Improvisation and Agile Project Management: A Merging of Two Ideals?

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Some Initial and Understood Factors...

- Projects are accepted as the framework for managing change in organizations.
- The speed of that change is accelerating.
- This is being intensified by the ‘turbulence’ of organizational environments.
- Ambiguity has to be embraced as we rarely have ‘complete’ information on which to base decisions.
Work is Changing - and Project-based work is changing as well...

• There is a view that the ‘rigidities’ associated with traditional management and work methods are becoming outdated...

• Allowing employees the freedom and space to decide how they want to achieve their work outputs is becoming more accepted...

• Planning and ‘process’ are being superseded by the ability to manage behaviours and deal with the ‘softer’ elements of work...
Issues...

- ‘Process’ –v- ‘Flexibility’
- Dealing with Environmental Turbulence
- Ambiguity and Complexity
- Shifting away from ‘the Plan’
So - What is the relevance of this session – and the paper ???

• It recognizes the shift from Process to Behaviors within ‘modern’ PM
• It accepts that projects are ‘complex’ and ‘ambiguous’
• It recognizes that project decision-making is often done with ‘incomplete’ data
• It deals with the need to harness Creativity and Innovation to survive in increasingly ‘turbulent’ environments
Modern Work in Modern Organizations...

- Chaotic – Task and Team-based
- Arguably more suited to educated and motivated workforces
- Workers can be disrespectful of authority if not accompanied by Expertise
- Often driven by specialization – together with the application of a discipline-associated knowledge base
So...

AGILE PROJECT MANAGEMENT...
AND IMPROVISATION...
Agile Software Development...

- Developed over the last decade or so to ‘speed up’ software delivery
- Based on ‘giving the user something quickly’ for evaluation
- Many iterations – each hopefully an improvement on the last iteration (closer to user requirements)
- Becoming more academically and generally accepted
Some of the ideas and principles from Agile Software Development are being combined with other flexible working concepts to form:

**Agile Project Management...**

And there are some significant parallels with ‘improvisational working’ within the project context, an area where I have published a number of papers.
So – what we are going to do is:

• Compare and contrast the characteristics of Agile PM, and ‘Improvisational Working’ within the Project context …

• Identify the similarities and differences between them… and:

• Maybe start the attempt to locate both concepts within the wider academic landscape…
The ‘Basics’…

**Agile Project Management**
- Emerging Literature from Agile Software Development principles
- Multiple iterations to meet user requirements
- Move away from ‘prescriptive’ planned outcomes

**Improvisation**
- Emerging Literature that applies Improvisation to the Project context
- Time and space to try different ways to resolve issues
- ‘Library’ of previous actions applied to new situations (*also a part of APM*)
Agile Project Management...

- Iterative process based around five phases...
- Requires a willingness to at least partially abandon a reliance on planning, reporting, and overt and documented management of risk in favour of flexibility, informal communication, and evolving requirements
- Fast development of ‘prototype’ solutions, usually without a detailed set of requirements (i.e. embracing ‘Ambiguity’)
The Five Phases of Agile PM...

– **Envision** (Envision-Explore as opposed to Plan-Do... Enough ‘vision’ to keep the next phases ‘bounded’)

– **Speculate** (Hypothesising about changing and evolving requirements)

– **Explore** (Exploring rather than Producing... Iterative – experimentation with the more ‘uncertain’ elements)

– **Adapt** (Adapting outputs from the ‘Explore’ phase, instead of anticipating requirements... )

– **Close** (Review and Learning for the future)
And APM is maybe:

• Not about ‘the perfect solution’
• Not about managing the process
• About balancing ‘flexibility’ and ‘stability’
• About ‘satisficing’ rather than ‘optimising’
• About dealing with turbulent environments and requirements
• About reacting to emergent change
• About putting ‘something out there that works’
But...

- It doesn’t let you off from doing some:
  - Planning...
  - Specifying...
  - Allocating work to teams...
  - Setting a ‘framework’ to work within...
  - Monitoring...
**Improvisation**

**INITIAL THREE CONSTRUCTS**

- **Creativity**
  - new ideas about how to achieve things

- **Intuition**
  - about what is possible within the structure and resources and capability of the organisation

- **Bricolage**
  - making the best of whatever resources you have to hand

- These constructs come from Moorman & Miner (1998a & 1998b)

- They define Improvisation as: “the degree to which composition and execution converge in time.” M&M(1998b: 698)
Miner et al. added more constructs of Organisational Improvisation...

Moorman & Miner (1998a & 1998b) talked in terms of:

- Creativity
- Intuition
- Bricolage

Miner et al. (2001) added:

- **Adaptation** of existing routines, etc
- **Compression** (of time) by simplifying and shortening steps
- **Innovation** as in deviation from existing practices and knowledge
- leading to **Learning**
Contradiction...

There is a historically accepted view that ‘organization’ is order, routine, and the logical arrangement of processes to achieve a given, controlled outcome.

BUT:

‘improvisational work practices’ require: “the conception of action as it unfolds...” (Cunha et al., 1999: 302)
Contradiction...

‘Organization’ infers pre-planning, and having procedures to deal with expected occurrences...

BUT:

‘Improvisation’ is about dealing with the ‘unplanned’, often meaning having to react organisationally to the ‘unexpected’ generated by a turbulent environment...
A ‘Contested Space’…

- Planning and structure to ensure processual integrity...

Versus

- A looser and more flexible environment to allow ‘improvised’ solutions...
So...

- Do we really need planning and process in PM any more ???
  - Some people would argue that we don’t (agile?)

AND:

- How do we manage this ‘tension’ within the contested space...
Tensions between Managing and Improvisation...

MANAGING:
The efficient day-to-day operation of the organization requires stable routines and controlled environments.

IMPROVISATION:
relies on intuition and creativity to develop new routines - usually achieved in a loose & flexible environment.
Comparing the constructs within Improvisational working to APM...

<table>
<thead>
<tr>
<th>Construct</th>
<th>Applied to Improvisation</th>
<th>Applied to APM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>Improvisation requires an element of Creativity, but Creativity does not have to involve Improvisation.</td>
<td>Suggested as an emergent result of well-functioning Agile teams. Will therefore be an output of effective APM.</td>
</tr>
<tr>
<td>Intuition</td>
<td>Improvisation can occur without Intuition.</td>
<td>Evidence that Intuition is usually present in APM, and that experienced agile teams employ it to assess the effectiveness of future iterations.</td>
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<tr>
<td>Bricolage</td>
<td>Improvisation almost always involves Bricolage, as the temporal requirements do not allow for additional resources to be marshalled.</td>
<td>No mention of or recognition of bricolage as a concept within APM. The literature assumes a sufficiency of resources.</td>
</tr>
<tr>
<td>Adaption</td>
<td>Adaption can occur outside of improvisation, and is often involved within improvisation to apply an existing or previous routine to a novel situation. Not all improvisation is adaptive.</td>
<td>A key element of APM, with a specific ‘Adapt’ phase, and adaption processes being a vital component of the development process.</td>
</tr>
<tr>
<td>Compression</td>
<td>Often present within improvisation, in order to reduce time or retrieve temporal problems.</td>
<td>Arguably always present, as APM aims to reduce time, particularly in NPD projects.</td>
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</tbody>
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Construct | Applied to Improvisation | Applied to APM
--- | --- | ---
Innovation | Can be planned or emergent, so although improvisation involves innovation, not all innovation is improvisational. | Present within APM, but managing the ‘tension’ between innovation and process is a key skill.
Learning | Improvisation is a specific type of learning, but there are also other ways of learning from the organisation’s own experiences. | Present at the tacit level, and at the explicit level within well managed APM, where the Close’ phase is executed.
## Components, Process, and Outputs...

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<td>Component &amp; Output</td>
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<tr>
<td>Intuition</td>
<td>Component</td>
<td>Component</td>
</tr>
<tr>
<td>Bricolage</td>
<td>Component</td>
<td>No evidence in Literature</td>
</tr>
<tr>
<td>Adaption</td>
<td>Process</td>
<td>Key Component</td>
</tr>
<tr>
<td>Compression</td>
<td>Process</td>
<td>Output</td>
</tr>
<tr>
<td>Innovation</td>
<td>Process (&amp; Output)</td>
<td>Output (&amp; input to the next iteration)</td>
</tr>
<tr>
<td>Learning</td>
<td>Output (&amp; input to the next improvised intervention)</td>
<td>Output</td>
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So Improvisation looks like...

INPUTS
- Creativity
- Intuition
- Bricolage

PROCESS
- Adaptation
- Compression
- Innovation

INPUTS & OUTPUTS

LEARNING
Some Problems and Criticisms...

– Not suitable for all scenarios and contexts
– ‘Higher Risk’ has to be accepted
– ‘Legacy’ processes may need to be dismantled or ‘sidelined’
– Trusting project workers to arrive at the right outcomes
– Developing appropriate skills
– Not about ‘getting it right first time’...
Where does this all fit with ‘existing’ PM...

– Supports the shift towards an appreciation that the ‘Plan - then Execute’ paradigm is not always appropriate...

– Draws on emerging work on Projects as ‘Complex Adaptive Systems’...

– Is linking with emerging understanding about the changing nature of work...

– Is leading to outputs that will offer new practitioner skills...
Some interesting quotes...

Projects that involve uncertainty, varying requirements and shorter delivery times can benefit from agile methods.

Projects in which innovation and experimentation are required – often in conjunction with uncertainty – also need to be managed in a more iterative... way...

It is common for a PM approach to focus primarily on cost rather than on value. It is common to attempt building something by some defined deadline.

Projects should meet deadlines by controlling scope and... by managing which chunks of value should be included and which should not.

Jim Highsmith

Ron Jeffries
So...

Remember, you can’t *do* agile, you have to *be* agile.

Andrew Hunt
So – in the ‘real world’...

Agile...

or ‘Agility’...
Questions...