

**Why boards need IT skills**  
**– more specifically - why**  
**boards need women with IT.**

**Author:**

**Sonja Bernhardt**

**Technology entrepreneur**

**and Chair AWISE.**

**January 2007**



Published January 2007

ISBN-13: 978-0-9803205-1-0

**The Author**

Sonja Bernhardt is a technology industry entrepreneur and passionate about encouraging more girls and women in technology studies and careers. . Sonja can be contacted at: [sonjab@awise.org.au](mailto:sonjab@awise.org.au)

**Acknowledgement and Disclaimer**

This article was originally written and published for the “Encyclopedia of Gender and Information Technology” 2006 Idea-Group Publishing, edited by Eilleen Trauth. – the original article/chapter was titled “Boards, Skills and Women – The Australian Context. Whilst made available via AWISE for publication the views expressed herein are those of Sonja Bernhardt.

© Copyright AWISE, 2007

**Non-commercial reproduction**

Information in this report has been produced with the intent that it be readily available for personal and public non-commercial use and may be reproduced, in part or in whole and by any means, without charge or further permission from AWISE.

We ask only that:

- Users exercise due diligence in ensuring the accuracy of the materials reproduced;
- That AWISE be identified as the source; and
- The reproduction is not represented as an official version of the materials reproduced, nor as having been made in affiliation with or with the endorsement of AWISE.

**Commercial reproduction**

Reproduction of multiple copies of materials in this report, in whole or in part, for the purposes of commercial redistribution is prohibited except with written permission from AWISE.

# **Boards, IT Skills and Women – the Australian**

## **Context**

### **I N T R O D U C T I O N**

In comparison to research on gender diversity on boards, little research has been conducted on the diversity of board skills required for survival in our fast dynamic world, where boards are becoming more responsible for IT strategy and where skills to optimize technology strategy and execution for maximum business value are in demand.

In this paper the importance of IT knowledge to overall board governance and the value of women with IT skills as board members are explored. A gender profile is developed from the Australian Stock Exchange (ASX), the Equal Opportunity for Women Agency (EOWA) and the Women on Boards 2004 reports. A discussion on relative contributions to board performance is undertaken.

Under the banner of diversity, research into board composition historically has focused on gender issues – where more specifically the lack of women appointed at board levels has been discussed. There is a significant volume of research that verifies the lack of female representation on boards. One example from the EOWA 2004 Census shows that for the top 200 companies listed on the ASX at 30 June 2004, the number of women executive managers in Australia's

companies has increased since 2003 by 1.8% to 10.2%, while the number of women board directors has increased since 2003 by only 0.2% to 8.6%. Additionally, 42.0% of companies have no women executive managers and 62.1% of women (but only 31.4% of men) occupy support positions – as opposed to the line positions that ultimately lead to CEO or Board appointments.

This article draws links between IT skills, governance and women with IT skills at the board level.

## **B A C K G R O U N D**

A view is emerging that the number of technology failures are increasing and that corporate boards in Australia are failing to meet expectations in this area. Various studies show that IT promises are rarely fulfilled, with failure rates as high as 97% being quoted for some projects (da Cruz, 2003).

With this volume of failures resulting in poor organizational performance, combined with increasing attention on corporate governance and a growing realization that IT portfolios are complex, one would expect more enterprises to implement frameworks for IT governance to more tightly focus their IT processes, people, and priorities on achieving business goals. As Broadbent (2004) says, “Lack of director experience in IT, or just plain ignorance, is an increasing problem in the technology age. The business significance of IT capabilities and assets is now very high”. Yet Broadbent further explains that very few of the top 100 Australian boards have even one board member with top-

level expertise in integrating IT into business processes or envisioning how IT might be changing their industry.

This is reflected by Turnidge's (2002) findings: "In Australia board skills continue to reflect legal, financial and engineering backgrounds, often with relatively limited international experience or skills related to the knowledge economy (such as science or technology)." Similarly, research firm Burson-Marsteller (2004) reported that just 5 percent of the global Fortune 500 companies have a CIO or former CIO on their board.

The call to include technology skills on boards is further supported by Huff, Maher and Munro (2004) who point out that boards are disinclined to discuss IT and do not comprehend the associated risk. Drawing the conclusion that "emerging technologies and changes in the business environment are redefining the role of corporate boards with respect to IT governance. By asking the right questions, bringing senior IT management into board discussions and recruiting IT talent at the board level, boards can become much more effective in dealing with IT issues."

Increasingly, researchers are making the links between good governance, diversity, and corporate performance. For example, Brown (2003) points to a study that quantifies what many investors intuitively have guessed, that companies with weak governance trail the market.

The call for diversity on boards has been widely discussed. The best boards know how to have a good fight. Diversity in experiences, skills, viewpoints, perspectives, talents, and ideas is a positive (Sonnenfeld 2002). Diversity is about enriching the leadership platform with different perspectives by having a team of people with different frames of reference”. This is further supported by Allen (2003), who states, “companies that will succeed in the 21<sup>st</sup> century are the ones that will learn and adopt fastest...and that embrace diversity of thought, style and culture.”

## **W H Y   I T   S K I L L S**

Case Study ID550 by Ovum (2003) advised that investment in IT “requires consistent firm strategies, effective internal and external communication and a careful assessment of risk. Implementation is often complex, with organizations seeking to balance the needs of multiple stakeholders while ensuring a satisfactory ROI.”

Turnidge (2002) supports this view by warning that deciding what is good governance in the technology age is becoming increasingly difficult. With IT having such a direct and immediate effect, boards are as accountable for IT and the associated strategic risks as they are for finances and legal compliance issues. IT governance cannot be designed in isolation from the other key assets of the firm (such as financial and human) and ultimately requires representation at board level.

The argument to include IT skills on boards is strongly supported by Burson-Marsteller's (2004) research, which found that boardrooms need to open their doors to directors with technology skills and competencies in order to unleash innovation and economic growth. Leading companies who had transformed the business landscape by including technology experts on their boards delivered annual returns 6.4% above their industry average.

Broadbent (2004) flags another key driver as being risk management: "IT assets are now just one asset class among others that companies deal with... But increasingly, if not managed appropriately and well integrated into the business they leave organizations exposed to huge risk and competitive disadvantage." Broadbent further warns that boards don't always have expertise in "envisioning how better IT-enabled business can improve positioning." This skill and risk profile is reflected by a statement made to Broadbent at a 2004 presentation: "I don't want to see my company in the headlines for the wrong reasons. We suspect we are at risk but we are not sure exactly how to assess that." The author suggests that IT expertise at board level might address this.

The issue can be brought down to risk, as Siwik & Randall (2004) indicate: "The emerging standards of corporate governance are forcing businesses to abandon their traditional silo-based risk management approach. As we have seen with Enron, silo-based risk management permits business leaders to point the finger elsewhere with nobody ultimately accepting responsibility ... Every company, regardless of size, should work to measure, manage and monitor risk in a coordinated manner. Businesses are a complicated blend of knowledge,

technology, people, processes, and capital, and the only proper and effective perspective is a comprehensive and strategic one.”

Thus we can draw the conclusion that if board governance is to be effective within our changing environment where strategic issues include the significant financial and operational issues associated with IT investment, then board members must demonstrate an ability to understand the implications of IT decisions. IT expertise belongs on the boards of companies alongside traditional financial, legal and general management skills.

## **W H Y   W O M E N**

There is no question of whether women are qualified: to be board members, CEO's, scientists or other professional roles. That was decisively answered years ago: some are and some are not, just as some men are qualified and some are not.

Research indicates one compelling reason to appoint women as board members: improved performance/outcomes. Despite this, Australia lags behind the USA and Canada, where 86% of US Fortune 500 companies and 62.4% of the Canadian Financial Post 500 have at least one woman in an executive management position.

This lag is demonstrated by the EOWA 2004 Census. It shows that women, although 43% of the total Australian workforce, currently account for only 3.2% of top executives, with only 5% in the line-officer pipeline. And according to the

ASX in 2003, women held only 8.4% of board directorships in the top 200 ASX companies, and 47.3% of Australian companies had no female directors. Therefore there is still a long way to go within Australia towards recognizing the value of appointing women at board level and the resulting improved performance.

The question to ask is, does selecting on gender necessarily result in improvement in the business areas that count? This question was addressed by Adler (2001), who tracked 215 Fortune 500 companies, comparing their financial performance to industry medians. He found that “companies that smash the glass ceiling also enjoy higher profits.” Furthermore, “the companies with the highest percentages of female executives delivered earnings far in excess of the median for other large firms in their industries.”

Brown, Brown and Anastasopoulos (2002) findings support those of Adler. It tracked the financial well being of Canadian firms with two or more women on their boards in 1995 to see where they stood six years later. It found that firms with women board members were much more likely than companies with all-male boards to be leaders when ranked by revenue or profit.

These findings are reflected in Australia in the 2004 EOWA census and the 2004 Women on Boards research, which indicated a significant trend of better financial results for companies with female directors.

Other studies show that boards with more women use more non-financial performance measures such as more regularly reviewing customer satisfaction, employee satisfaction, gender representation in management, improved community relations, innovation and connection to a wider customer base. This shows that appointment of female board members broadens the focus of issues that boards consider. While these studies do not make a theory they do strongly suggest a positive relationship between the presence of women on boards, good corporate governance and financial performance.

Simply put, board diversity, specifically an increase in the number of women board members, is good business. It strengthens governance, promotes marketplace competitiveness, builds employee morale, and is a source of positive Public Relations for shareholders and the public. And improved performance in those areas adds up to improved financial performance (Women on Boards 2003 Report).

## **W H Y   W O M E N   W I T H   I T   S K I L L S**

Sonnenfeld (2002) poses some interesting questions: “How well can board members with mostly similar experiences and backgrounds ensure that the full range of strategic risks facing their organization have been identified?”, and “How can board members with similar perspectives and frames of reference truly assign a value to risk management and oversight?”

The question of assessing risk begins to be addressed by Brown, Brown and Anastasopoulos (2002) who found that more female than male directors pay attention to audit and risk oversight and control; that women, more than men, tend to consider the needs of more categories of stakeholders; and that women, more than men, tend to examine a wider range of management and organizational performance. In addition, the research found that 94% of boards with three or more women (but only 58% of all-male boards) insist on conflict-of-interest guidelines.

With respect to IT knowledge, the challenge is to locate board representatives that are able to ask the right questions to unravel the “secrets” of IT in such a way that other board members can appreciate the associated risk and business imperatives without the need for technical detail, acronyms and other jargon. Craig (2004) flags that “the research literature shows that there are many people in Australia who have established that they believe passionately about the need for diversity... They consider that women can bring a different perspective and alternative skills that will help create better systems for all.” This is further supported by Jamnik (2004), who advised that in the knowledge economy better decisions will be made by including women in the decision process.

Thus the preceding discussion implies that if women with IT skills were appointed at board level then:

more attention would be paid to associated IT risks

implications of IT activity would be considered enterprise wide, encompassing a wider field of stakeholders

better decisions would be made

IT strategy would be linked to business objectives

board performance would be improved

company financial performance would be improved.

## I S S U E S

### **Where are the women?**

Anecdotal evidence in Australia is that those seeking board members advise “they would have appointed a women but could not find one”, which raises the question of “Where are the Women?”

Key issues that need to be considered when seeking suitable women for board appointment are:

- (a) women are not visible at executive levels
- (b) an increasing number of women are departing corporate firms to establish their own businesses, and
- (c) the majority of firms (up to 97%) within the Australian IT industry are small (less than 20 staff) not publicly listed firms (ABS 2002). This trend appears evident globally.

Traditionally, board recruiting in Australia has tended to be fairly informal, conducted largely through existing directors’ networks. Historically this has

appeared to work, but it naturally limits the pool of potential candidates. The author suggests that despite frequent claims to the contrary, there are talented individuals who qualify as potential board nominees. The problem lies in the fact that they may not be well known within directors' networks because they are not ex-CEOs or Directors of public companies.

This implies changes are needed to recruitment practices of boards for those seeking to appoint women to boards and more specifically women with IT skills. Such changes would incorporate actively seeking women who may not be visible in the top 500 firms, but who possess the required skills and abilities but have opted out for smaller organizations or set up their own businesses (Allen 2003).

More specifically, boards seeking women with IT skills ought to adopt a strategy of aligning with industry associations that are attracting women with business and IT skills. Interestingly, the past 2 years has seen an increase within Australia of projects and programs targeted at attracting, registering and skilling up board ready women (WIT, Women on Boards, AWISE) – therefore the pool of potential candidates is increasing, and the issue is looking in the right places.

### **Women and Profits**

More research is needed on cause and effect re the better financial performance associated with appointment of women on boards: particularly in gauging if it is due to the impact of women on boards, or if successful firms tend to be less conservative and more innovative, and more likely to appoint women.

## **Gender vs Individual**

While a link between greater board diversity and company performance has been established, research is required to determine how much of this is due to more balance in gender etc per se, versus better selection of individuals with the right skills outside of the reigning social group or network.

## **F U T U R E   T R E N D S**

Fundamentally this chapter is proposing 3 future trends:

- (1) board governance to incorporate IT strategy
- (2) appointment of people with technology skills, and more specifically women with IT skills, onto boards, and
- (3) modifications to the board appointment recruitment process to increase the visibility of women who are not current or ex CEO's.

This is about improving company performance, where a genuinely representative board brings together individuals with different experiences, skills and points of view. This suggests the need for careful consideration in the future of the board composition, to better meet not only business needs of the company, but with more emphasis on the skills required for understanding technology impacts and directions.

## **C O N C L U S I O N**

The focus of a significant volume of literature about diversity on boards has been on gender issues. This chapter broadens the gender debate to include skills and learning/communication styles, more specifically the inclusion of IT skills on boards. In our dynamic world where boards are becoming more responsible for IT strategy and investment, gender balance is only one aspect of this larger issue.

This is summarized by Slater (2003) “The board in the business environment in this century might be characterized as smaller, leaner, and more diversified, with technology comprehension, business acumen and an energetic entrepreneurial drive.”

It's not rocket science. We draw the conclusion that to enhance the ability to succeed in the 21<sup>st</sup> century, IT skills belong on the boards of companies alongside traditional financial, legal and general management skills.

The facts are:

- (a) there is strong evidence that indicates that diversity (specifically appointment of women) enhances board performance;
- (b) we are in a fast paced society where technology is an underlying infrastructure across many businesses and boards need to pay attention to IT governance; and
- (c) there is already an “invisible” pool of talented women with IT skills suitable for appointment to boards: recruitment strategies just need to

source these women to amplify the impacts and enhance board diversity and performance.

## R E F E R E N C E S

Australian Bureau of Statistics ABS, (2002) Small Business in Australia, Australian Government Printer Retrieved August 16 2004 from <http://www.abs.gov.au/Ausstats/abs@.nsf/0/97452f3932f44031ca256c5b00027f19?OpenDocument>

Adler R, D. (2001 November) Women in the Executive Suite Correlate to High Profits *Harvard Business Review*, p4-5

Allen, J. (2003 June) Retaining Talented Women. *CEO Forum—leadership forum* Retrieved 16 October 2004 from [http://www.ceoforum.com.au/200306\\_leadership.cfm](http://www.ceoforum.com.au/200306_leadership.cfm)

AWISE - Australian Women in IT and Science Entity [www.awise.org.au](http://www.awise.org.au) board readiness program

Broadbent, M. (2002 October) CIO Futures – Lead with effective Governance *Conference paper ICA 36<sup>th</sup> Conference* Retrieved 1 June 2005 from <http://www.ica-it.org/conf36>

Broadbent, M. (2004 August 1) Boards and IT who cares and does it matter?  
Retrieved June 1 2005 from  
<http://www.companydirectors.com.au/AICD/Website/CDJ1.nsf/webArticlesByYear/527660b0c517a7aeca256f35001ce698!OpenDocument&CONTENTTYPE=DOCCONTENT&Click=>

Brown D, Brown D and Anastasopoulos V (2002) Women on Boards: Not Just the Right Thing But the 'Bright' Thing *Conference Board of Canada*

Brown, K. (2003 September 9) Weak Boardrooms and Weak Stocks Go Hand in Hand, *Wall Street Journal*

Burson-Marsteller. (2004 February 18) World's Largest Company Boards Suffer from IT-Deficit Retrieved June 1 2005 from  
<http://www.bm.com/pages/news/releases/2004/press-02-18-2004>

Craig, A.(2004 June) Redressing the Gender Imbalance in Australian Computing - Position Papers for the *Oxford Internet Institute (OII) Policy Forum*  
Retrieved June 1 2005 from  
[http://www.oii.ox.ac.uk/resources/publications/OIIPP\\_20040617-WomenInIT\\_200407.pdf](http://www.oii.ox.ac.uk/resources/publications/OIIPP_20040617-WomenInIT_200407.pdf)

Da Cruz, M. (2003 November) Governance of ICT *Ramin Communications*  
Retrieved October 14 2004 from  
(<http://www.ramin.com.au/marg/ictgovpaper.html>)

Equal Opportunity for Women in the Workplace Agency - EOWA (2004)  
*Census of Women in Leadership* Canberra Australian Government Printer

Huff, S L, Maher, M P and Munro, M C. (2004 September/October) What boards don't do - but must do – about Information Technology *Ivey Business Journal* p 4.

Jamnik, M (2004 June) The EPSRC Network for Women in Computing Research- *Position Papers for the Oxford Internet Institute (OII) Policy Forum*  
Retrieved June 1 2005 from  
([http://www.oii.ox.ac.uk/resources/publications/OIIPP\\_20040617-WomenInIT\\_200407.pdf](http://www.oii.ox.ac.uk/resources/publications/OIIPP_20040617-WomenInIT_200407.pdf))

Ovum (2003) *Productivity and Organisational Transformation: optimising investment in ICT*. Monash University Publisher. Australian Government Information Management Office

Siwik, M & Randall, D. (2004 April 29) The Essence of Good Corporate Governance: Strategic Risk Management *Corporate Board Member Magazine*  
Retrieved June 1 2005 from  
[http://www.boardmember.com/network/index.pl?section=1028&article\\_id=&show=article](http://www.boardmember.com/network/index.pl?section=1028&article_id=&show=article))

Slater, M. (2003 February) *The Board – Size, composition, Selection and Continuity – a paper prepared and presented for the A.A.P.B.S Directors Forum* Retrieved November 1 2004 from [www.aapbs.com.au/directors'\\_forum\\_-\\_hobart\\_feb\\_2003.htm](http://www.aapbs.com.au/directors'_forum_-_hobart_feb_2003.htm)

Sonnenfeld, J. (2002 September) *What Makes Great Boards Great Harvard Business Review*

Turnidge, G. (2002 August 10) *Corporate Governance and Growth. Information Age CEDA* Retrieved October 14 2004 from <http://www.infoage.idg.com.au/index.php/id;2117831644;fp;4;fpid;675408222>

WIT – Women in Technology [www.wit.org.au](http://www.wit.org.au) board readiness program

Women on Boards Australia (2004) research report conducted by Delta Outlooks [www.womenonboards.org.au](http://www.womenonboards.org.au)

Women on Boards (USA) Report *The Forum of Executive Women – Executive Suites Initiative* (2003)

## **Terms and Definitions**

**Board/Board of Directors:** includes commercial, government and not for profit boards, and board members refers to executive and non-executive as well as voluntary and ex officio appointments.

**Board composition:** the mix of specific skills in areas such as marketing, finance, law, risk management, industrial relations, asset management, communications or public relations, economics, IT, change management and broad strategic awareness.

**Corporate Governance:** promoting corporate fairness, transparency and accountability. Governance is essentially about ensuring that business is conducted properly. It is less about overt control and strict adherence to rules, and more about guidance and effective and equitable usage of resources to ensure sustainability of an organization's strategic objectives.

**Diversity:** refers to more than just representation of diversity of skills and experience in the composition of the board. The board, in its directorship base, should also possess a diversity of styles and views. Diversity refers to differences across a range of demographic attributes including gender, age, religion, ethnicity, national origin, physical and mental ability, level of education, marital and family status and sexual orientation.

**IT Governance:** provides the framework and structure that links IT resources and information to enterprise goals and strategies. As defined by Broadbent (2002) IT governance specifies the decision rights and accountability framework to encourage desirable behavior in the use of IT. It is not about IT management and the detail of particular IT decisions and their implementation, rather about

the arrangements for who makes critical decisions and who is accountable for them.

**IT /Information Technology:** a term that encompasses all forms of technology used to create, store, exchange, and use information in its various forms. Reference to IT/Information Technology is deemed to include the ‘C’ of “ICT” information and Communications technology, which is the technology used to handle information and aid communication.

**Knowledge Economy:** “where the generation and exploitation of knowledge play the predominant part in the creation of wealth” (United Kingdom Department of Trade and Industry, 1998).

**ROI:** Return on Investment.