

Women, leadership and information technology

The impact of women leaders in organizations and their role in integrating information technology with corporate strategy

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Abstract *Management literature suggests that the values of future organizations may suit women to a greater degree. Self-knowledge, building relationships, facilitation skills and empowering others are emerging as essential skills for all managers. These skills are increasingly identified as the central ingredients for successful executives – moving from the male autocrat of the 1970s, to the male communicators today, then to the male or female leader/enabler of the future as described by the Karpin report. The paper explores the impact women are having on their organizations, including studies which focus on information technology. The authors also look at whether traditional female values are a help or a hinderance in creating globally competitive organizations and conclude that a blend of traditional male and female values are essential to the success of organizations, in a global context.*

Introduction

Controversy surrounds the study of the way that traditional female values affect women at work. It is often easier to ignore sex differences and investigate work behaviour patterns through other lenses. Identifying and discussing sex as a determinant of behaviour can lead to a simplistic view that is easily rejected. Yet, the culture of the majority of organizations is predominantly male and women who have been working their way through these organizations are often aware of the differences created by the fact that they are women working in male cultures. They have few role-models of their own sex and many women are still searching for appropriate expressions of behaviour and values in organizations. But the values of Australian organizations may be changing in the future; changing in ways that will take advantage of the blend of male and female values.

Organizations at the cross-roads

Australian organizations will change dramatically over the next ten to 20 years, according to the Boston Consulting Group (1995). Economic deregulation has continued to open Australia to more international competition, particularly Asian markets. This means that there is now an increased

emphasis on the contribution made by Australian businesses in identifying how to add value to products and processes. This added value must come from people and technology.

Australian organizations are at the cross-roads in people management. In the past, Australian organizations have been content to espouse the value of good people management or to describe people as their most important asset, whilst doing little to take care of this asset. Now, however, more is needed. Full-scale commitment to changed behaviour, at every level, is required if Australia is to compete successfully in world markets. Policies will not be enough, action will be required. The action that is needed will mean that behaviours and values will have to change. If Australia is to meet the challenge of the future, organizations will have to place more value on their people, releasing and using their creativity to develop better products and markets.

These changes are needed in both the private and the public sectors. Sturgess (1995) points out that the old paradigms in public administration, that is, of hierarchical and self-sufficient monopolies, will have to give way to organizations that are flexible and that focus on providing value to society. This point is emphasized in *Enterprising Nation* (Report of the Industry Task Force on Leadership and Management Skills, 1995) (Karpin Report) which claims that Australian enterprises are not moving quickly enough to meet the challenges of globalization. The profile of the emerging senior manager identified in this report includes characteristics such as:

- high-level of education;
- global-focus, world traveller and resident;
- information-sharing;
- extensive delegation;
- results-driven;
- able to cope with high levels of pressure; and
- adaptable to rapid change.

Future senior managers will value working collaboratively within partnerships, internationally, nationally and within their own organizations. Recognition of the strategic value of partnerships will out-weigh competitive values. In the past, according to Hofstede (1980), Australians have been seen by Asians as emphasizing individual achievement at the expense of organizational achievement. Research undertaken by the Institute for Research into International Competitiveness (1995) shows that Australian managers are not well regarded as people managers by their Asian counterparts. A Singaporean entrepreneur quoted in this report stated:

A major personal adjustment for an Australian manager is to move from an autocratic management style to team decision – working and participative management.

Strategic alliances do not just “happen”, they have to be managed. The most important aspect of the alliance is in the relationships that are formed.

Encouraging and managing multi-level contacts between countries requires a strong mutual understanding of priorities, development of trust, shared planning and a carefully managed information-flow. Communication, in this context, cannot be allowed to find its own level, active approaches are required to achieve market leadership.

According to Corbett (1995), the change towards strategic alliances in retailing has been spearheaded by the evolution of technology. Technology provides data and information quickly and accurately, thereby helping to facilitate strategic alliances between organizations.

Strategic alliances are needed to overcome the differences between organizations. Understanding between the organizations is a pre-requisite to achieving a common mission. Strategic planning is not just doing more of the same. Many strategic plans flounder due to their failure to make real changes in cost-structures, organizational culture and basic strategy. In creating strategy, new capabilities must be developed. The inherent capabilities of technology are limited by the people who drive it. Furthermore, people are, in turn, limited by their values.

“Traditional” male and female values and organizational needs

Research into differences between the values and behaviours of men and women is often based on stereotypical descriptions of “traditional male” and “traditional female” characteristics. It is the experience of the authors, however, that while most males have “traditionally male” values/behaviours, not all males fit neatly into this stereotype. Likewise, not all women exhibit “traditional female” behaviours exclusively. Notwithstanding this, it is also the experience of the authors that very few people deny that differences exist in the values and behaviours of men and women, at work.

Many of those differences have been identified in research undertaken into the communication patterns of men and women. Gray (1992) and Tannen (1990) have, separately, reached similar conclusions regarding those differences. Basic differences appear to be that:

- Males value power, competency, efficiency and achievement. However, this may mean that they fear not being “good enough”. The positive side of this is that men strive to achieve. The negative is that fear of making mistakes can lead to risk-averse and conservative behaviour.
- Females value communication, relationships, working together towards a common purpose and understanding others. Women have difficulty coming to terms with not being understood. Women appear less threatened by mistakes. Making a mistake is not seen by women as a comment on competence; it is simply regarded as something to be corrected. The negative, however, is that relationship issues can outweigh purpose.
- Male communication is more directed towards providing answers. Men, mistakenly, offer solutions to women and thereby invalidate women’s

feelings. Women are more likely than men to talk about their problems as they are seeking personal recognition. They are not looking for solutions. However, male communication, being more strongly directed towards solutions, is often at cross-purposes with women's needs, hence "I want understanding and I get a solution". The strength of this type of communication is its convergent, solution-oriented thinking. Men pursue solutions to problems with great interest and energy. The negative is that, by reaching solutions too quickly, men may not adequately explore the problem.

- Female communication also often invalidates male needs. Women are more likely to mistakenly offer men advice and assistance and, thereby, unwittingly invalidate male competence – "I want approval and get suggestions for improvement". This attitude supports an approach to continuous improvement, however, it can have the effect of demotivating other people.
- Males disagree, while females disapprove. Men are better at focussing on issues, women are better at focussing on people. Therefore, males are better at continuing to work with people whose standards differ to their own. Females have more difficulty. This means that men can adapt to different situations. But, on the negative side, they are also more likely to continue to accept people whose behaviour is aggressive and dysfunctional.
- Males tell, females ask. This is due to the different motivations for communicating. Males are motivated by the need to convey or gather information, whereas females are more complex in their motivation. Females are more likely to communicate not only to convey and gather information, but also to explore their own thinking on issues, to overcome or understand their feelings and to create understanding. The negative of traditional male communication needs is that it creates a communication pattern within organizations that operates on a "need to know" basis. Women are more exploratory in their communication, and less instrumental. They are more likely to communicate issues that are not judged as "necessary" by males, but, in doing so, can provide a broader understanding in others.

It is evident that many of the characteristics identified above as "good management skills" are the characteristics ascribed to "traditional females".

However, men and women who adopt these traditionally "female" behaviours will find resistance from more conservative managers. This is partly due to the fact that organizational power and culture are still based on the "traditional male" model. This culture has been reinforced by conservative decisions (made by males) in selecting managers. Whilst technical ability and skills gains promotion to upper-middle levels, different criteria apply to reach the senior management echelons. In most organizations, getting to the top is

dependent on how you are judged. That is, how you are judged by the people in power (usually men, regarding themselves to be of sound judgement). Survival in organizations is often determined by the ability to conform with criteria established by those who have already succeeded, and have been reinforced, usually in the male culture.

Another reason that there will be resistance to change in the male management culture is that the dominant paradigm is aversion to mistakes. Change leads to uncertainty of outcomes. It is far easier to talk about changed attitudes and behaviour than to demonstrate them.

Yet another barrier to achieving change has been created by the dominant “need to know” basis for disclosure and communication. Being fed the information that you “need to know” to do your job leads to narrow and resentful thinking when change is imposed upon you. By not communicating the bigger vision, people have been taught to not think strategically.

Information technology: agent of change?

In the information technology industry, the need to think strategically is becoming more urgent.

There has been a change in the information technology environment over the past 20 years. The attitudes that prevailed during the 1970s, and the 1980s, were more suited to male values than to female values. Information technology professionals were seen, at that time, as possessing highly technical skills and knowledge which were inaccessible to the rest of the organization. Control and power over resources rested in the hands of these professional males. They were surrounded by mystique, which suited both the information technology professionals and the rest of the management structure (also mostly males).

The information technology professionals liked being behind the technological curtain as it allowed them to retain control (power). It also allowed them to be seen as highly competent in fields incomprehensible to the lay-person. This was at a time when technology achievements were wrapped up in large computer systems, which required months, even years of dedicated development time, absorbing huge resources. Information technology was not expected to be accessed by lay-people. It was for experts only. Communication was highly instrumental and often used layers of jargon that even the professionals found difficult to keep up with. The information technology professional told management what they could have. Rarely did they ask what was needed.

The technological curtain also suited the mostly male managers who were running the organizations. This is because they did not have to risk learning something they could not master. By employing experts, they were off the hook – no longer at risk of appearing personally incompetent, but they still accrued the benefits of a competent organization, riding on the achievements of the information technology professionals. They were also used to an environment

where they were told what they needed to know. If their understanding was incomplete, they were not concerned as they were confident that the solution would be found by the experts.

In this scenario, technology drove business strategy – a highly inefficient way of operating. In the mid-1980s, massive technological changes occurred, placing computers within reach of all members of the organization. The lay-person could no longer be complacent in his/her ignorance. The explosion of personal computing and the enthusiasm with which this technology was adopted by organizations and individuals, led to an increase in understanding and a requirement for different expertise. The new experts had sufficient knowledge of the technology to begin to question the inaccessibility of the hardware and software.

Pressure on business and increasing competition also led to the need for Australia to seek wider markets. The failure of the finance and insurance industries in the 1980s, led to re-structuring and high levels of staff turn-over (Dunphy and Stace, 1990). In turn, this led to a loss of expertise and an urgent need for new technology to fill the gap. The technology could no longer be of mammoth proportions and budgets, it had to be cost effective and contribute to the overall efficiency of the organizations. Information technology professionals had to learn to fit their work in the business strategies of their organizations.

At the same time, the markets were changing. Global markets were being developed, with much of the communication between countries being done through information technology. The information side of information technology was coming into its own.

Meanwhile, the technology side was also becoming increasingly competitive, more readily available (cheaper). Equipment that had been highly-expensive and charged with the mystique of experts, became yet another commodity to be traded on the market.

Social changes, at the same time, led to an increase in highly-educated women participating in the work-force to a greater extent than ever before. These women participated in the work-force with the expectation that the path to the top of the organization was equally accessible to them as it was to their male counterparts. Certainly, they found that the technology was accessible and many women moved into information technology areas.

Yet, only a small percentage of senior professionals in the information technology profession are women. Yap (1995) also found that senior female information technology professionals are five to 12 years younger than their male counterparts and have 7.7 fewer years of work experience. Being younger and less-experienced than most of your colleagues may have a significant effect on ones confidence and ability and probably means that one is less likely to strive for, or be encouraged to strive for, promotion and positions of responsibility.

These views could be further supported by the fact that female information technology professionals earn less than their male colleagues.

However, Yap (1995) also identified that female and male information technology professionals have the same education background; are given the same opportunities to participate in training programs and career development activities; and progress in jobs toward the top of the hierarchy in the same way. These apparent contradictions were explained by Yap (1995) as resulting from female information technology professionals being constrained by factors such as social pressures and their own values and priorities. Yap (1995) also says that organizations appear to treat their male and female information technology professionals differently.

“Technology” versus “information”

If women information technology professionals are being held back in their progress through organizations by their values, what does this mean? Earlier, it was stated that women value communication, relationships, working together towards a common purpose and understanding others. Does this mean that the information technology environment is hostile to those values?

Men, on the other hand, were identified as valuing power, competency, efficiency and achievement. If the emphasis in information technology is placed on the technical side, it is evident that these values would lead to success.

However, one could argue that the emphasis must, increasingly, move to the information side of information technology, and a more strategic view is needed to successfully compete in today's markets.

In this changing environment, new approaches are required. To develop new approaches, the values of the past must be challenged. Much of that challenge is coming from successful women information technology professionals. Baatz (1995) looked at the influence of people such as Ellen Knapp, vice-chairman of technology at Coopers & Lybrand; Mary Cirillo, senior vice-president for global finance operations and technology at Citicorp; and Patricia M. Wallington, vice-president and chief information officer for Xerox Corporation on their respective organizations. These women speak in language that demonstrates their values. Phrases such as “working in teams”, “collaboration”, “strategic planning” and “marketing and communication” are used by them liberally. Knapp sees her mission as harnessing the knowledge base of others. To achieve this, she identifies the need to work collaboratively and to bring together multi-disciplinary skills.

Cirillo describes a strategy of continuous improvement and planning to help her keep information technology aligned with the global business strategy. Wallington has, also, aligned information technology strategy with global business goals, as she seeks more and more flexibility and increased productivity from the information technology environment.

To create a new path, one first has to stop walking down the old path. In the mid-1990s, the information technology industry is taking tentative steps away from old values. IT professionals are no longer only bombarded by advertising material based on technology, more and more, the brochures crossing their desks are selling titles such as *The Challenge for Change*, *Building Shared*

Visions and Team Learning. The need to transform information technology professionals is well recognized. What is not so well recognized is the pool of talented information technology women professionals, whose values more closely match the new values that are needed.

Of the few female information technology professionals who have persisted in their careers over the past ten to 15 years, many are now at the top of their organizations. For example: Jane Treadwell, CIO of Centrelink; Christine Page-Hanify, director of information services and deputy principal of the University of New South Wales; and Christine Gillies, CIO of the Bank of Melbourne.

However, many other women have left the information technology profession. Perhaps the different experience of information technology professional men and women, as identified by Yap (1995), has contributed to this situation.

Male and female values are blending

Information technology is an industry in transition. At the moment, the industry is in the no-man's-land between the old reality and the new. It is in limbo between the old sense of identity and the new. It is a time when the old way is gone and the new does not feel comfortable yet (Bridges, 1993). The old culture was directed towards providing the answers, not at meeting the needs of the users. It was a male culture, with the strengths and the weaknesses of that culture. The weaknesses in that culture, however, are blocking the change that is needed.

To meet the demands of the global market, there is a need for strategic thinking in the information technology industry, complemented by customer-orientation. As the values of Australian organizations change, the values that are inherently female will offer opportunities to businesses. New communication skills are needed. Communication that provides detail, asks questions, explores problems and seeks collaborative solutions increasingly meet the needs of the emerging markets. This is particularly important in the current moves to outsource the information technology services of organizations.

To encourage these new values, organizations may have to make some firm decisions not to continue walking down the old pathways.

Technology is the means by which new methods, new systems and new organizational structures can be developed to maximise productivity. Management skills aimed at easing the introduction of technology are increasingly important. The Boston Consulting Group (1995) expresses the view that technological advances have an impact on the management skills required for in the next century. Those skills include:

- a thorough understanding of systems requirements and options;
- the ability to develop strategic alliances with suppliers;
- personal skills to build and maintain relationships;
- the ability to share rewards; and
- an emphasis on group, rather than individual, motivation and responses.

These skills are, at last, a blending of traditional male and female values.

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