



## Macquarie University ResearchOnline

---

**This is the author's version of an article from the following conference:**

Evans, S., Hunt, R. A. and Alexander, M. (2006) BAX Global : a case study of business process improvement theory and practice, *Australian and New Zealand Academy of Management (ANZAM) Conference* (20th : 2006 : 6 – 9 December 2006 : Yeppoon, QLD).

**Access to the published version:**

<http://hdl.cqu.edu.au/10018/8842>

**BAX Global:**  
**A Case Study of Business Process Improvement Theory & Practice**

Sheri Evans  
Robert (Bob) Hunt  
and  
Maggie Alexander

Centre for Management Innovation and Technology  
Macquarie University

[sheridanconsulting@yahoo.com](mailto:sheridanconsulting@yahoo.com)

# **BAX Global: A Case Study of Business Process Improvement Theory & Practice**

## **ABSTRACT**

This descriptive case study outlines how Business Process Improvement (BPI) was bundled into a learning and development program to achieve targets on freight forwarding clearance while embedding BPI competencies within the organisation. Non-compliance with company standards, low productivity and flow-on blockages prompted managements' action. The Program team members included company representatives, university academics and a business process trainer, together they managed, delivered and recorded the program. Insights into managing the challenges of overcoming resistance to change and embedding innovative training methods such as GDSS, BizKit, StickyWall & Belbin Team Roles are captured. Questions of interest include; Would BPI and the tools become truly integrated? Are the techniques and experiences generalisable? Action research methodology was adopted as an aide to reflective analysis.

122

## **Keywords**

*Technology Innovation Management/ Management Education & Development*

## **INTRODUCTION**

This descriptive case study, within the framework of ‘experiential learning, aims to document and share insights and comments from experiences and outcomes of a collaborative Business Process Improvement (BPI) consulting program (Brown 1972). An Action Research approach was adopted to aide reflective analysis and inform on-going dialogue and action among participants and the wider management and business education community, the university team as Gamma, management team and trainer as Beta and Alpha the reader (Sankaran, 2001, Coglan & Pedler, 2006). The case aims to serve as a reflective statement on how theory blended with practice and practice with theory can serve both well (Sawyer, Ferry, & Kydd, 2001, Dean & Bowen 1994). Theories in-use are grounded in business process improvement, change management, operations management, behavioural science. Of particular interest in this case was whether or not the BPI program would gain acceptance in the workplace, whether the unique technologies and techniques would be effective, whether learning-transfer would occur and finally whether a new mindset would develop thus signifying a paradigm shift towards process thinking away from the dominant person/ structure perspective predominantly used.

Achieving a successful program outcome would be a challenge as multiple stakeholder needs had to be satisfied which required building of trust. Corporate stakeholders demanded low-cost, high effect, fast-track solutions. Academics aimed to record, understand and extract ‘learning’ and apply ‘theory’. The consultant focused on program scope, definition, deliverables, tasks, timelines, and cost. In addition the program would be employing unique training innovations previously unknown to the participants.

Effective achievement of deliverables in business process improvement (BPI) programs cannot be assumed especially when innovating using technology aided methods (Hammer & Stanton, 2001, Waters 2001, McGoff, Hunt, Vogel & Nunamaker, 1990). It can be difficult overcoming ‘sacred cows’, old habits, fear of the unknown. ‘turf warfare’, and powerful internal functional or sectional fiefdoms (Boyatzis, Cowen & Kolb 1995, Mezirow 1984, Schon 1983). But examples of successes recorded by organisations such as IBM, who reduced time-to-market by 75% saving \$9 billion, Texas Instruments who shrank its

product launch time by 50%, and Duke Power who achieved 98% up from 30-50% building contractor-customer commitments suggests that CEOs and managers ignore business process imperatives to their peril (Hammer & Stanton, 2100). Seppanen, Kumar and Chandra (2005) noted that ... 'New business process improvement programs need to be designed so as to incorporate past best practice with enough flexibility to align with an ever-changing world'. Any management/ business tools and techniques need to add value and enhance company metrics and be a means to and end, higher productivity for example.

The organisation, Bax Global, formed a program team to guide the BPI initiative. The team included an expert BPI trainer/consultant, and a graduate management school innovation and technology research group and company senior managers. Through the capture and sharing of experiences from the program opportunities for reflection provide the practitioner manager and academic with new insight into practice and theory.

Business practitioners, tend to be action orientated, seeking to continually focus on what will improve the 'bottom-line' faster, cheaper, more effectively and more efficiently. Their quest is to improve operational performance in order to survive and thrive in increasingly competitive environments (Hammer & Champy: 1993, Hammer & Stanton: 2001, Hammer: 2000). From this arises a constant creative tension between textbook theory and 'real world' practice. The former doesn't necessarily 'fit' the rapidly evolving circumstances confronting modern organisations, ergo '*you cannot step into the same river twice*' Heraclites BC500. Modifications, on both sides, are usually needed. Guided by the hand of pragmatism, business and academe can work harmoniously to achieve 'real world' applicability, *ciné-vérité*. In this case the deliverables were to achieve the BAX Global standards on freight forward clearance rates, creation of internal change champions up-skilled in BPI and embedded in the organisation, a re-focus on BPI as a business opportunity. A unique combination of learning and delivery technology was used to create a dynamic fast-track BPI learning environment. Tools included the Sticky Wall© system, a group decision support system (GDSS) Zing, BPI training modules and activities, and Belbin Team role profiling. This case is about building and maintaining relationships and an equitable balance

because ultimately there is no *'bwana'*, it's about business practitioners and academics complementing not competing with one another.

## **BACKGROUND**

BAX Global, the client, had continuing problems in its freight forwarding area despite numerous past attempts to rectify the situation. Previous initiatives had created negative sentiment towards business process reengineering (BPR) methodology and terminology among workers and line management. The strength of feeling was demonstrated by a request from line management that BPR terminology be avoided for fear of fueling disquiet (Kinlaw 1993, Kolb 1984). A BPI expert trainer/consultant conducted an analysis of the situation and developed a bundled business process improvement program that included training and use of integrated hard and soft technologies which were designed as an embedded solution. The university management research team linked both groups acting as conduit, overseer and high level mentor across all phases within the Action Research framework of the 'set'. The academic team recorded the program methods and tools for use in operations and technology strategy management classes in an MBA program.

## **THE JOURNEY TO FINDING A STRATEGY**

The journey began when a BAX Global manager/student in a technology strategy management course, discussed their organisations situation with their professor. The organisation was seeking ways to address performance non-compliance and underperformance in the freight forwarding section. From this initial interaction developed a project team that worked on development of a business improvement initiative appropriate to the situation.

## **THE ORGANISATION**

BAX Global is a subsidiary of The Brink's Company, a company with a history of consistently growing through successful operational and strategic initiatives. Its strong leadership and management controls

a \$2.4 billion transportation and supply chain management company with over 12,000 employees worldwide (Schein, 1983). BAX Global has a worldwide network of 500 offices in 133 countries, is a major international freight transportation and supply chain management company providing services encompassing; international air and sea freight forwarding, multi-modal delivery options and guaranteed and standard delivery service throughout North America. BAX Global's client include aerospace, automotive, hi-tech, health care and retail firms. BAX Operations and affiliates are certified in 34 countries. BAX Global corporate aims state that it will ... 'establish and maintain valued customer-focused services, technological innovation and geographic expansion, along with a level of personal service delivered by people whose expertise within the transportation and logistics industry is widely recognized'. BAX Global's corporate challenges involve constantly changing global conditions and demands, widely dispersed geographic areas and worldwide development if affiliation with supply chains. In 1994 BAX Global commenced ISO9002 certification and developed its standards, by 2002 integration extended to 180 locations worldwide (BaxGlobal 2003).

## **THE PROGRAM TEAM**

The program team comprised an internal senior management steering committee and external expert representatives therein combining organisational and theoretical knowledge with practice-based skills, knowledge and ability, and decision making authority, influence and power (Salancik & Pfeffer, 1974, Pfeffer, 1981). Bax Global's representatives included: the Vice-President Australia and New Zealand, Executive Director NSW, State Manager QLD, Logistics Manager VIC, Financial Controller, IT Manager South Pacific, Human Resources Manager, Projects & Implementation Manager. External Consultancy team members included the Director of the Centre for Management Innovation and Technology, Macquarie Graduate School of Management, who provided oversight and guidance on theoretical and operational matters, is a highly respected academic with a distinguished record. Consultant/ trainer and program coordinator, a leading expert in Business Process Innovation (BPI) and Learning Innovation Diffusion (LID), added extensive multi-national corporate change management, technology management

experience and learning and development expertise. An MGSM research team member recorded and documented the program.

**Business Process Improvement – The Definition in use** - For the purposes of the program business process improvement (BPI) was constructed and operationalised as ‘a radical paradigm shift, requiring high investment in people, with a technology focus, scrap and re-build, and champion driven (Alexander 2004).

## **BUSINESS PROBLEM**

BAX Global Australia was not achieving the BAX Standards 90% clearance within 24 hours in all branches. And business growth was outpacing its ability to deliver. Customers demanded faster, more reliable service at lower cost. Functional stovepipes were causing delays, waste and frustration. Cumbersome process handoffs resulted in errors and delays. Bottlenecks impeded throughput, particularly in import and customs processes. Problem identification tended to be skewed towards a focus on HR and personnel issues or structural arrangements within and between business units and sections.

## **AGREED PROGRAM**

**Program Goals** - Achieve 90% clearance within 24 hours by re-engineering processes from sales to delivery, including customs brokerage and import processes, Reduce process costs to be able to price competitively. **Program Objectives** - Manage program for on time and on budget outcome, Manage change satisfactorily (as measured by survey results). **Business Objectives** - Increase new business by agreed percentage within 1 year by re-engineering the business development process, Reduce the DSO by reducing billing errors and achieving 90% clearance within 24 hours in every branch, Create ‘track and trace’ processes that achieve agreed % of throughput within agreed time.

**Deliverables** - Staff trained in process improvement methods, tools, techniques so they can carry out improvement continuously, Change champions mentored and coached, Program Plan to include Change Management Plan and Communications Plan, Projects Plans that will achieve the program mission.

**Projects** - Total Supply processes project, Re-engineering processes from sales to delivery, including

customs brokerage, import, 'track and trace' sub-processes and job roles and responsibilities. Customs processes sub-project: Review of the customs processes using the process analysis already completed. Import processes sub-project :Review of the import processes. Restructuring project : includes input from (1) and from corporate. **In scope** - Import supply process to BAX end customers (internal and external), Include performance management and leadership processes, focus on Sydney problems and solving them, business development process including clarifying of roles and responsibilities in the winning, implementation and operational support of new business. **Out of scope** - Export and outbound processes, Recruitment and training processes.

## **METHOD AND INTEGRATED BPI TECHNOLOGY**

Working together the BPI Expert consultant/ educationalist, university team and senior representatives conceptualized and operationalized spoken and unspoken "observed" needs of the organisation. Dialogue ensued between the participants over three to four months along with site visits. The BPI expert formulated a schedule (see below), documented it, and gained approval from decision makers. The program content and philosophies were largely generated by the BPI expert from their professional and theoretical knowledge. Theories were grounded in business process modeling and re-engineering, adult education using IT and eLearning, logistics, operations, business administration. Action Research provided a meta-process perspective of program activity. Each repetition building self knowledge and insight into the steps that were being taken to reach consensus and the adjustments that were necessary to keep forward momentum and avert failure.

**THE PROGRAM SCHEDULE** - The program schedule comprised: pre-program planning meetings, a one day management awareness program, a two day change and business process improvement workshop, a one day Change Champion workshop, and ongoing needs based mentoring of the change champions.

**Selection of Tools-** The three main tools – the group decision support system (GDSS) enabled BizKit Team Meeting system, Sticky Wall, and Belbin team role profiling – enabled the creation of new

knowledge, innovation and assisting continual improvement and organisational change processes (Belbin 1991). The Australian designed and developed GDSS has been available since the late 1980s and is known for its simplicity of architecture, speed and flexibility (Findlay 1996, Findlay, Hunt, & Crawford 1998).

**Change Champions & Team Meeting System-** An important part of the program was the requirement to train Change Champions and select from among them a lead Change Champion who could use and diffuse the learning throughout the organisation using the Team Meeting System. Essential requirements include; basic computing skills, a positive attitude to technology, openness to learning and most importantly good interpersonal and communication skills. Because the Change Champion leader is required to guide participants through complex thinking and decision making processes high level cognitive and intellectual skills are needed (Kolb & Fry 1975). Change Champions selection, including the Change Champion leader, was made at the conclusion of the workshops in consultation with program team members, participants and senior management (Kirton 1994).

**Belbin Team Roles-** Belbin Team Roles were used to build team cohesiveness and understanding within a staged process (Strauss, 1997, Kirton 1994, Kinlaw 1993, Tuckman, 1965, Tuckman & Jensen, 1977). Team types include; Shaper, Plant, Resource Investigator,

| Nine Team Roles   |   |  |
|---|---|--|
| <b>RI</b><br><b>RESOURCE INVESTIGATOR:</b><br>Extrovert, enthusiastic, communicative. Explores opportunities. Develops contacts  | <b>IMP</b><br><b>IMPLEMENTER:</b><br>Disciplined, reliable, conservative and efficient. Turns ideas into practical actions.  | <b>CO</b><br><b>CO-ORDINATOR:</b><br>Mature, confident, a good chairperson. Clarifies goals, promotes decision-making, delegates well.  |
| <b>PL</b><br><b>PLANT:</b><br>Creative, imaginative, unorthodox. Solves difficult problems.                                      | <b>SH</b><br><b>SHAPER:</b><br>Challenging, dynamic, thrives on pressure. The drive and courage to overcome obstacles.       | <b>ME</b><br><b>MONITOR EVALUATOR:</b> Sober, strategic and discerning. Sees all options. Judges accurately.                            |
| <b>TW</b><br><b>TEAMWORKER:</b><br>Co-operative, mild, perceptive and diplomatic. Listens, builds, averts friction.              | <b>CF</b><br><b>COMPLETER:</b><br>Painstaking, conscientious, anxious. Searches out errors and omissions. Delivers on time.  | <b>SP</b><br><b>SPECIALIST:</b><br>Single-minded, self-starting, dedicated. Provides knowledge and skills in rare supply.               |

Implementer, Monitor Evaluator, Team Worker, Coordinator, Completer Finisher, Specialist (Belbin 1991). A Shaper drives the group forward; Plant provides ideas, the Resource Investigator acquires resources; the Implementer turns ideas into action; the Monitor Evaluator prudently judges team output, the Team Worker promotes team spirit, the Coordinator focuses on goals emanating control and

confidence, the Completer Finisher conscientiously ensures all details are in order, and the Specialist self adds technical expertise to the team (Belbin 1991).

***Sticky Wall*** - The StickyWall is a unique tool developed by M&M Consulting that combines process modeling, process analysis and redesign methods. As a business process improvement (BPI) tool it is the physical space where the team builds its “shared vision” (Alexander 2004). The physicality of using the now famous ‘post-it’ notes in brainstorming and affinitising has been elevated to a new level of sophistication with the StickyWall. An adhesive covered surface allows for easy manipulation of post-it style notes on its surface. The StickyWall kit incorporates process mapping note pads consisting of commonly used process symbols; arrows, triangles, boxes and so forth used in process modeling.

StickyWall output was progressively captured on a digital camera. This was for the purpose of creating a permanent record of the session and preserving a record of the phases of the learning process. This becomes accessible for further processing, classifying, categorising, problem-identification, decision-making, identifying key learnings, and innovative breakthroughs (Sternberg 1998, Advanced Practical Thinking Training Inc. 2001).

### **THIRTEEN STEPS TO BPI**

1. Identify the organisation’s need to change,
2. Define the organisation’s key processes and process problems,
3. Model the key processes selected for review, using process mapping tools and techniques, to understand them,
4. Evaluate the performance of the key processes against the goals and their performance indicators.
5. Benchmark the key processes against other organisation’s processes,
6. Identify the customers of the key processes, their needs and expectations,
7. Decide on the changes with the maximum impact,
8. Design the future processes using process and data modeling at a high and then a detailed level,
9. Set process goals to achieve desired results,
10. Evaluate options for change in people, process and technology,
11. Plan how to produce process enablers and construct them.
12. Plan process

implementation and change, carry out the plan and implement process, 13. Review the process changes against goals (Alexander 2004).

## **PROGRAM OUTCOMES**

The program final deliverables and results included; 1. Sydney clearance rates which had been running at around 70% instead of a desired 90% post-program came in consistently near or over 80%. 2. Sydney branch successfully achieved work flow changes after adopting the new process based work approach learnt in their BPI training. 3. Immediate observed improvement after the first BPI training session was achieved. 4. Human Resources recruitment practices were positively impacted with new staff possessing a business process orientation being targeted for appointment. 5. Corporate recognition of the importance of a business process focus was achieved. 6. Decision making became more focused with better balance of workloads. 7. Uncovered other areas needing business process improvement, eg. COD (cash on delivery). 8. Problem identification commenced on COD area. (Metrics still to be established). 9. Air, Ocean and Land systematically dealt with all jobs across all areas as a result of BPI training. 10. Process issues, eg. paper-shuffling and excess paperwork problems were continuously streamlined. 11. Cleared bottlenecks caused jamming elsewhere eg, customer service, which then came under management scrutiny. 12. External variables affecting performance outcomes that were unchangeable, for example, US port system problems filtering into domestic delays, were recognized and better understood. 13. Change Champions mentored and coached, staff trained in process improvement methods, tools and techniques and able to perform as an in-house / embedded trainers. 14. Pre-Program deliverables completed as per original scope. 15. Positive feedback from the participants and management. 16. Improved cross-functional communication. 17. Structural and staff changes were recognized by senior management and action taken.

**Internal Team Observations** – Below is a summary of the main observations and comments made by the Bax Global senior management and the training/ consulting group during a post-program feedback sessions. Many challenges beyond that of process improvement were confronting the organisation throughout the business improvement program as is usual for any organisation. For Bax Global issues

included; introduction on a new IT system with attendant system failures and interruptions, changes in key staff from promotions, re-deployments, transfers, dismissals and retirements, directives from offshore Head Office, client demands, changes in clients, new clients demanding differing specifications.

Capacity constraints generated by continued growth of around 20% year on year placed pressure everywhere. Resistance to change in the warehouse was identified and was being addressed with the appointment of a new warehouse manager. Day to day accountability and oversight in the warehouse has become a priority due to losses in that area. The organisation could see the benefits of the BPI program but getting (and keeping) senior management committed was foreshadowed as an on-going challenge. Feedback on the BPI program has been positive. No negative feedback had been forthcoming. As far as change in the workplace there has been more of a subtle process of change rather than a dramatic shift. Staff are showing no signs of resistance to the changes. Future plans for BPI programs are that the company expects to conduct three programs in 2006. Ocean freight is being considered as an early candidate as it is a bottleneck area.

Limitations recognized included: staff shortages, lack of industry 'talent' with appropriate skills, knowledge, ability and attitude, staff enthusiasm and interest levels, succession planning, need to recruit staff who possess a process 'mind set', time needed to train new staff to reach peak performance, small staff changes have big impact on efficiency and effectiveness of remaining staff, work pressures divert trainees, other crisis elsewhere diverts senior managers attention and reduces resolve and commitment for the BPI program to continue at the highest level, for example new IT system integration problems had consumed time and resources, lack of appropriate in-house staff to run the BPI program, need a critical mass of at least 3 staff championing it and running sessions. Inability of some original change champions to continue either due to staff changes, re-deployment, retirement, resignation, Head Office proposed re-structure creating uncertainty and causing a sense of 'draining'. The key company BPI trainer has facilitated 2 days of training but with work pressure and time constraints is having difficulty coordinating further training. Continuing the momentum, keeping up further training in process improvement

management is a challenge in itself due to time and resources and competing business needs. Sales support and customer service needs revitalizing to focus on selling and building CRM, building greater structural alignment is needed.

**External Team Observations** – Bax Global team comments reinforced a key point, that having embedded organisational capabilities and resources is vital for sustained momentum. What else was taken from this exercise? Significant resources especially in terms of personal time, energy and commitment at all levels, is required to undertake and continue a change program through to its conclusion. The conclusion of a successful change initiative often becomes merely the beginning of a new phase of the original program. Failure on the other hand can lead to not only loss of momentum for change in the organisation thus making it harder to begin again afresh, but also loss of morale and creation of cynicism about future change initiatives. This can be very damaging and difficult to turnaround. Interruptions and crises get in the way of special initiatives as do the constant demands of day-to-day organisational work life. However when a change initiative is well developed, implemented and embedded positives flow through the organisation and provide a sense of pride in achievement, energizing personnel and sustaining effort. Outcomes such as improved financial metrics and other performance indicators need to be highlighted and communicated to motivate staff.

The extensive pre-program effort meant that few modifications were needed once the program commenced. Changes that did emerge were due mainly to industry fluctuations, seasonality, introduction of a new IT system and some head office changes.

***Belbin Profiling to Build Effective Teams*** - Belbin Team Role profiling was found to be very effective in creating understanding, appreciation and enhanced ability to deal with and across individual differences (Belbin 1993). Participants completed a Belbin self-perception questionnaire while work colleagues completed Belbin Observer questionnaires. The consultant, Belbin accredited, provided feedback and interpretations. Profiling reduced guess work associated with team-member allocation and tasks. Teams

were encouraged to maximise their areas of strengths, discuss weaknesses and openly and honestly negotiate complementary person-task relationships as part of building balanced teams (Belbin 1993).

Random group allocation and rotation of individuals throughout the workshops tested various team combinations. Team profiles were generated and compared as changes occurred providing opportunities for team review and discussion (Belbin 2004). Profiling kept the focus on task and role congruence rather than personality and behavioural differences, the latter associated with dysfunctional groups. Belbin's theory promotes the concept of difference as desirable and functional (Belbin 1993). Kegan noted that learners can gain more knowledge when there is support and challenge in their environments (Kegan 1982, 1994). Belbin has operationalised this concept by creating a normative language group members can use. The teams involved in this program gained an understanding of their own Team Role and that of their team members from this part of the program. Experiential learning methodologies are recognized as enhancing learning through active experience and participation leading to reflecting, conceptualising and testing 'in use theory' (Kolb & Fry 1975). This was observed throughout the program. It was felt that use of additional tools such as Kolb's Learner Types (1984) or Honey and Mumford's Learning Styles (Honey & Mumford 1986) could be useful to further expand team learning where resources permit.

Matching individual to task is not new, it has been a key area of management research since Mary Parker Follet's 1900s research within the Behavioural School (Jones, George & Hill 2000). Work by Janis (1972) on groupthink highlighted the sorts of problems that can arise when group loyalty, strong unanimity and like-thinking styles can become unhelpful and even dangerous when critical thinking and tolerance for diverse views is supplanted. Recognising and managing dysfunctional attitudes and behaviours in organisational teams/groups needs to be a joint responsibility of participants, managers and trainers/consultants. A team member typology, formulated as a result of researching individual-team-technology interactions on a project management task, found that teams appeared unable to effectively self diagnose weaknesses and tended to overestimate self-efficacy in terms of team functioning and task accomplishment (Evans and Hunt, 2003). Dysfunctional teams failed to adopt technologies and tools

despite having ready access to specifically designed tools and techniques as well as training. What emerged from this research was the importance of creating a structure and discipline via high level guidance and monitoring until behaviours were learned and embedded.

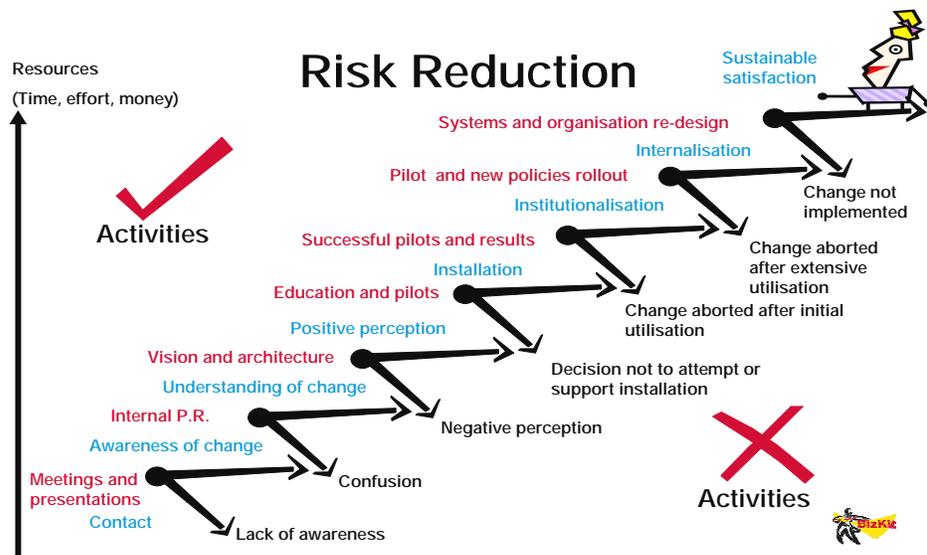
The BizKit Team Meeting System, incorporating BPI methods incorporated in the GDSS emphasizes building “a shared vision of the future” (Alexander 2004). GDSS system flexibility allows modifications to be made that tailors the basic tool into a variety of highly effective and rapid business enablers for groups on decision-making and problem solving (Deacon-Carr, Herman, Keldsen & Miller, 2001, Findlay, Hunt & Crawford, 1998, Dennis, Valacich, & Nunamaker, 1990). Combined use of the tools provided power and dynamism to the workshop sessions. Participants demonstrated high engagement and involvement. The level of participant engagement in the workshops was an important part of the process improvement and change initiative. Problems associated with work groups and teams populate the literature so special emphasis was put on building effective balanced teams. Special care was taken in choosing and using tools and techniques. According to Argyris (1993), “action-orientated change” is based on the notion of double-loop learning where problems are connected to action, strategies and standards of performance. Once the current problems are understood, the next step is to re-design or innovate the process to achieve targets. The target ultimately was to achieve company standards on clearance rates and embed process thinking. The Belbin Team Roles types who usually excel in this area are analytical types such as Monitor Evaluators and Specialists. On the other hand, strong analysis requires breaking down whole situations or problems into sub-parts. Re-designing and innovating requires types who can select and build the right parts into new and better processes. These are typically ideas people such as the Plants and Resource Investigators.

Breakthrough’s or ‘Eureka’ moments occurred as team members ‘got it’. Moments of inspiration and insight occurred. Underlying cause and effect was understood. By the end of the workshops teams were able to critique existing models and create new high-level process flow models. They grasped the significance of team composition and collaborative cross-functional interaction.

“Action-orientated change allows managers and employees to use collective knowledge. Organisational learning takes away the idea of change being imposed and creates a sense of engagement and influence. Without action, alternatives to the existing state are not attempted. Experimentation is critical if an organisation is to meet the challenges posed by an increasingly complex external environment. A capacity to act facilitates learning” (Brewer 1995).

**Figure 4. Phases and responses to Risk Involved in Change Management**

Figure 4 sets out the theory of how change initiatives can suffer from a range of problems over time starting with a lack of awareness, confusion, negative perceptions, lack of support, lack



of commitment, and resistance to change. Other risks arise in non-performing teams where strongly individualistic types continue functioning as autonomous independent individuals maintaining personal identity and resisting the group social identity and shared group goals. By being aware of the risks and problems early appropriate intervention to build trust, communication, leadership and productivity can be initiated (Haslam, Eggins & Reynolds, 2003).

Theoretical constructs associated with Learning Styles and Team Roles are criticized for their static nature. Building dynamic models of learning and development incorporating a stage or process model similar to ‘Maturity Models’ espoused by Tooher and Jafaari (2002) and Leigh (2000) is seen as a useful direction for theory development. Similarly, individual concordance with the goals of a training program,

technology in-use, facilitation competence, group member role congruence and organisational openness appear important for generating a successful outcome. It is anticipated that by undertaking further research into these relationships a framework can be developed to measure key variables underpinning program success and that this can serve as a practical generalisable guide for future practice.

## **CONCLUSION**

All organizations experience tension between maintaining a steady state and taking risks. This case captured 'learnings' from a business process program which involved introducing and integrating new knowledge and skills through collaboration. Such collaborative relationships require sympathetic blending of pragmatic realism with ideological philosophy. To get the full advantage though there must necessarily be a high level of cooperation and trust. Trust is built through regular contact, dialogue and respect for both people and process. The Action Research approach supported and guided the process and the people through reflectivity at a meta level building trust. Facilitation handover was seen as important in achieving program outcomes. It turned out to be only partially successful because of fluctuations in personnel. Clearance rates, although improved to +80%, were under the BaxGlobal Standards of 90% clearance. However both management and staff had begun to build a shared mental model of process thinking instead of merely seeing problems as structural or personnel dominated issues. A paradigm shift towards a process modeling and process improvement mindset had clearly begun to take hold. This was evidenced by positive comment and feedback and stated interest in pursuing future BPI initiatives.

This case study has demonstrated that there are significant gains to be had by using BPI, collaborative program teams and team learning systems in BPI training such as the BizKit Team Meeting System, StickyWall and Belbi profiling. However organisations need to know that the tools and methods they are using are well tested and viable. Thus one ongoing challenge for the future is to be able to define and construct standardized training programs that are well tested, accepted, embedded and transferable.

## REFERENCES

- Alexander, M. 2004, Bax Global: Business Process Improvement, Training Notes, M&M Consulting (*unpub.*)
- Belbin, R. M., 1991, Management Teams: Why They Succeed Or Fail, Butterworth-Heinemann, Jordan Hill, Oxford.
- Boyatzis, R.E., Cowen, S.S. & Kolb, D.A. 1995, Innovation in professional education: steps on a journey from teaching to learning, Jossey Bass, San Francisco.
- Brown, L. 1972, Research Action: Organizational Feedback, understanding and change, *Journal of Applied Behavioural Research*, vol. 8, pp. 697-711.
- Coglan, D. & Pedler, M., 2006, Action learning dissertations: structure, supervision and examination, *Action Learning : Research and Practice*, Sept., vol.3, no.2, pp. 127-139.
- Deacon-Carr, S., Herman, E.D., Keldsen, S.Z., Miller\*, J.G. & Wakefield, P. 2001. Team Learning Assistant: Web-Based Support for Team Learning™, Boston University, School of Management, Center for Team Learning, Boston, Massachusetts.  
([http://www.teamlearning.org/text/kb/TeamlearningAssistant4\\_.doc.pdf](http://www.teamlearning.org/text/kb/TeamlearningAssistant4_.doc.pdf)) (*unpub.*).
- Dean, J.W. & Bowen, D.E 1994, Management theory and total quality: improving research and practice through theory development, *Academy of Management Review*, vol. 19, pp. 392-418.
- Dennis, A.R., Valacich, J.S., Nunamaker, J.F. 1990, An Experimental Investigation of the Effects of Group Size in an Electronic Meeting Environment, *IEEE Transactions on Systems, Man and Cybernetics*, vol. 25, no. 5, pp. 1049-1057.
- Findlay, J 1996, Small GDSS at Coopers & Lybrand, Research Project (unpublished work).
- Findlay, J., Hunt, W. & Crawford, K. 1998, Exploring the Future Program: Using GDSS as an innovation tool in schools, World Innovation and Strategy Conference, Australian Technology Park, Sydney.
- Hammer, M.2000, The Superefficient Company, The Harvard Business School Publishing Corporation.
- Hammer M., & Stanton, S. 2001 How Process Enterprises Really Work, Harvard Business Review, Harvard Business School Publishing Corporation, November – December.
- Haslam, S.A., Eggins, R.A. & Reynolds, K.J., 2003, The ASPIRe model: Actualising Social and Personal Identity Resources to enhance organizational outcomes, *Journal of Occupational and Organizational Psychology*, vol. 76, pp. 83-113.
- Kinlaw, D.C. 1993, Team-managed facilitation: critical skills for developing self-sufficient teams, Pfeiffer, San Diego, CA.
- Kirton, J. 1994, Cells in industry: managing teams for profit. McGraw-Hill, Berkshire.
- Kolb D.A. 1984, Experiential Learning: Experience as the source of learning and development, Prentice Hall, Englewood Cliffs, NJ.
- Mezirow, R. 1998, Transformative dimensions of adult learning, Jossey Bass, San Francisco.
- Leigh, E., 2000, Notes on Learning by Reflection, Project Management course notes, University of Technology, Sydney, *unpub.*
- McGoff, C., Hunt, A., Vogel, D., & Nunamaker, J. 1990, IBM's Experiences with Groupsystems. Interfaces, November-December, pp 39-52.
- Pfeffer J., 1981, Power in Organizations, Pitman, Boston.
- Salancik, G.R. & Pfeffer, J., 1974, The bases and uses of power in organizational decision making, *Administrative Science Quarterly*, vol. 19, pp. 452 -473.
- Sankaran, S., 2001, Methodology for an organisational action research thesis. Action Research International, Paper 3. Available on-line: <http://www.scu.edu.au/schools/gcm/ar/ari/p-ssankaran01.html>.
- Sawyer, J. E., Ferry, D. E. & Kydd, C. 2001, Learning about and from group support systems, *Journal of Management Education*, Thousand Oaks, June, vol. 25. URL:  
<http://proquest.umi.com/pqdweb?TS+992311245&Di=000000073274478&Mtd=1&Fmt=4> {accessed on 12/06/2001}.

- Seppanen, M.S., Kumar, S. & Chandra, C., 2005, *Process Analysis and Improvement: Tools and Techniques*, McGraw Hill, Boston.
- Schon, D.A., 1983, *The reflective practitioner: how professionals think in action*, Basic Books, New York.
- Strauss S.G. 1997, Technology, Group Process, and Group Outcomes: testing the connections in computer-mediated and face-to-face groups, *Human-Computer Interaction*, vol. 12, pp. 227-266.
- Schein, H, 1983, The Role of the Founder in Creating Organisational Culture, *Organizational Dynamics*, vol. 12, pp. 13-28.
- Tooher, E. J. & Jafaari, A., 2002, Building Virtual Teams for Success: A Learning and Development Framework, *IPMA Congress*.
- Tuckman, B.W. 1965, Developmental Sequences in Small Groups, *Psychological Bulletin*, no. 63, pp. 384-399.
- Tuckman, B.W. & Jensen, M.C. 1977, Stages of small group development, *Group and Organizational Studies*, vol 2, pp. 419-427.
- Waters, J. 2001, Gaining Acceptance for Your Idea, *AGSEI Technology Business Review*, April/ May, pp. 32-33.