have just answered yourself in the same sentence of your question. We are not talking of necessarily measuring in money terms (IRR, NPV). We are just talking of measuring that the goals for which the Project was undertaken have been *achieved*. So, how do you measure it? Well, by checking that all later IT Projects that use the HW Platform have done well with that Platform, and that you have not have the necessity to invest in another platform than the one used in your preferred IT HW Project. Conversely, if you had to invest in other HW Platform in order to implement the later IT Projects, then your IT HW Project did not achieve its goal. The important thing is that you *do* have a way to measure the success of your IT Projects.

In order that all IT defined in the IT Profile fit your PITI, all of them must be at least in one Project. This means that IT defined in the IT Profile may be used in more than one IT Project. For example, you may have defined that a web storefront will be an application you will use to have a better knowledge of your customers. Yet, because of IT cultural criteria, you will make two projects using the same application: the first will be named "Web Storefront", but the second will be named "e-CRM implementation". The objective in the first is to sell through the Internet, whereas the second is to develop a top quality customer attention. In the first project along with the Storefront you will need Internet access, perhaps broadband, integration to ERP at Inventories, Sales and Accounting modules. In the second Project, along with the Storefront you will need e-CRM, BI tools, perhaps web cam facility to interact with customers that use web cam, etc.

Had you done all this with the traditional approach (and the participation of your CIO), perhaps it could have been done in different stages according to IT itself (First, all CRM as the Back Office stage, then all the Storefront). Or, it may have well been one sole Project. But SUIT Methodology has made a different approach, and two different Projects have been identified, both pointing to business goals, both taking into consideration IT culture of the organization, and both well aligned with a Business Strategic view that has determined what to do, in what order and with which *intention*.

Writing an IT Project that will be evaluated by Business Managers is no piece of cake. It must be written in business terms, but technological aspects can not be avoided. And, it must make reference to the IT Profile that matches the Strategic Issues identified in SUIT. This is most necessary to make the whole process coherent and business-like.

Some very simple and well known Business tips may help:

- a) Put a name to every Project that has to do with the Business Goals you want to achieve, so as to make it closer to end users and beneficiaries of the Project
- b) Specify the connection of the Project with the Strategic Issues it is helping to achieve, since that *will be the driver* of the Project

- c) Clearly specify the *deliverables* the Project will have and the *Success Criteria* by which it should be measured.
- d) Clearly specify the *reach* of the Project, stating carefully i) what it includes and what it does not include, ii) who are the people in the organization involved and which is the impact on their workplace and on the contents of their work. It is very usual that people involved in an IT Project “understand” that this or that particular issue was “of course” included in the Project. And people involved in the success of the Project unconsciously get involved in aspects that were not contemplated in the beginning – specially those regarded to “who is going to assume which role”. In the end, unless it is clearly stated, a part of the team ends playing *all* roles in the Project (including doing things the end user must do)
- e) Specify the *organization* that will be needed to make the Project. Refer clearly to the Man-Hours involved, both from external sources as from internal sources.
- f) Identify and explain the “*entry barriers*” that the Project has and how they will be overcome
- g) Explain any other *business risks* the Project has and how they will be managed
- h) Describe your Internal Marketing Plan to make all the team in your Organization “buy” the Project.
- i) Make an economic evaluation of the Project, and be careful with hidden costs. If the project will bring lower costs or bigger gross margin, or bigger sales, make a forecast in a spreadsheet and come out with financial figures such as IRR, NPV or Payback term.

With all this work done, the analytical cycle of SUIT is finished and achieved. Now comes the way to make it happen.

Structuring the IT Project Follow-up

Implementing IT has its own particular issues, that make it a bit different from other Investment Projects. Nevertheless, the clue to a successful case in IT Project is the same than in any business project:

- 1) A well defined follow up process, that includes measuring the grade of completion of the Project, reporting of deliverables, and control of tasks committed
- 2) A procedure to identify potential threats to the achievement of goals in the Project, and propose action plans to avoid the threats
- 3) An effective cost control of the Project.

Discipline is a key attitude towards the successful completion of an IT Project. This is because to some extent IT Projects have a lot of creativeness in their completion; the environment is very unstable and quick to change; there are continuous challenges that threaten the Project and have to deal with people, IT, and how they work together.

One simple approach to this can be to write a Memo of meetings that must be done regularly, and gather there what issues were discussed, what agreements were done, and which commitments were made. If this is followed up meeting after meeting (specially when it comes to agreements and commitments) there is by far a lower risk that the Project may go out of focus. It is nearly a Paradigm of IT Projects that “every one knows when and how they start, no one knows when and how they end”. In our consultancy work, this very elemental tool has proved to be very powerful to ensure that focus is not

lost, tasked and commitments are clearly established, and the sense of multidisciplinary team is achieved. This latter is very important because, in the end, an IT Project *is* a multidisciplinary Project: a Business Project that uses IT in a certain way. IT Staff alone cannot do it. Workers and IT Staff alone cannot make it possible. But Management, workers, and IT Staff can make it. External Consultants can also be useful when necessary, specially to provide an external look of what is going on, how is the IT adoption process being carried out, how is the risk management of the Project being addressed, etc. Or, he might be needed as an external Project Manager if IT Staff is with enough work with their day to day business.

The “Internal Marketing Role” is also a key issue for a successful development of the IT projects. It does not begin and end with one only and typical “Start Up meeting”, but is rather a continuous process in which users must be informed, supported, helped and cheered. IT staff, as a more technologically-driven employee, tend to underestimate this side of the Project, and yet nowhere is it more necessary than in a IT Project. People have a love-hate type of relationship with IT. Their approach is normally one of apprehension and fear in a first stage, until they are “charmed” by the usefulness of IT. It is an emotional process that needs to be addressed properly. Otherwise, the users might turn to “the dark side of IT” and become an entry barrier rather than a driver agent in the implementing of IT. So, they *must* know what is going on, how it will affect their working space (in a broad sense), which opportunities arise with the IT Project that can leverage their career within the organization and as professionals.

If the organization has enough Budget to support a structure made for SUIT, then the better. We have worked anyhow with SMEs as external consultant, and things may run well as long as there is a real commitment and enthusiasm by the Management team, that plays a key role as the real leader of the IT Projects, with the IT Staff playing the role of “internal supplier”. Our experience says more: given the enthusiastic support of the Top Management, it is even easier in SMEs than in big corporations, because Top Management is nearer to employees in the former than in the latter.

Conclusions

SUIT is a Methodology that creates a process within the organization to ensure the incorporation of the IT that make sense for the Strategy of the Organization. As such, the only way to have results using SUIT is by... using SUIT! It is a practical methodology rather than a model. We think it will stay as such as long as IT is a never-ending-to-evolve business tool, which from time to time (and each time faster) happens to appear with a new paradigm that affects businesses as they exist, or even whole industries as they exist.

With practice, SUIT helps non technological managers incorporate IT into their managerial skills, vision, tasks and performance. It also helps the organization to understand which IT and why are the best suitable for their strategic vision. It also helps the people in an organization to undergo a process of IT adoption that is not traumatic. It finally helps to create a virtual circle by which IT drives knowledge creation and knowledge creation drives IT smart use, adding muscle to intellectual capital of both the organization and its employees. In the end, the entire organization is driven towards a knowledge organization.