

The Corporate Bush Mechanic - possibility or absurdity: An exploration of the potential and design for the installation of a CBM system in The Flight Centre Inc. (TFC)

Introduction.....	2
A working definition of a Bush Mechanic/Artificer.....	2
Related Concepts	3
Personal Journey (1994-2005).....	3
Current Research program	4
(a) Field component	4
(b) Coding component	4
(c) Write up component	4
Futuring.....	4
Grounded Theory	4
The ‘D’esign Process - PIDIL.....	5
Bush Mechanics/Artificer Principles as developed through the application of Grounded Theory	6
BMP 1: The Exemplar Project Principle	6
BMP 2: Social Betterment Principle.....	7
BMP 3: Collective Responsibility Principle – the Bush Mechanic as a Socially Responsible Corporate Citizen responding locally, proactively, concretely and collaboratively to the Corporate Problematique	7
BMP 4: Learning Principle – Learning from actions based on the above 3 principles for a better world.....	8
Towards a revised definition of Bush Mechanic/Artificer	8
The efficacy of the Corporate Bush Mechanic approach in various operating environments- the Cynefin approach	9
The Corporate Bush Mechanic as complexity jockey	10
Converting Complexity into Simplicity for Commercialisation through an Innovation process	11
Integrating Bush Mechanicing into Corporate Design as applied to The Flight Centre.....	11
Bush Mechanic Biodata	13
Bushie Backgrounds	14
Recent Works by the Bush Mechanics directly related to this Research Project	15
Steps to implement a Corporate Bush Mechanic program in The Flight Centre Inc. (TFC).....	16
Resources	18
Web (accessed 20-09-2005).....	18
Text - Reference.....	18
Text - source	18

Prepared for Danny Hovey danny_hovey@flightcentre.com

Dean: William James School of Business – The Flight Centre Inc.

By Paul Wildman paul@kalgrove.com mob 0412027818 No 7 06-12-05 comm 05-10-05 7500 words

Introduction

In Australia there has always been the great outback full of bush (Australia is size of mainland US with 20m compared to 320m folk) and so understandably it has entered our national psyche. Here there is bush everything – bush music, bush tucker, bush lawyer, bush shops, bush doctors, bush mechanics, bush campfire (TV), bush cooking, bush humour, movies are made about it and tourists regularly die when they are lost in it and so forth. When one is living in this bush to get something done one has to think and act ahead using one's ingenuity and come up with innovative practical solutions that work. Of particular interest for this report is – the bush mechanic – a particular breed of Australian who can arguably put the zing into futuring with her form of engaged and engaging futures research. This work in progress report uses Grounded Theory to identify several attributes of such an endangered breed.

From a somewhat more theoretical perspective I argue that expressions of a humanist future of citizen activists that seek to reverse the trend, so evident in the left, from practice to theory, and simultaneously seeks to address Arendt's challenge to modernity to relink thinking and doing. This paper argues that a form of critical futures praxis called 'artificer learning' more commonly understood as 'bush mechanic' concept is one such response that may well be worth a second look.¹

From an applied position the corporate sector for several reasons is the sector wherein innovation is most obvious today. In public sector innovation is largely by way of reactionary regulation and control – little in social evolution occurs therein. And similarly the Community Sector in Australia is largely regulated by the public sector to be a somewhat milder version of itself. Consequently in terms of a response to answering the question '*how then should we live and do business together today in order for a better world for ourselves and our children's children?*', it may be argued strongly that the corporate sector is 'the' sector where significant proactive, and innovative change can be forthcoming.

It is in the light of such an 'innovative change' potential that the following report has been undertaken in order to explore, as the reports title suggests, the applicability of a system of harnessing ingenuity well known in Australia called 'the bush mechanic', in stimulating profitable and socially responsible corporate innovation and learning.

A working definition of a Bush Mechanic/Artificer

The bush mechanic then is deeply ingrained into the national psyche indeed the runner up for the national anthem – Waltzing Matilda – is about a bushie who steals a sheep for food and ultimately takes his own life rather than be caught by the law. Conventionally a bushie is someone who can fix a practical problem with 'fencing wire' and do a great job to boot. The Australian Broadcasting series (see web site section in resources) literally shows just that particularly in indigenous communities.

A bush mechanic or artificer learner may be defined for the purposes of this research project report as:

someone who while being deeply and broadly technically skilled is reflexively orientated and who ethically and participatively explores the

¹ Saul (2005:248); Arendt (1963:177)

big picture and prioritises, chooses, designs and enacts forward wisely by creatively developing prototypes towards a world transformed.

Related Concepts

French:

Bricoleur - A bricoleur is a 'Jack of all trades or a kind of tinkerer, a professional do-it-yourself person.' There are many kinds of bricoleurs - interpretive, narrative, theoretical, practical and political. The bricoleur produces a bricolage - that is, a pieced-together set of representations or components that are fitted to the specifics of a complex situation [closest English equivalent – tinkerer – though usually used disparagingly]

L'esprit Accor – is the art of blending skills, of combining traditions of the past with the modern innovation, adding the generosity, discipline, imagination and warmth which can carry our work to a higher level of excellence. L'esprit Accor then is a conquering vision of success. [closest English equivalent – efficacious magnanimousness/morale – 20% fit]

Critical Futures Praxis – here futures related praxis is used to problematise or criticalise the present.

Futuring – proactive action research to establish actual futures oriented demonstration projects today – to show that a different future is possible

Intentional Action Research - in this concept action research is directional and intentional in that it anticipates a change in the status quo and works from that perspective backwards

Personal Journey (1994-2005)

Over the past six years many discussions I have been involved in have sought to develop an answer to the question what would an ideal action oriented learning environment look like given one's praxis experiences. As part of this process in the early 2000's the criteria for such a vibrant learning process were documented and explored. Wildman (2001).²

In many places in the West, Slaughter's industrial flatland, still rules, there is not much cultural, industrial, vocational or even legal space left for alternatives to survive let alone such 'left field' people as bush mechanics. Nevertheless the more one looked the more it appeared that there were still some bush mechanics left.³ Thomson (1995).

² This particular (2001) article sought to explore several emerging issues and included the period of my involvement in charting their emergence. Bush Mechanics is on the other end of *emerging issues* it is an *evanescent issue* – yet this current article argues, is an issue of relevance to our futures yet structurally disadvantaged in today's bureaucratized and globalized world of ready made consumerism.

³ This article applies the more formal term *artificer* to bush mechanic to indicate the step beyond artisan. Furthermore that the 'spirit' of the artificer was alive, having been marginalised could now to be found in what has been called the 'bush mechanic' - a self reliant person who can, largely in the informal sector, innovate and solve difficult problems practically with what is on hand.

Current Research program

(a) Field component

The field research program covers the research period early 2002 to early 2005 (basically a 2 year period). This research was conducted along side key bush mechanics I have had the privilege to work with during this period. My involvement has been to work intensively with some six such individuals. During this exposure to these folk it became increasingly clear that they had a significantly different way of learning and approaching tasks even to being in society in which they deliberately made themselves them 'hard to identify', in our day to day world. These include a disabled person, an artist, a philosopher and a boat technician.

A learning journal was maintained during this period and ultimately detailed the approximately 80 Learning Insights (LI's) that have arisen over this 2 year period. This research project was set in place to chart these 'ways' and 'attributes' and to compare these with those established for artificer learning in the early 2000's.

(b) Coding component

Undertaken from 01-2005 to 03-2005. Grounded Theory (see below) was then applied to the field observations from (a) to identify the key categories, attributes or principles of artificer learning.

(c) Write up component

Current; from 04-2005.

Futuring

This approach is that of engaged knowing. This may be termed Futuring⁴ or 'acting ahead wisely' and is called in this study Artificing commonly know as Bush Mechanicing. Here reality is established through enactment that is the braiding of thinking and doing. Certainly in terms of futuring this research project suggests that a bush mechanic approach may be seen as one direct application or manifestation thereof.

Grounded Theory

The method chosen to process the field observations of this project into general understanding of the key categories/attributes/principles of being a Bush Mechanic is Grounded Theory. Glasser (1995); Dick (2000). Dick after Glaser suggests two key advantages of Grounded Theory for judging the adequacy of the emergent principle categories: do they fit the situation; and do they work. In this sense such emergent categories can help the people in the coalface situation make better sense of their experience and improve the management of the particular situation.

⁴ To my understanding Jerome Glenn was the first to coin the term 'futuring' when he published an article called 'Futuring..' in January or February in 1972 or 73 - then defined as a process that 1) identifies trends, 2) projects them and includes broad participation to describe scenarios, 3) corrects them to be more normative, and 4) traces them back for policy and strategy to do today. In the early 90's I extended this process by adding an additional four points, 5) seeks to assist in selecting a particular scenario and then, 6) to design implementation thereof through a prototypical exemplar project then 7) assists efficacious implementation thereof while 8) learning through an action learning cycle there from. Clearly a bush mechanic meets, to differing extents, these 8 criteria, and includes the concept of Anticipatory Action Learning.

Of critical importance is to be crystal clear about what most differentiates grounded theory from much other research is that it is emergent, bottom up from observations and explicitly so. Grounded Theory does not test a hypothesis. It sets out to find what theory accounts for the research situation as it is recorded in the field notes. In this respect it is like action research: the aim is to understand the research situation. The aim, as Glaser in particular states it, is to discover the theory implicit in the data. This is an example of building Local Theory – theory from the ground up, rather than in the case of Grand Theory where theory is applied from the top down. Thus in Grounded Theory the categories are ‘emergent’ in that they emerge from the coding groups that emerge from coding the data/learning insights.

In the case of this article the exemplar project was undertaken jointly by myself as assistant and a bush mechanic over a two year period. In this period I also worked with some five bush mechanics (see Table 1 below). During this period I maintained a learning insights journal in line with that I maintained for my Doctoral field work a decade earlier. During this 2 year research period from 2002-2004, approximately 80 learning insights Grounded Theory were recorded. In a subsequent process of applying Grounded theory over some four cycles these 80 entries became aggregated into 14 and ultimately 4 categories. The prime category, one that all the others refer to, was identified as the Exemplar Project category and this category is listed first of the four emergent categories.

The ‘D’esign Process - PIDIL

Generally speaking the primary aim of a holistic design or ‘D’esign process is that of *generating* i.e. elicit, to uncover, to learn, to discover from the particulars, details, disappointments and insights from a particular period/project of praxis/employment. The ‘D’esign process uses the PIDIL process of P (Problematique) | I (idea) | D (design) | I (implementation) & | L (learning) summarised as TDL (Thinking | Doing | Learning). While these stages are logically sequential they can and often do operate cyclically in the real world.

- *Problematique* means the acceptance of the importance of the intention to identify the overall corporate *Problematique*/challenge *Problematise* it to determine which part of it is to be addressed first and then *Prioritise* these responses through establishing a specific proposed exemplar and its intent to address this through a (Exemplar) *Project* to address the *Prioritised* aspect of the *Problem* to derived from the *Problematique* (4P’s approach – the big Picture, *Problematise* that picture into various attributes, *Prioritise* these attributes, *Projectise* the prioritised attributes into a project that can respond to the priorities identified from the emergent problems that are part of the overall *problematique*). For instance: What’s the big picture? What bits/emerging issues of it is enough of a problem to warrant addressing? Which one of these bits do we intend to address? What are some project options to address this bit?

Typically approx. 3% time and resources are required here ⁵.

⁵ NB: These figures, are approximate only and are drawn from my field research notes from several actual (P)I-D-I(-L) projects I was involved with 2003-05. From an academic perspective I (cognition/theory/text) receives in the Social Sciences at least 80% of the energy and resources and D and I are seldom mentioned (which take up over 80% of resources in the actuality or reality of the project). From a stratagising perspective, we need to consider direction, pattern recognition (emerging issues), laterality (left field influences)

[EG. Brightness of Future circle in Figure 2 below]

- *I* means *Idea* or concept, and supporting theoretical or speculative rationale, one has in relation to the Exemplar Project that addresses the chosen priority area from the corporate *Problematique* (4P's above). *For instance*: Which of these project options and their supporting rationale bears implementation? Typically approx. 5% time and resources are required here.
- *D* means design an *Implementation* strategy for the *Idea* through the exemplar project. This is the 'd'esign stage. *For instance*: Let's blueprint this option? Typically approx. 1/4er time and resources are required here.
- *I* means implement the design through any or all of - resourcing, operational plan, budget, stages, process/Gantt flowchart, timelines, staffing, goffering, component interface etc. *For instance*: Let's build the prototype exemplar project/pilot/simulation/microworld to these blueprints!! Typically approx. 2/3rds time and resources are required here.
[EG. Change Management circle in Figure 2 below]

- *L* means learn from the lessons and experiences gained from this the overall 'D'esign process to date this then feed-forward results into intent of the beginning stages of the cycle *Problematique* and *Idea* for subsequent iterations *For instance*: What have we learnt from building/establishing and test flying the prototype? And how can this lead to us better understanding the overall *Problematique*, refining our *Idea* and overall design of the prototype
Typically approx. 5% time and resources are required here.
[EG. Action Learning circle from Figure 2 below]

Bush Mechanics/Artificer Principles as developed through the application of Grounded Theory

The following are the conclusions of the two year grounded theory project designed to elicit the key emergent properties of artificer learners more commonly called bush mechanics. The full grounded theory report details the methodology and procedures as well as presenting the actual journal entries, memos, initial categories and emergent grounded theory categories as they emerged.

NB: The attributes revolve around the grounded concept of the 'exemplar project' and hopefully can provide the basis of a new 'theory of bush mechanics', as such the attributes point to a grounded form of vocational and citizen education that has all but faded from view in developed nations in the past 50 years. Bush Mechanic Principle (BMP).

Being a bush mechanic involves being committed to the following four principles.

BMP 1: The Exemplar Project Principle

Exemplar project – or bricolage - means *a best in class project/prototype which demonstrates a better world is possible for our children.*

For example a project that draws from the BM's learning over a decade of praxis as in broad committed experience. This praxis has helped generate a grasp of the big picture while understanding the small picture from its components in detail, as well as how the sub systems interface. The exemplar project involves the 'D'esign process and often occurs at the edges of the formal | informal economy. The project tends to be innovative rather than inventive, and combines business discipline, vocational expertise and social context, that braids thinking and doing; part and whole; individual and collective and is aimed at bettering the lot of our fellow human in line with the requirements of the global problematique.⁶ In a corporate sense then the Exemplar Project integrates/interfaces Corporate Futures | Action Research and | Change Management as per Figure 2 below.

BMP 2: Social Betterment Principle

The exemplar project is seen by the bush mechanic as an example of a social betterment. Such betterment can be for the corporation and its community interactions, for the community independent of the corporation, or for society as a whole.

The exemplar project although it may manifest in an technological or organisational manner is actually seen by the BM as a social betterment or holon, after Koestler (1978). That is as self organising nested system which is simultaneously part and whole, hierarchically situated yet autonomous, using fixed rules yet flexible strategies, such as the heart in the circulation system of our body.

The Bush Mechanic is a Renaissance person and sees the exemplar project at essence not uniquely materialistic i.e. a technological endeavour yet to be understood in terms of social betterment. Bush Mechanics tend to integrate life at the individual perspective with social betterment.

BMP 3: Collective Responsibility Principle – the Bush Mechanic as a Socially Responsible Corporate Citizen responding locally, proactively, concretely and collaboratively to the Corporate Problematique

The Bush Mechanic or Artificer sees her self as a Corporate then Global citizen responding locally, concretely, participatively, anticipatively, and proactively with the above two attributes to global futures via. the corporate problematique by blending internal and external ethics eg. the redefinition of psychological markers such as income, status, time and task etc. The closest historical parallel to this type of combined vocational and consciousness raising that has emerged in Australia and the UK is, for instance, the Workers Education Association (WEA).

⁶ As such a bush mechanic can be seen as doing nothing new, or worse as they tend to be particularly singular in focus on task they can be seen as hectoring about their favourite 'hobby horse', failing at the main game, demonstrating little self-understanding. being overly practical and even at best a 'ratbag' and at worst 'a professional failure', even marginalising themselves over time. The key point being, however that in general they do not seek to have their work assessed on its conceptual or textual merits rather by the practical results there from through the folk they work for e.g. their customers. Thus in the think/do dilemma between the academic *and* the practitioner from theory *and* practice bushies locate in the latter, while recognising that like breathing both, inhaling and exhaling, are necessary.

In this sense the bushie sees the exemplar project as a living prototypical response to the question ‘how then should we live together? – a sort of ‘Stargate’ portal to one aspect of a better world’

BMP 4: Learning Principle – Learning from actions based on the above 3 principles for a better world

This includes learning from and with the engagement/embodiment/action of establishing the exemplar corporate project.

Towards a revised definition of Bush Mechanic/Artificer

Based on these four key outcomes of the Bush Mechanic/Artificer grounded research project we may now postulate a new definition of same.

A Bush Mechanic is someone who, over a period of years and with substantial effort, resources and commitment, and as part of their responsibility as world citizen, participative and anticipatively conceives designs, establishes and learns from an exemplar project to demonstrate today a better world for our children’s children.

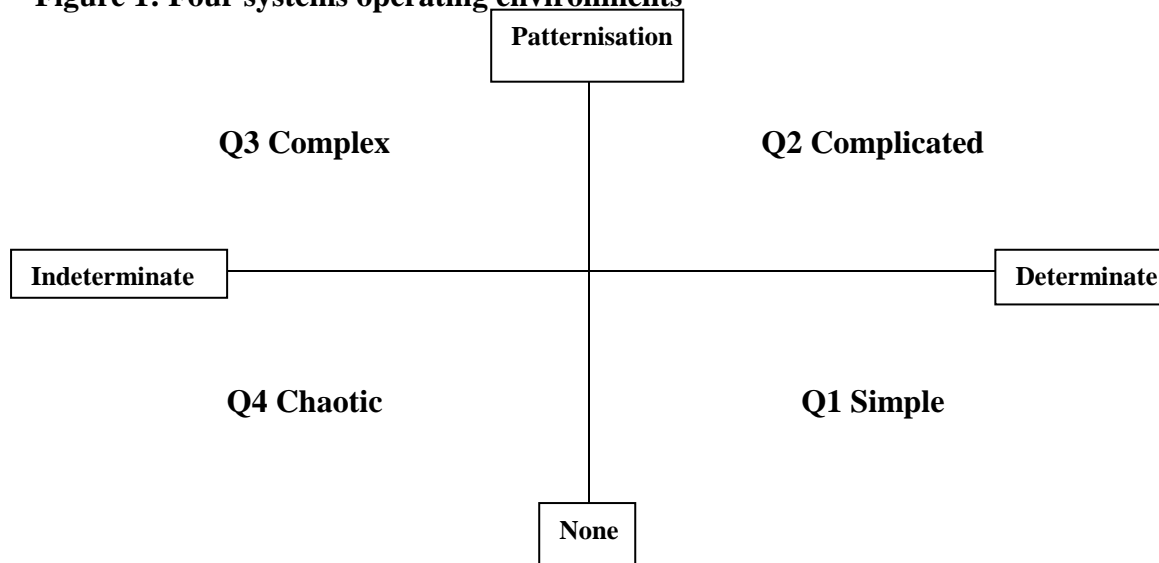
[PW No. 5 10-10-05; comm.15-02-2005]

In short someone who acts ahead wisely.

The efficacy of the Corporate Bush Mechanic approach in various operating environments- the Cynefin approach

Cynefin Institute a creative research institute into organisational development established and run by Dave Snowden. The institute grew out of a similarly titled institute which he helped form in IBM. See <http://www.cynefin.net/> . In Figure (1) below we explore the Cynefin approach in identifying two axes and thus four operating environments are as per:

Figure 1: Four systems operating environments



Source: From work by Bob Dick based on work by Dave Snowden's at the Cynefin Institute <http://www.cynefin.net/> drawn up by P Wildman 06-05

Determinate Corporate Environment

Q1 *Simple/Simplex categorical environment* – estimate 15% organisational operating environments in Australia/US today – cause&effect linear & sequential;

Diagnostic = Sense → Categorise

Action = Sense → Categorise → Act from category/policy directive

Role of Corporate Bush Mechanic - Corporate Bush Mechanic largely irrelevant – rather this is the realm of the bureaucracy

Q2 *Corporate operating environment – Complicated* – estimate 25% organisational operating environments in Australia/US today - cause&effect separated in time and space yet can be researched;

Diagnostic = Sense → Analyse

Action = sense → analyse (research report/inquiry) → change categories → act from changed categories/policy directive/structure

Role of Corporate Bush Mechanic – somewhat unnecessary – rather this is the realm of the Royal Commission or Taskforce leading to policy change – mind you we have to wait for the corporate or public sector wheels to fall of the issue at hand eg Health in Queensland then after the major system failure (often notified by a worker) we change the categories (policies) and think this will fix the situation. Clearly this can improve the situation however it remains of note for me that in terms of social and public policy in areas such as health and governance we behave remarkably like we

would 100 years ago when manned flight had barely occurred and the web would not exist for nearly 90 years. Yet technologically we move ahead with a newer computer every couple of years or so. Socially we seem to be going backwards by using governance structures that can only operate on the basis of a simplex/complicated operating environment.

Indeterminate Corporate Environment

Q3 *Corporate operating environment – Complex* - estimate 50% organisational operating environments in Australia/US today - also called chaotic – cause&effect does not repeat and is unpredictable yet anticipatable in terms of patterns and fractals – butterfly beating its wings effect. This is the realm of the prototype of the exemplar project whereby patterns may be distilled into an event process or product.

Diagnostic = Probe → Sense

Action = Probe with pilot projects/simulations/scenarios → Sense → Act from specific results of probes

Role of Corporate Bush Mechanic – crucial for thrival

Q4 *Corporate operating environment – Chaotic* - estimate 10% organisational operating environments in Australia/US today - also called incoherent - no cause&effect relationships can be perceived, **no** easy fine tuned predictability as to when random bottom tipping top over type events eg. terrorism, will occur;

Diagnostic = Act → Sense

Action = Act → Sense → Act

Role of Corporate Bush Mechanic – critical for survival - a genuine and relevant option however no one response pattern/option can unlock this environment, although it may be possible to find and help spread pockets of complexity within the chaos

The Corporate Bush Mechanic as complexity jockey

Today it may be estimated that around 3/4 rs of the corporate environment is complex and complicated (probably in around a 1/2 / 1/4 balance respectively. But wait this doesn't mean that the rest is simplex rather nowadays 1/10th is just chaotic. This leaves some 15% for simplex. Bureaucracies can only operate effectively in simplex environment which today suit less than 1 in 5 instances – this would be up from an estimate of 3 in 5 a generation ago. In this undeniably turbulent environment the task at hand is not so much to manage stochastic disorder in complex environments but also to establish a sense of direction therein a sense of meaning. This is the real challenge and needs must exist in a qualitative sense of justice and profit.

Much of a Corporate Bush Mechanics role is through deep experience, inc. interface and pattern recognition, to move as much as possible of complexity into complicated, especially for the customer. In this sense the bushie is a complexity jockey riding a complex horse in a complicated race. Complex organisation and structures to be managed and understood and constructed need to be able to be perceived and to a point understood, especially in lay terms, in determinate/complicated space. That is through patterns, fractals, holons, interface etc. The Corporate Bush Mechanic/Artificer Learner then operates in effect by making prototypes even moreso as exemplar projects.

Converting Complexity into Simplicity for Commercialisation through an Innovation process

In terms of an innovation process pure research and ‘inventions’ tend to be in Q4 which, brings chaos to the edge of complexity i.e. the Q4/Q3 border. Exemplar projects essentially are prototypes i.e. distilled patterns from Q3 that exist on the Q3/Q2 border. Importantly not every prototype will be effective or efficacious, indeed one in 20 may be ‘successful’ in that regard. The Corporate Bush Mechanic however drawing on her depth experience in complex space knows the primary patterns and interfaces and design ability e.g. test in virtual space/on the drawing board etc. and so this ‘risk ratio’ is substantially improved to maybe one in 5 for even one in 3. This is where the artificer learning process comes into its own i.e. learning from mistakes so that if one is not acting by establishing exemplar projects, one is not able to ‘fail’ and thus one remains unable to undertake learning.

Commercialisation then requires a movement from Q3 to Q1 viz. Q3 the prototype, which is then systems engineered into complicated space Q2 (with designs, flow/critical path charts, which is then concretised into a manufacturing process such as a production line and manufactured in simple space Q1. Commercialisation requires moving from complexity Q3 to simplicity Q1. Too often however complex environments are legislated to perform like simplex ones through bullying, violence and regulation.

Integrating Bush Mechanicing into Corporate Design as applied to The Flight Centre

Our purpose here is to contribute to the concept of bush mechanicing as bottom line focussed and socially responsible innovation cycle within a corporation. As discussed below, we conceive of it as a combination of three fields of endeavour: futures studies, action research and change agency. I argue that these three endeavours combine well with each other as illustrated in the following Figure, (Fig. 2).

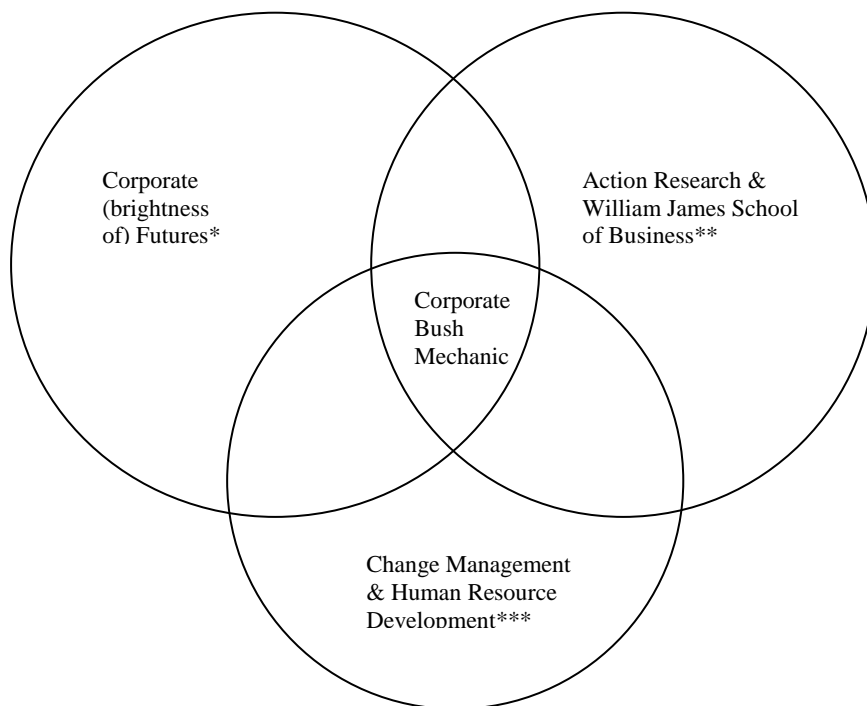


Fig.2. Corporate Bush Mechanics: an integration of Corporate Futures, Action Research and Change Management. Source: developed in conjunction with Bob Dick 09-2005.

* This circle links individual and corporate goals, strategy, intentionality, direction; ** this circle links individual study path and corporate skill needs; *** This circle links personal and organisational development

It may be argued that the current state of the world warrants attention and action, and that further this state flows through and directly impacts the operating environments for corporations, which may be characterised by what is referred to above as ‘complexity’. Designing a corporation that sees a complex environment as host positive requires in my view the integration of three things linking (1) individual and corporate goals, strategy, intentionality, direction; (2) individual professional development and study path and corporate skill needs; and (3) Personal and organisational development. See above Figure (2) for an illustration of this linking.

Their solution will require approaches that integrate theory and practice, and generate amongst people a common will to act together. A combination of futures, action research and change agency can achieve more than any one of them can in isolation:

- A futures orientation can take people out of their usual assumptions and open up new possibilities.
- To this, action research brings a focus on action and a cyclic alternation between theory and practice. The result is easier theory-practice integration.
- Change agency adds a set of tools and techniques to help in operationalising the solutions reached.
- The participative nature of action research and change agency builds collective commitment to the solutions and enhances collective action.

Bush Mechanic Biodata

Biodata on the Bush Mechanics in the research project

Table 1: Bush Mechanic Biodata

	MS	RP	RM	DM	CD
Age	45	65	56	60	
Gender	♀	♂	♂	♂	♀
Project	Permission to Shine – reconception-redesign & reconstruction of her life & lifestyle after an ABI in 1995	Science Art Research Centre – const & use	Global Governance	Marine Innovation	
Project Length [with PW/BD]	10 yrs [5yrs]	15 years [9yrs]	25 years [5yrs]	8 years [4yrs]	[BD]
Outcomes	Reconstructed lifestyle, Permission to Shine written & published	SARC completed, now also a 4 star B&B, research work underway	Thesis completed & CART (Communicative Action Research Team) undertaken over a 3 year period	Various race boats & marine innovations – went under the radar 8 yrs ago	Art prop design & construction
Education	Basic	Technical as surveyors asst.	Doctorate in Phil 2001	Technical as surveyors asst.	
Period known to researcher	Since late 2001 [PW 5yrs]	Since late 1997 [PW 9yrs]	Since late 2000 [PW 5 yrs]	Since early 2002 [PW 4 years]	[PW 1 yr]
Bushies Background in BM Project arena	Since ABI in mid 90's	Approaching 50 years	Approx 30 years	Approx. 40 years	Art and sculpturing
Economic position	Basic	Developed	Appropriate	Under the radar	Self sustaining
Joint Activities Level 1 – support Level 2 – Participation Level 3 – Participant in Action Research Proj Level 4 – Joint Bushie Project	Acted as , mentor & editor for her book [L1: Technical support, empowerment & moral encouragement]	Undertook joint research & seminar presentation [L2: Strategic i.e. design & presentation assistance]	Developed world public service proposal jointly, member of CART – Communicative Action Research Team - CIVIDA 3 years Civic Integrity Devt. Assn – fortnightly meetings 2001-2003, integrity survey of Qld politicians prior to election [L3: particip. in AR Project]	Upgraded my first boat 2002-05 (Fugely) & custom built the second 04-05 included concept design, const oversight, and fitout implementation i.e. I D I [L4: Joint Bushie Project]	Planning a workshop on Bush Mechanics
Bushie Principles Met: P1: Exemplar Project P2: Social Holon P3: Global Citizen P4: Learning (0-10✓)	P1: 8 P2: 8 P3: 3 P4: 8 Av. 7	P1: 9 P2: 7 P3: 9 P4: 7 Av. 8	P1: 9 P2: 9 P3: 8 P4: 8 Av. 8	P1: 9 P2: 8 P3: 5 P4: 4 Av. 6	P1: 5 P2: 8 P3: 6 P4: 5 Av. 6

Source: P Wildman 17-1-2005 Bushie Project = I | D | I in context of Action Research exemplar project; MS Meriel Stanger, RP Robert Pope, RM Richard Mochelle, DW David Wyatt, DM Don Miller, CD Clair Dick,

Bushie Backgrounds

Table 2: Examples of Bush Mechanics and their exemplar projects

Addressing the need for Global Governance. Richard Mochelle, seeing the emerging global governance crisis, has combined Doctoral studies* in the arena of Global Governance with fieldwork; designing and piloting a communicative action community involvement global governance project. Commencing in Architecture in his 20's this current project, commenced in the early 1990's, is a self-funded all-of-life project and has included the production of media, a citizen action group and academic resources. Further, Mochelle [mochelle@acenet.net.au] has 'walked his talk' and 'talked his walk' through the design and implementation of several Communicative Action Research Teams (CART's) – a model for a proactive citizen's group to establish prototype internet interlinked global governance exemplars. * Mochelle, R., *Towards a New Constitutionalism: Developing Global Civic Responsibility through Participation in World Constitutional Deliberation*. 2001, RMITU (Royal Melbourne Institute of Technology University).

Linking Science and Art today for the betterment of human health tomorrow. Robert Pope and Robert Todani have, over 15 years, established Australia's first Science Art Research Centre, just outside of Uki in Northern New South Wales. <http://www.science-art.com.au/>. This involved the artists themselves: conceiving, designing and building the centre; undertaking painting commissions; and continuing the centre's innovative research and learning activities; towards explicating a creative physics modelled on the ancient Greeks: wherein Science and Art; thinking and doing, are intertwined. This has largely been paid for by the sale of the artist's own art. More recently Robert Pope (who originally trained as a surveyor) and his partner Irene Brown established a Bed and Breakfast at the centre, offering painting masterclasses, science-art philosophy courses and Thai cooking. Robert uses experiential learning to link his futures work and art with the present day-to-day activities in the Centre in order to establish a creative physics for a 'healthy' global future.

Community Education today for emancipated Citizens tomorrow. Helen Schwencke has spent the past decade conceptualising, designing, launching and maintaining a Community Learning Association in Queensland. The Association has been a counterpoint to the economic rationalist and behaviourist approach to training mainly evident today (and which has meant the demise of the 'School of Arts' and 'Workers Education Association's' where much forward looking Adult Education occurred in the past). Originally trained in the biological sciences, Helen's [hschwenc@dovenetq.net.au] contribution has been self-generated rather than by external reward. In order to redevelop and transform Adult Learning into something meaningful to adults and communities, rather than simply task competencies, she has undertaken several futures research and community development projects to facilitate Community and Adult Learning for our grandchildren.

Biotech for a better world. David Wyatt is the principal of Novogenesis, a futures oriented Business Angel, Creativity & New Venture Catalyst company he founded in 1998, and adjunct professor graduate school of management Queensland University of Technology. His original field was micro-biology: specialising in children's health. He was previously co-founder of the award winning biotechnology company PanBio [<http://www.panbio.com.au/>] established in 1987, now listed on the Australian Stock Exchange, and he also held the position of founding Managing Director from 1991 to 1998. Novogenesis is affiliated with the DeBono Institute and the Grameen Bank This has allowed David to achieve his design intention of innovating in bio-technology in order to broaden his investments to social innovation. To this end Novogenesis invests time and seed funds for equity in start-up enterprises that are knowledge based with global market potential. David has embedded critical action learning as a means of disseminating lessons learnt.

Boat designer, builder, racer and championship winner 1983, plus 25 years conceiving, designing and **prototyping a series of marine innovations** to assist in the accessibility of marine pastimes to more ordinary Australians. Also committed to bringing attention to the deterioration in citizens rights brought about through the declaration of ban on recreational fishing in areas covering some 3/4ers of the Queensland Coast (current – South East Queensland). Innovations include a self launch and self retrieval system for trailer boats, no pull anchor, special pod design for maximum hydrodynamic lift from twin contra-rotating motors, spark plug tester and bore inspection method, stainless steel trailer design and construction. **Boating bushies** Don Miller - more info from paul@kalgrove.com

For a decade and with one finger typing a '**disabled bushie**' has redesigned and built another lifestyle for herself after becoming brain injured after falling from a horse. **Meriel Stanger**, now confined to a wheel-

chair, has had to rethink/redesign and reconstruct her lifestyle for herself and two daughters. She was approached to be the Event Director of Dressage Queensland to co-ordinate their state championships in October 2004. She is on the Boards of Management for several community disability groups. She also on the Community Reference Group with Brisbane City Council for the foreshore re-development. Not only that, in all this she finds time to write and self-publish a book - Stanger, M., *Permission to Shine - The Gift a journey of recovery and discovery*. 2004, Brisbane 200pgs: Available from the author by email on mstanger@powerup.com.au or PO Box 2040, Ascot, Qld, 4017. At a cost of \$25 for the book plus \$5 P&H in Australia and \$15 P&H overseas.

Marine Innovation Paul Wildman is the second tier of Custom Power Boats and has sought over the past year to develop an exemplar project that demonstrates several marine innovations. These include – stainless steel trailer featuring self launch and retrieval, readily moveable sub frame for achieving desired weight distribution when the boat is loaded. Hydrodynamically designed motor pod for twin contra-rotating motors, separate instrument pod for navigation instruments. This exemplar project is designed to demonstrate the attributes of a bush mechanic arising from this research project. paul@kalgrove.com

Flexible working arrangements in Flight Centre. Carlene Gillie, Manager of the Mt Hawthorn Flight Centre Store, Western Australia, having sympathy for the difficulty of combining parental responsibility with work, combined her Masters studies via the internal Corporate Business School to develop a viable model of flexible work practices. Supported by the Action Research model of problem solving the solution that has emerged is a break through which challenges the underlying assumption of the organization in this area. Through her work the organisation has achieved a level of profit in her store that is unmatched. In addition the degree of staff satisfaction is high which will be necessary for continued organizational success. Carlene cites as her major achievement not the profit generated but rather that six women that would not have been able to contribute to organizational success because of family commitments are now doing so. Her work succeeded without significant support and in an environment that normally would have quashed such an initiative. Carlene can be contacted on carlene_gillie@flightcentre.com

Source: P Wildman 12-2005 * praxisers agreement for the publication of these notes gratefully acknowledged

Recent Works by the Bush Mechanics directly related to this Research Project

Stanger, M. (2004) *Permission to Shine - a journey of recovery and discovery*. Brisbane: published by the author – Brisbane. 200pgs.

Pope, R. and R. Todonai, (1988) *Two Bob's Worth*. Loxton, SA: Science-Art Research Centre. 130.

Pope, R. and P. Wildman, (1988) Ethical Physics: A Foundation for Tomorrow's Communities. *New Renaissance*, 7(4): p. 21-23.

Wildman, P., D. Leggett, and R. Pope. (2003) *Human Science Technology: Harnessing Negentropy for Human Survival*. in *Human Science Technology Symposium 18th August 2003 at the Science-Art Research Centre Uki NSW*. Brisbane: Prosperity Press, Sustainability Research Institute, Science-Art Research Centre.

Miller, D. (1970-2005). has designed and prototyped: *race boat tunnel hull innovations, a spark plug tester for outboards, bore inspection light for cylinder bore inspections while cylinder head is still on, no pull anchor system, drive on drive off system for boat trailers* 1970-2005

Mochelle, R. (2001) *Towards a New Constitutionalism: Developing Global Civic Responsibility through Participation in World Constitutional Deliberation*.
<http://adt.lib.rmit.edu.au/adt/public/index.html> RMITU (Royal Melbourne Institute of Technology University). Unpublished. 300pgs.

Mochelle, R. and P. Wildman. (2002) *Constituting a World Public Service Network*. Brisbane. p.1.

Steps to implement a Corporate Bush Mechanic program in The Flight Centre Inc. (TFC)

Considering the above arguments and with reference to Figures 1 and 2 this report argues that the concept of a Corporate Bush Mechanic is not an absurdity and in fact may well provide a corporate innovation system in many ways tailor made to value add to the work being done by the William James School of Business. It therefore is now germane to focus on the host entity i.e. The Flight Centre as a corporate entity. TFC operates in a complicated/complex rather than simplex operating environment where the relevance of the Bush Mechanic approach to corporate innovation, profitability and efficacy of TFC is well worth considering.

A critical aspect of corporate efficacy today especially in competitive markets such as that of TFC is a process to harness corporate innovation from the bottom up. Thus this article argues that a method of corporate innovation relevant to TFC is needed. One such method is Bush Mechanicing . Further this article argues that an ideal outcome in this regard for TFC would be an innovation and ingenuity process i.e. bush mechanicing that (1) works bottom up and (2) builds on incentivisation (3) while linking individual aspirations (brightness of future), (4) corporate goals and 'locks' all this up within the corporate learning and history of TFC through (5) the corporate capability via. The William James School of Business.

Provided ethical considerations are borne in mind and practice, it is submitted that a bush mechanic program may well benefit employees and certainly will benefit Flight Centre.

In the event of such a view being accepted by senior management the following steps:

1. Establish a Full Throttle Working Group (FTWG) within The Flight Centre with a remit to implement starting from early 2006. It is suggested that this task force be no more than 5 in number inc. consultant to facilitate the process) and be chaired by the William James School of Business with a HRD, strategy person and staff member (not reps or talking head but full member – someone who is passionately committed to the project) Skroo or his nominee would be a consideration on the Task Force but probably not at first – as we were feeling our way
2. Decide the balance between social corporate responsibility and internal innovation required – I would suggest 60/40 however the Task Force may well reverse this however eliminating social all together is not a part of this proposal. Attention is drawn to The Body Shop and its deep social outreaches with international aid investment fund and so forth. Their web site <http://www.thebodyshopinternational.com/web/tbsgl> declares, and they support projects to back this, against animal cruelty, in favour of community trade, defending human rights, activate self esteem and protecting our planet.

Such a balance would probably be 80/20 in favour of social and in my view detracts somewhat significantly from what we are trying to achieve here with a bush mechanic action learning style approach.

3. This means working out the desired balance between community and corporate and individual benefit desired – this outcome profile needs to be most flexible yet a guide as e.g. initiating a project for disabled kids will have enormous community benefit yet in the long run will have much less tangible though nevertheless profound market presence effect
4. Use this as the corporate innovation policy
5. Resource it separately as a % of net profit and as a corporate foundation or endowment so to speak – internal corporate philanthropy. Year 1-2 resources estimated at \$100000 then the system should be self resourcing with the program receiving 1% of net benefits (cash and kind) to the corporation from the bush mechanic projects it supports for each of 3 years of each project, and if a net benefit does not flow neither do these returns. Transparent accounting is crucial here
6. Pilot the project in say the Australian region for 6 months, review and go company wide in 12 months
7. Incorporate its projects within the WJSB action learning study path and broadcast these outcomes by way of annual conference and innovation e-newsletter
8. Quantify it locally and verify centrally – sometimes though it will be necessary, within limits, just to do it first and measure later
9. Evaluate proposals on the basis of the three circles to see if they will meet a melding of corporate and individual employee needs, then assess successful proposals by the four criteria identified above
10. Once validated say after the review following the 12mth pilot – incorporate into the Annual General Report and recruiting material for TFC
11. Allow at least a six month implementation phase and let run for another 6 months before doing the performance litmus test

Resources

Web (accessed 20-09-2005)

<http://www.fbo.com.au/movie.asp?ID=10187> - Indigenous Bush Mechanics web site
http://www.bushmechanics.com/pages/bush_mecanics/body_bm.htm - more general information on indigenous bush mechanics
<http://www.abc.net.au/message/archive/bushmechanic/> Indigenous Bush Mechanic TV series by episode
www.hotfutures.net.au/bushie - hot futures bush mechanic blog
<http://geolib.pair.com/smith.adam/won1-10.html> Adam Smith on Artificers
<http://www.yorkriteofcalifornia.org/royalarch/raeduc007.htm> The link between Masons and Artificers

Text - Reference

Arendt, H. (1963) *On Revolution.*, London: Penguin. 350 pgs.

Dick, B. (2000) *Grounded Theory: a thumbnail sketch*. Interchange. 28pgs. Dick offers wide referencing and draws strongly from Glaser (1995 etc.)

Glaser, Barney G., ed. (1995) *Grounded theory 1984-1994*, Volume 1. Mill Valley, Ca.: Sociology Press. [This and its companion Volume 2 between them carry a large collection (48) of papers from a variety of authors on a variety of aspects of grounded theory. Many case studies are included]

Johnson, M. (2005) *Family, Village, Tribe: The Story of Flight Centre Limited*. Sydney: Random House Australia. 250pgs.

Koestler, A.(1978) *Janus - a summing up*. New York: Vintage. 300pgs.

Saul, J.R. (2005) *The Collapse of Globalism and the Reinvention of the World*. Camberwell, Victoria, Australia: Penguin Books (Australia). 300pgs

Wildman, P. (2001) Anticipating Emerging Issues: Reflections from a futurist. *Journal of Futures Studies* **6**, 137-152.

Text - source

Cox, D. (2005) *Integrity, Commitment and Indirect Consequentialism*, in *University of Queensland*. Brisbane. p. 14. Unpublished

Dick, B. (2000) *Grounded Theory: a thumbnail sketch*. Interchange. 28pgs. Dick offers wide referencing and draws strongly from Glaser (1995 etc)

Galtung, J. (2004) *On the Social Costs of Modernisation: Social disintegration, anomie and social development*, in *The Causal Layered Analysis (CLA) Reader*, S. Inayatullah, Editor. (2004), Tamkang University: Taipei. p. 84-118.

Glaser, Barney G., ed. (1995) *Grounded theory 1984-1994*, Volume 1. Mill Valley, Ca.: Sociology Press. [This and its companion Volume 2 between them carry a large collection (48) of papers from a variety of authors on a variety of aspects of grounded theory. Many case studies are included]

Inayatullah, S., Causal Layered Analysis: Poststructuralism as Method. *Futures*, 1998. **30**(8): p. 815-829.

Inayatullah, S., ed. (2004) *The Causal Layered Analysis (CLA) Reader - Theory and Case Studies of an Integrative and Transformative Methodology*. Tamkang University: Taipei. 570.

Jantsch, E. (1975) *Design for Evolution: Self-Organisation in the Life of Human Systems*. 1975, New York: George Braziller. 320.

Koestler, A., *Janus - a summing up*. 1978, New York: Vintage. 300pgs.

Kolb, David. (1984). *Experiential Learning - Experience as the source of learning and development*. New Jersey: Prentice Hall. 255pgs.

Mochelle, R. (1994) *The Future Meaning of Work? Enabling Discourse on Work through Post-Conventional Citizenship Education*. RMIT.

Molina, L., (2005) *Red tape out of control*, in *Courier Mail*: 24-05-2005. Brisbane. Pg. 21.

Morrissey, K., (2004) *Governance guidelines prove hard to swallow*, in *Courier Mail* (Friday, 17-12-2004). Brisbane. p. 37.

Moustakas, C. (1990) *Heuristic Research: Design, Methodology, and Applications*. Newbury Park: Sage. 128.

Thomson, M., *The Complete Blokes and Sheds; including stories from the shed*. 1995, Sydney: Angus&Robertson. 280pgs.

Wildman, Paul. (1995) Research by Looking Backwards: Reflective Praxis as an Action Research Model. *Action Research Case Studies Newsletter (ARCS)* (published by - ALARPM, Prosperity Press and Interchange), 3(1): p. 20-47.

Wildman, P. (2002) *Developing Grounded Theory into Local Theory - through an Action Research Process aimed at developing a community economy to support exemplar projects*. Brisbane. p.15.

Wildman, P. (2004) *Identifying Australia's Meme Complex - Learning's - a personal and professional futures perspective on a generation of experiencing the systemic blockages in working for socio-economic change in Australia*. Prosperity Press: Brisbane. p.13. [2004b]

Wildman, P. (2004) *Bush Mechanic and Artificer Learner Defined in Simple Text*. Prosperity Press: Brisbane. p.6. [2004c]

Wildman, P. (2005) *The Origins of the Separation of Thinking and Doing*. Kids and Adults Learning Pty Ltd - the Bush Mechanics Institute Report No.1: Brisbane. p. 6.

Wildman, P. and S. Inayatullah, Ways of Knowing and the Pedagogies of the Future. *Futures*, 1996. 28(8): p. 723-740.

Wildman, P. and Schwencke, H. (2003) *Your Community Learning - action learning circles for learning and earning through community economic development*. Community Learning Initiatives and Prosperity Press: Brisbane. Multi Media CD Rom.