

The Community Artifice Innovation Process (CAIP)

BMARP3 Overview: Link 3 in overview in the Bush Mechanic Action Research Program

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Community Artifice Innovation Process (CAIP)

Reader Navigation Question: While I recognise the importance of individual creativity and innovation we also need to understand the community innovation process so we can harness our individual creativity for the common good. The Community Artifice Innovation Process (CAIP) is one such way.

Introduction

. Creative Socio-diversity

Here we are concerned about socio-diversity - a social or community version of bio-diversity - the rich ecosystems of ideas that sustain human communities in the same way that natural living systems sustain the organisation of biological life. This is the community equivalent of moving beyond a monoculture. A system dominated by a single set of political and economic ideas, like an ecosystem populated by just a few plants and animals. Such a system is far more vulnerable to disaster.

In fact Deming, the inventor of Quality Circles, maintains that around 80% of a community's success is dependent on structural arrangements such as the CIP, HRD strategy, policies, transparency and participation. Only 20% relate to the actual people in the community.

That aptly describes what happened to the Soviet Union and other authoritarian command-economy systems in Eastern Europe. They crumbled for decades yet collapsed almost overnight because their structures did not allow diversity in thought – few, if any, fresh ideas could emerge, other than reinventing the past that could be implemented when things started going wrong. The global economy in many ways mirrors this precarious political situation. The global mindset says there is just one way to organize a society: the market economy. When the weak links of this system become apparent, as nearly happened last year when the Asian economic crisis sent tremors through Wall Street and the City of London, we have little to draw upon in our efforts to mend the mess.

. Background - distinguishing between invention and innovation

Invention

Invention is used to relate to stage 1 and 2 initiatives whereas innovation is used to refer to stage 3 and 4 initiatives. Invention in this sense is used to refer primarily to the use of imaginative or creative power to ‘new’ and ‘unique’ and ‘first time on planet earth’ type actual projects, initiatives of use in accomplishing human objectives that previously were difficult or impossible.

Generally invention refers to things however it can also refer to underlying community processes, for instance spelling and language while community inventions of millennia past are no longer such, although new words could be seen as community innovations.

Inventions are ideas first applied.

Community Inventions can be ‘good’ or ‘bad’. Mostly if they are genuine inventions and thus challenge the status quo unless the status quo can incorporate them to reinvent itself they are universally labelled negatively, harebrained, yes but we are already doing it, same as x, y or z and so forth.

Innovation

Innovations, on the other hand, can be seen as improvements or optimisation on what is rather than inventions of something new. Often innovations spring from a previous invention sometimes they appear as improvements to existing systems. So innovations are a form of third generation idea application i.e. ideas are at first conceived and then designed and applied first in inventions and then adapted through innovations and finally applied generally through community technology.

Our society seems particularly of need in the area of community innovation. This tends to thwart any moves towards community transformation. Certainly community inventions and innovations abound ‘out there’. What is needed however is twofold:

1. Community technologies that assist implementation and trailing of new processes and ideas and,
2. A resourced Community Artifice Innovation Process that can then link the invention and the technology and thereby help us understand and learn about the overall process in order to improve our communities for our childrens’ children.

So in summary the Community Artifice Innovation Process is about Community Invention/Innovation + Community technology = Community Transformation.

In this instance Community Innovation (CI) primarily refers to innovations and inventions in hard or soft areas of Community Technology that promote resilience and cohesiveness and learning of communities – the Community Innovation Process (CIP). Communities as used in this project are not ‘spray on solutions’ rather they are serious informal and enormously important mutual aid social structures and processes that have

for generations given meaning to folk esp. our youth. Over the course of the industrial revolution communities and families have become more in name than a reality. Increasingly CI initiatives are seeking to redress this and are strongly committed to the view of cohesive, vibrant communities being a vital part of tomorrow's world.

CI recognises that such innovation and invention are difficult, time consuming (thirty year cycle) and don't always work. This is all the more reason however for undertaking CI as if we don't make moves to change our culture and society, and small scale community change is as good a place as any to start, we will get to exactly where we are now i.e. we won't get anywhere different unless we proactively seek to change using processes such as CAIP. And nowadays the need for change from a 'More Of The Same' and 'Business As Usual' approach is evident all around us in the visual horror of terrorism, poverty, unemployment, obscene divergence between the rich and poor and the tragedy of refugees and youth suicide.

Community Technology (CTech) refers to self-managed processes and structures, focusing on the informal or third sector that enable communities through their own determination to function as cohesive inclusive entities. This can include 'hard' infrastructure such as civic architecture such as civic centre, library, town hall etc.; infostructure e.g. internet connections and software; and 'soft' infrastructure such as street meetings, community bulletin board, mutual aid associations, adult learning, neighbourhood watch, service clubs, Local Government open days, Action learning circles such as this one and so forth.

Community Transformation (CT) then refers to the end point of a successful Community Artifice Innovation Process (CAIP) enacted through a viable Community Technology (CTech) that leads to, or catalyses, the re-emergence of community in a particular area as cohesive, inclusive, vibrant informal part of the broader culture. Nowadays communities are often almost completely dependent on Government funding and control for their *raison d'être*. This project maintains that communities are a vital component of our social fabric and social capital and those supportive networks need to achieve a certain degree of independence while retaining their informality.

How and when to use CAIP

This tool illustrates an application from the perspective of community invention. This is seen in the difference between stages 1 & 2 and 3 & 4 respectively in the following figure.

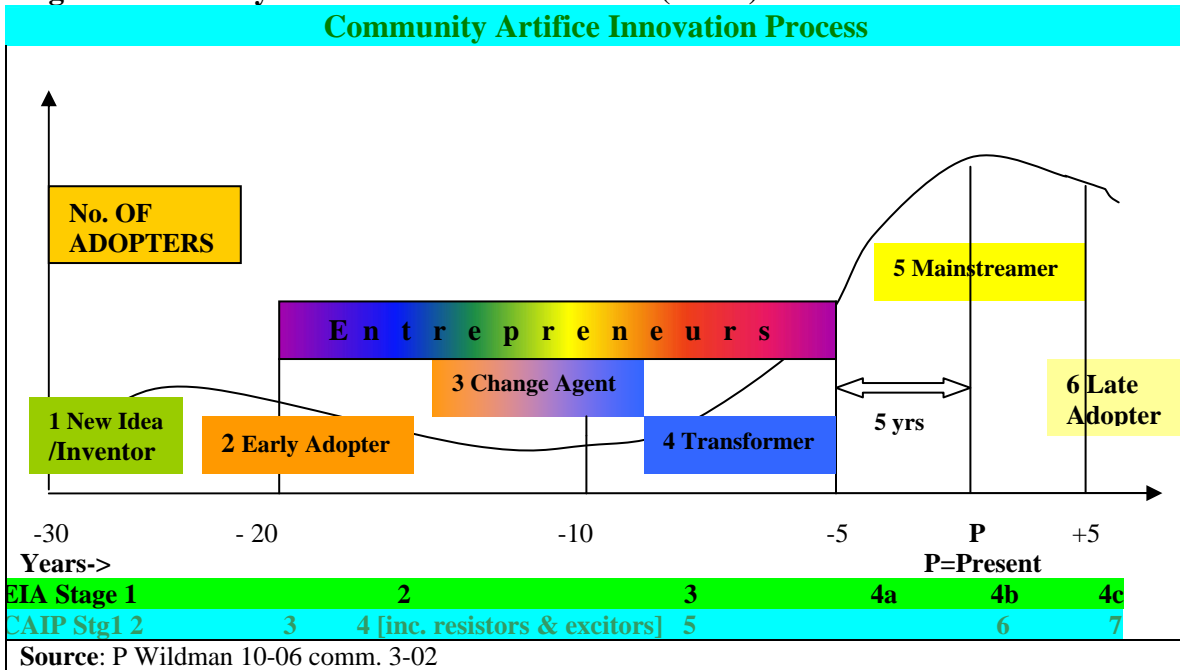
Inventions are more than ideas as they represent the demonstratable actualisation and concretisation of these ideas. Often they snap or change or challenge status quo, whereas innovations tend to snap on to the status quo. Communities, organisations and committees, however, are presently only well versed in handling large numbers of 'new ideas and inventions' and regularly lure them into dark alleys of bureaucratic necessities and pre-requisites and watch as they quietly strangle themselves.

The Seven Step Community Artifice Innovation Process (CAIP)

The focus of this tool is more on community transformation, which includes an invention and methods for the handling of ideas as well as encouraging the individual inventive genius with an emphasis on successful implementation. Here are the three stages – conceptualisation (the new/bright idea); design (eg. prototype development and entrepreneurial opportunity) and implementation or mainstreaming. This process, when applied to an overall innovation process for a community or organization can be lengthy eg. up to 30 years. This is especially marked when this timeline is compared to technological innovation with for instance fact-based knowledge doubling every 3 months by 2010 down from 18 months at present.

Clearly to be in front of the pack an organisation will not only needs to be able to innovate it will also need to know what to innovate. That is it needs a CAIP and a way of identifying emerging issues eg. through Emerging Issue Analysis (EIA) see separate tool in for further details. In the following table CAIP and EIA are integrated. Molitor (1980), Wildman (2001).

Fig 1: Community Artifice Innovation Process (CAIP)



. The Seven stage Community Artifice Innovation Process

CAIP

The Seven steps in the CAIP tend to be sequential and generally locate around the following seven stages:

1. **CAIP Stage 1; [EIA Stage 1]** - First there is the **New Idea (NI)** possibly from deep theory or pure research or chance. Generally speaking most inventors try to implement or construct their invention. Then they move on to something else. Note change comes from the periphery. **Most of these inventors, & writers are outside conventional systems & far outside the central mainstream.**
2. **CAIP Stage 2; [EIA Stage 1-2]** – There is **The Inventor (TI)** or visionary who is curious & can harness the NI & produce & invention
3. **CAIP Stage 3; [EIA Stage 2-3]** After TI's come first the **Early Adopters (EA's)/ Innovator (I's)**; then the **Change Agents (CA's)**, then the **Transformers (T's)**. The term '**Entrepreneurs**' is used for short, covers this tripartite 'zone of innovation' whereas '**Artifice Entrepreneurs**' tend to concentrate in the first two pre mainstream marketing. **Entrepreneurs** pick out the positives & advocate this to the broader market group. That is they link the idea to the market & vice versa. These are the messengers even harbingers of change & are often straightway 'shot' or toasted by the status quo. **Early Adopters** adopt the innovation/invention as is wires hanging of it etc. i.e. as a prototype, generally for themselves. This in a sense demonstrates is viability and effectiveness as a product/service. **Change Agents** start the process of diffusion by changing and reshaping the product as well as on selling it to mainstreaming marketing folk. Finally **Transformers** reshape or channelise the innovation in its appearance, features and spiel and link this to consumer's wants or desires and skills.
NB: Most of the 'change agents etc' here are not part of, or paid by, mainstream organisation, though some of the authors may well be part of mainstream academic system.
4. **CAIP Stage 4; [EIA Stage 3]** - This brings a **reaction**: (a) **The Resistors (TR)** out of the woodwork & embeds the process well & truly in the Politics Of Implementation (POI). Often these are reactionaries with vested interests in the Status Quo (b) **The Exciters (TE)** folk who withdraw from the innovation(s) Lets hope they don't re-enter at Stage 7 the Curmudgeons.
5. **CAIP Stages 5; [EIA Stage 3-4a]** - **Transformers (T)** are folk who step down the voltage of the invention often by innovating various prototypes for various uses of the original invention inc. demonstration & thereby ease its movement into mainstream; these folk are still generally outside 'the market', and are traditionally Artificers called Bush Mechanics. This is where Community Transformation starts. Usually in EIA stage 3 they generally don't have the motivation of developing the invention rather they are looking to its application – which typically is some product development generations away.
Observations: One CIP indicates they are VERY thin on the ground, in fact it's a desert out there, more so than the early implementers i.e. the inventionists themselves in stage 1 & early 2. Yet there is a veritable rush of published material. Heaps more thinkers than doers in these stages. **Two** the thinkers are now increasingly part of mainstream institutions eg. think tanks, Universities and even corporate design offices, certainly by now advertising 'watchers' are picking up the emerging market vibe. Once again the pragmatic designers and doers are often essentially outside the box and self funded.
6. **CAIP Stage 6; [EIA Stage 4a, b]** - **Mainstreamers** – this is the zone of occupation of **policy development**, legal inquiry, conventional consumerism – generically operational optimisation. Full blown adoption through **Mainstreamers (M)** generally lags some decade behind the published material. Adoption now leads to the production of new learning materials & incorporation within the Status Quo Community Control Mechanisms (SQSCM) i.e. by rules & regulations

7. **CAIP Stage 7;** [EIA Stage 4c] - **Late Adopters;** The early adopters have already moved on however for various reasons they choose not to adopt till now. Sometimes adoption never happens. For instance a group never adopts, becomes almost '**spiritually reclusive**' & locks into an optimising process at the mainstreamers stage eg. Amish. Another group the **curmudgeons** may well be comprehensively pessimistic even nihilistically reactionary eg. some aspects of the citizen's militia in the US. The curmudgeons are only a handful yet are a serious & potentially nasty piece of work as they can poison future change

8. Observations:

- **The Cycles repeat** for other products & services. They are not 'phase or sequence locked' as may be considered from these figures. For instance the 5-year phase difference identified in CIP 4a where consumption is rising yet issue alerts are falling may stretch to 10 years in some instances.
- Critically though for diffusion these phases are repeated yet much compressed. Further they: (1) much more strongly linked (2) the cycle time is reduced from 30 to less than 3 years and (3) the Early Adopters and even Inventors can benefit from the marketing of the product as it happens so quickly and therefore (4) we see in high tech firms these folk have been brought under the corporate roof to reduce cycle times even further
- **Entrepreneurs** stretch over EIA stages 2&3 and have several crucial roles – (1) They link idea and market (2) Act as transformers (3) Play a key role in appropriate design.
- In this context we need a Community Design for **Community Entrepreneurship**. CD &CE are broader than SD&SE in that Culture allows one to move away from existing 'colonised' community space. While maintaining some constraints this allows separation from existing community arrangements such as Governance.
- The CIP applied to **community governance** quickly shows the design weakness for innovation therein. Such governance is vital for establishing a pro-innovation climate.
- There are few formal community governance processes of engaging **CIP stages 1 or 2.**

Activity 1: Developing a CAIP Idea

Think of two ideas – and ideas duplex - please:

- 1 An innovative idea you have seen implemented in your community recently. For instance it needs to be local and could come from a neighbourhood group, local government, service club etc.
- 2 An innovative idea you would like to see implemented in your community in the near future (say over the next couple of years)

You can think of several of these 'duplexes' if you wish esp. in a community 'creative' action-think-tank.

Now pass these various duplex ideas through the CAIP sieve – that is – is the idea capable of solution within and by the community itself. Some ideas are capable of household application/solution; some require regional solution and some beyond that. We wish to focus on ideas capable of solution at the community level via. resources, expertise and implementation. Select a duplex.

Now consider the CAIP diagram and locate both ideas in one of the four stages.

What are a few ways you could use to move your idea to the next stage?

Applying of the CAIP Process

The party in power then implements the policies (if honest & most aren't) through a Cabinet/executive & no community discussion is held (cabinet solidarity). Implementation is undertaken over a three-year period. Then the community are informed via. press releases & the media. Actual implementation is undertaken by bureaucrats whose aim is to keep their CEO looking good i.e. not to try anything that wont work and this requires control of the CIP to the point where totally deterministic (rigidly controlled) methods of implementation are used. So there are no pilots, policy alternatives identified, para orgs (Huston 2000), micro words etc tested.

Policy change is seen as executive fiat and change of regulations – no change in delivery let alone formulation is considered. [Jantsch (1975) identifies 5 types of policy – deterministic, operational, heuristic, purposive and evolutionary. The deterministic system of deliver means almost nothing is learnt in the process of implementation which is considered of a lower level than policy development which itself is done to fit to the political agendas mentioned above.

Implementation is done by the organisations bureaucracy that is until the wheels fall off i.e. major system failure like Aboriginal Deaths In Custody (1990), Institutional Paedophilia (1996), HIH insurance collapse (2000-1), Ansett aircraft grounding (2001). Then an inquiry is held, even a Royal Commission where even more instrumental/deterministic policy is put in place usually by way of hundreds of recommendations requiring thousands of further regulations eg. the RCIADIC came up with 339 recommendations that have resulted in thousands more regulations for prison authorities the expenditure of \$470Maud and the deaths continue. Such deterministic responses effectively further dumbs down any innovation or resiliency in a system.

So by now implementation is approaching 30 years at best from when the issue first became actionable at CIP stage 2. So the CIP is at best (1) seriously delayed, (2) profoundly extended and (3) inherently conservative, compared to the above mentioned **technological diffusion process**, using similar categories of say at most 1/10th of this period i.e. 3 not 30 years. This allows innovators as entrepreneurs to be included in the mainstreaming process – witness the .com phenomena. Using this model the need is for community entrepreneurs that can operate at the EA and PD stages if the CIP process. This will mean broadening the meaning of entrepreneur substantially as well as providing spaces for such community innovation and experimentation to occur.

Effectively this analysis means that innovation via. the community system and using policy decisions from an executive level, can lock CIP into Stage 4 primarily Stage 4b and 4c. So this system of Community Innovation is always doing at best a catch up and at worst a fall behind. Consequently those undertaking community innovation eg. in CIP stages 2&3 are almost always on the periphery and outside bureaucracy and academia. Unlike its technological cousin the rate of change is so slow that it seems more like community evolution than community revolution.

Sources: P Wildman 10-01 based on Atkisson (1999:182), Huston (2000), Jantsch (1975), Mochelle (1995), Molitor (1980)

Benefits of the tool

CAIP shows at once how important CAIP is in theory and also how slow and difficult it is in practice. What this means is that we often give up in practice and keep the fancy diagrams on the whyte board. This doesn't have to be however if we combine CIP with a tool such as EIA then we have a ready-made community front end aimed at innovation, productivity and efficacy.

Drawbacks/things to watch out for

This tool along with several others in this toolbox is a serious one. It needs understanding and regular attention to work. And it takes time. As such it should not be used if it is just to provide a cover over a ‘do nothing’ approach.

Activity 2: Applying the CAIP

Scene	Text	Close
Community scene with the CAIP diagram visible	<p>Understanding the CAIP is vital in supporting technological innovation in an organisation. Much work has been done on the technical side of innovation and not much on the org side. Consequently in an organisation the place where innovation usually falls down is not technical but community.</p> <p>Generally before implementation an idea will appear 10-15 years before it is accepted. With EIA it is possible to keep in touch these ideas and to commence piloting several years before they start to mainstream.</p> <p>Try these steps:</p> <ul style="list-style-type: none"> ▪ Take a Community Artifice Innovation issue such as Community Bank, Self-Managed Community Prototype Development Task Groups (SMCPDTG). ▪ When did you first hear about them (emerging issue)? ▪ How long was it till they surfaced in an organisation you know of? ▪ Where would you place the innovation in the CAIP process? Stage 3, 4a? ▪ How can a Community Bank/SMCPDTG assist you(r) company? Will, and how much, can this save in costs? ▪ What will follow Community Bank/SMCPDTC? That is identify an emerging issue following the one you choose say at stage 1 or 2. 	A second flip chart with SMCPDTG in full and another emerging issue eg. chaotic organisation under it.

References

. Web

(almost nothing in Aust & NZ)

Deming, W., Edwards (2002). *Various Deming web resources* No. The Deming Institute:
<http://www.deming.org/>

The Deming co-operative <http://www.deming.edu/demingcoop.html>

Deming electronic website <http://deming.eng.clemson.edu/pub/den/>.

Overview: Deming did not so much write books as practice his quality improvement system with particularly efficacious ends especially in Japan. Consequently Deming is more written about than having written himself.

Global Ideas Bank and Community Invention Contest, The Global Ideas Bank of the Institute for Community Inventions offers 1000 pounds in prizes for the best community inventions. <http://www.island.net/~dpwilson/gibisi.html>

Forum International de l'Innovation Communitye (International Forum for Community Innovation) Created in 1976, the Forum International de l'Innovation Community (the Forum) is an international non-profit association whose aim it is to promote community innovations. <http://www.continents.com/FIIS.htm>

Stanford Business School: Centre for Community Innovation Bringing Entrepreneurship and Research to the Community Sector Stanford Business School has established a unique new Centre for Community Innovation (CSI). The primary goal of CSI is to inform, shape, and accelerate a growing movement aimed at bringing general management, entrepreneurship and social science to the social arena <http://gardnercenter.stanford.edu/youth-dev-resources/other-orgs.html>

How to start a neighbourhood community innovation group, summarised from a Tranet newsletter monitored for the Institute by Mark Kinzley. Here are suggestions for starting a group that can work to help create a sustainable world of family, neighbourhood <http://www.globalideasbank.org/site/home/>

. Text

Albery, N. (Ed.). (1992). *The Book of Visions - An Encyclopedia of Community Innovations*. London:

Atkisson, A. (1999). *Believing Cassandra: An Optimist Looks at a Pessimist's World*. Melbourne: Scribe Communityations.

Aerla, G., Dunning, A., & Forge, S. (1997). *Chaotics: An Agenda for Business & Society in the 21st Century*. Twickenham, UK: Adamantine.

Huston, J. (2000). *A Passion to Evolve*. Hawaii: JH Publications.

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

Mochelle, R (1995) *Rethinking the Ethics of Professionalism, Citizenship and Work: Implications for Environmental Design*. Catalyst 95: The Design and Environment Conference. 1995 Centre for Environmental Philosophy, Planning and Design, Faculty of Environmental Design, University of Canberra

Molitor, G. (1980). *Environmental Forecasting: Community Policy Forecasting*. In L. Preston (Ed.), *Conference Papers, American Assembly of Collegiate Schools of Business, St. Louis Missouri [The origins of EIA]*, Collegiate Schools of Business US.

Osborne, D., & Gaebler, T. (1992). *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Community Sector*. New York: Plume.

Walljasper, J (1999) Ideas of Community Invention (August)
www.isl&.net/~dpwilson/gibisi.html

Walnick, D. (1995). Community Theory: New Science as a Model for Community Development. *Futurics*, 19(1&2), 47-61.

Wildman, P. (2001). Anticipating Emerging Issues: Reflections from a futurist. *Journal of Futures Studies*, 6(1), 137-152.