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INSOURCING :
RESTRUCTURING THE I.T. DEPARTMENT
FOR BETTER BUSINESS FOCUS
AND
INCREASED EFFECTIVENESS

ARMSCOR CASE STUDY

By

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(THE ARMAMENTS CORPORATION OF SOUTH AFRICA)
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1 INTRODUCTION
I.T. in business over the years has frequently raised expectations which have not been satisfied. Frequently, organizations resort to restructuring the I.T. function in order to overcome managements dissatisfaction with the failure of I.T. to meet their expectations. Robertson has over a number of years at conferences in South Africa, Munich, London and Tel Aviv reported that indications are that management of in excess of 70% of corporations are dissatisfied with the performance of their I.T. Departments. At the same conferences, a diagnosis of the major factors has been presented and proposals made for addressing the “real issues”. In December 1995, the opportunity to test these concepts in practice arose when Differentiated Strategic Solutions was appointed by Armscor on open tender to develop the new Armscor I.T. Strategy. Jof Nelson was the client Project Manager on the project. This paper overviews the process that was adopted and reports on the results one year later.

The process involved a market focused strategic analysis of the I.T. environment at Armscor which gave rise to a user satisfaction rating of 42% in which it was found by the consultants that, while the Technology aspects of I.T. at Armscor were of a World Class standard, most of the soft issues identified by Robertson were not receiving adequate attention and this was the source of dissatisfaction. A comprehensive Strategic gap analysis was undertaken and from this a detailed three year strategic action plan was developed. Armscor have been engaged in the implementation of this plan since June 1996.

As a result of the I.T. Strategy, the Armscor I.T. Department has significantly refocused on business service and business effectiveness and significant improvements have been experienced. The paper outlines some of the steps that have been taken and some of the benefits that are already being experienced. It is concluded that the implementation of a market focused I.T. Strategy at Armscor has given rise to a situation where outsourcing is unlikely to be found necessary and where insourcing has been found viable.

2 PROCESS OVERVIEW
The I.T. Strategy process applied in this particular case comprised the following major components:

a. Executive Workshops
A total of five workshops were held with approximately 100 middle to senior managers. In these workshops, the issues giving rise to I.T. underperformance were highlighted and a series of Critical Success Factor determinations for different aspects of I.T. were undertaken. As a consequence of the market focused strategic analysis, it was determined that there was a considerable gap between the expectations of users and what was being delivered. It was also established that the gap lay in areas not traditionally addressed by I.T. Departments.

b. Systems and Technology Audit
A high level systems and technology audit was undertaken of all I.T. systems, processes, etc. The conclusion reached was that there was little room for improvement and that the technical aspect of I.T. services was of a world class standard. It was clear that the level of dissatisfaction expressed by users had very little to do with technology. Accordingly, it was recommended that a number of technology projects should receive lower priorities than previously intended and the focus of the strategy project was directed at addressing the major shortcomings identified by the user workshops. It was concluded that significant opportunities existed for improving user satisfaction without incurring major capital expenditure.

c. Strategic Gap Analysis
Having determined that a strategic gap between actual and expected service levels existed in every I.T. service area, a series of workshops were held with I.T. management during which the detailed steps that could be taken to close the strategic gap were identified and documented. Significant
reference was made to the "real issues" identified by Robertson.

**d. Strategic Action Plan**

Having determined the steps to close the strategic gap, an intensive series of workshops were held to develop the Strategic Action Plan. This plan involved the systematic and iterative walkthrough of the gap actions in order to allocate responsibilities, time frames, required internal and external manpower requirements, capital expenditure implications and expected financial and service level benefits. In the process of iteratively developing the plan with two alternative manpower scenarios, a high level of understanding of the implications of the plan was obtained thus resulting in a high level of plan ownership by the management team. This resulted in a plan which, to date, has been implemented with no further external input.

**e. Implementation**

The I.T. Management team have been involved with the implementation of the plan since mid 1996 and subsequent sections outline in more detail what has been done.

**3 OUTCOME OF I.T. STRATEGY**

As a consequence of the I.T. Strategy Project at Armscor, the I.T. Department re-evaluated it's position and focus on a number of different fronts including:

**a. I.T. Position in Armscor**

I.T. in Armscor is located in the Finance and Administration Division and will remain in this division for the foreseeable future. As a consequence of this positioning, the I.T. Department had always regarded itself as purely a demand driven service provider rather than a partner with the business users. The I.T. Strategy clearly identified that I.T. should seek to enter into a partnership relationship with the rest of the organization paying particular attention to it's role as a specialist advisor dedicated to identifying opportunities to add value to the core business operation.

**b. Type of Services Rendered**

In the past Armscor I.T. concentrated on delivering services as requested. A consequence of this approach was that projects were undertaken without consideration of the business benefit and in many cases, the nett effect was that the I.T. Department was perceived not to be adding value to the Corporation. I.T. is now giving careful consideration to the business problem that requires solution and seeking to be proactive in identifying the business problem that the user is seeking to address and thereafter making recommendations as to the most appropriate value adding solution. The possibility of a "do nothing" recommendation is now recognized.

**c. Tasks Performed by I.T.**

I.T. previously provided technology services such as programming and technical support. Today I.T. is seeking to be proactive in advising the business and understanding the business environment and business opportunities. The medium term objective is to reach a point where I.T. identify business opportunities before the business user and assist the user to turn these opportunities into effective business solutions that truly add value to the stakeholders in Armscor.

**d. What are I.T. Starting to Do**

I.T. are now starting to send staff to work with business users for a period in order to understand the business and the practical problems associated with using I.T. in the business context. Recruitment is now focusing on personnel who have the ability to understand the business users and to communicate effectively with them. Business users are being invited to spend time in I.T. in order to gain a better understanding of what I.T. has to offer and the practical constraints on introducing new solutions. Business users are being actively involved in projects.

**e. What are I.T. Stopping**

I.T. are actively seeking to stop thinking in a technology blinkered fashion and waiting for users to bring problems and requests to I.T. I.T. is now actively approaching the business with possible solutions that will add value and with recommendations to eliminate value destroying use of I.T.

**f. How I.T. Should Do What They Must Do**

I.T. are seeking to get away from the old, "conservative" I.T. Department approach and change to be more business benefit oriented with open communication with the business users. The focus is on redefining the I.T. shop to be seen by the business users as value adding.
g. Implement Business Case

I.T. are moving towards a model where projects are only undertaken if there is a clear business case to demonstrate that value will be added to the business by the project. If a clear business case demonstrating value added cannot be developed and delivered, then projects are not undertaken.

4 REVISIT THE I.T. ORGANOGRAM

After careful consideration of the impact of the I.T. Strategy on the I.T. Department, it became apparent that the old Department structure was no longer appropriate. Accordingly, the Management Team undertook a detailed analysis of the existing structure and the structure that was appropriate to achieving the strategic objectives. As a consequence, significant changes were implemented.

In particular, the department was restructured towards a business unit model with its own administrative and financial sections. The change in operational focus was also reflected by the introduction of a Business Support and marketing section. The development section was refocused on the total system life cycle and a call desk was implemented in order to provide central liaison and communication irrespective of the service required.

Psychological testing was introduced in order to ensure that personnel were matched with different groups of users in order to minimize personality clashes resulting from incompatible personality styles and also to ensure that personnel were suited to their positions in terms of their natural personality preferences.

5 I.T. ALWAYS THOUGHT AND PRACTISED I.T.

I.T. had always thought of themselves as purely a technology department. As a result of the strategy, I.T. started to move towards thinking of themselves as business solution providers. In particular:

a. User Business Control

I.T. recognized the need to give the users control over the business direction of any project and to interact with them in order to determine exactly what the business problem and business objective were.

I.T. are also involving users in the project management of I.T. projects. In this way, I.T. are able to draw on the extensive project management experience of the business users thus avoiding past suggestions that I.T. was doing a second rate project management job and ignoring the expertise of the business users. As a consequence, business users are now gaining a much more realistic understanding of the realities of I.T. projects and are no longer making unreasonable demands in terms of deadlines and deliverables. The user is now far more involved in establishing the project plan and in ensuring compliance. The result is more realistic planning on both sides.

b. Make it Fun

The more you know about anything the easier it is to contribute and give worthwhile input, this makes the work more enjoyable. A job well done and well received is far more satisfying and enjoyable. There is a lot of satisfaction to be gained in solving a user's problem before he realises that it exists.

c. Understand the User's Problem

An I.T. person who understands the user's problem is able to offer meaningful solutions. Many I.T. people spend much of their time trying to solve the technical problem they think the user has rather than understanding the business problem. In many cases, the solution may not be a technical solution, changes in business process, implementation of better standards and many other business focused actions are often called for in order to solve a problem that was previously seen to be a technical problem. A major benefit is that I.T. are no longer seen to be making the problem worse.

6 THINK BUSINESS

Flowing from the above, a fundamental paradigm shift is in process, the I.T. personnel are learning to STOP THINKING I.T. and START THINKING BUSINESS. In order to do this, I.T. are starting to work with the users and learn business terms, the business of the business is the business of I.T.

I.T. personnel are participating in and managing non-I.T. projects or subsets thereof such as the current BPR project.

Considerable emphasis is placed on encouraging and equipping I.T. staff to listen to users rather than telling business users how they should run the business. As a direct result, I.T. personnel are learning to speak the user's language. The improved understanding is greatly reducing miscommunication and solving of non-existent problems giving rise to new problems that were not there in the first place. End result: more
satisfied users at lower overall cost, a WIN WIN situation.

The focus on becoming part of the business requires that I.T. stop trying to be different. In the past, I.T. personnel tended to go out of their way to dress differently and behave differently. There was a "them" and "us" mentality. Today, that is being actively discouraged and the focus is on becoming an integral part of the business. At the same time, by becoming part of the team, the I.T. staff are starting to get in behind the scenes in the business where the business of the business really happens. This can only take place once I.T. has earned acceptance and respect as part of the team.

7 USER INVOLVEMENT

As indicated previously, a vital consequence of the new I.T. direction has been a recognition that the users have considerable expertise that is of value to I.T. and is necessary for a successful project outcome. Flowing from this recognition, users are being invited to work in the I.T. Department and to run I.T. projects. In those cases where the user has the necessary expertise, I.T. has even gone so far as to appoint the user as the chief system designer. I.T. simply provide the necessary services to assist the user achieve his stated objective and advise as necessary.

8 WORK TOGETHER

The emphasis on becoming part of the business, improved communication and understanding has brought about a culture in which I.T. are now actively seeking to form relationships and even partnerships with the business community within the corporation.

By giving the users what they want in the way they want, it levels of user satisfaction are improving. The number of satisfied users is steadily increasing.

In seeking to achieve user satisfaction, the I.T. department is seeking to reverse the normal I.T. tendency of over promising and under delivering. Today the slogan is "under promise - over deliver". I.T. staff are encouraged to be honest with users in terms of deadlines, problem understanding, lack of knowledge, etc. Users value honest answers, the truth comes out eventually anyway.

At the same time, I.T. have recognized that there will be differences in opinion but that there is a responsibility on the part of I.T. to "sell the difference in opinion" where they can see pitfalls or uncertainties which the user does not recognize.

Working together with users to set deadlines and targets greatly improves the likelihood of achievable targets.

9 CONCLUSION

By stepping back from the situation and appointing outside specialists to evaluate the real needs of the internal markets, Armscor I.T. were confronted with a major gap in between the level of service that they thought they were delivering as compared to the user's opinion of the service. After the initial shock, the I.T. Department recognized that this presented a great opportunity for improvement and wholeheartedly committed themselves to developing the I.T. Strategy to a point where the action plan was sufficiently detailed for implementation.

The recognition of the need for user and market focus also caused I.T. to take their eyes off technology and place them on the business with a resulting reduction in technology spend and increase in efforts to understand the business and get to know the users. The outcome to date has been a significant increase in the level of user satisfaction and a steady move towards I.T. being viewed as a business partner rather than technology freaks always seeking to spend money on new toys.

This has opened the way for the Armscor I.T. Department to deliver a quality, value adding service to the Corporation which is expected to largely eliminate debates about centralized versus decentralized I.T. as well as eliminating much of the pressure which might otherwise have built up for outsourcing. The final outcome is expected to be a more integrated and effective business I.T. service than could be achieved by implementing an artificial commercial profit boundary between I.T. and the business which is the current trend with outsourcing. The long term benefits of insourcing in this way are expected to be considerable.

FOOTNOTE : ARMSCOR

Armscor is the main procurement and acquisition agency for the South African National Defence Force. Armscor offers the SANDF a full range of procurement and acquisition services covering the full spectrum of concept development to final delivery of sophisticated custom weapons and defence systems.
FOOTNOTE : dS²

Differentiated Strategic Solutions (dS²) is a firm of independent business information system specialists concentrating on offering I.T. and management consultancy services and bespoke system development on a project basis with a strong emphasis on strategic solutions and on creating and sustaining competitive advantage. Through associates in The MaXus Group and other associated specialists they are able to provide a wide range of additional consulting and other services in support of the concepts outlined in this paper. dS² can be contacted on (011) 886-9863, fax 787-0132.

ACKNOWLEDGMENTS : ARMSCOR

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It is also dedicated to Ingrid and my children Alexandra and Struan and my parents, Angus and Thelma without whose support the knowledge shared in this paper would never have been acquired.

DEDICATION

This work is dedicated to God our Father, His Son, our Saviour Jesus Christ and His Holy Spirit Who is the source of all wisdom, understanding and knowledge and the reason for our existence, without Whom this work would not be possible nor of any significance. For THE LORD is the God of Knowledge and by Him actions are weighed (1 Samuel 2:3).

BIBLIOGRAPHY


