STARTING UP & STEERING AN INNOVATION PRACTICE
IN A TEMPORARY ORGANIZATION

Submitted for the fulfillment of the requirements for The Doctor of Philosophy Degree in Management

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ABSTRACT

This thesis is driven by an interest in exploring whether and how temporary organizations can adopt an organizational innovation practice to foster innovations in the broader industry. It examines a seemingly paradoxical case in which a major project adopts an organizational innovation practice to facilitate innovations by tapping open and emergent opportunities in its midst. It uses this opportunity to theorize about organizational identity, routine, and legitimacy processes. In particular, it focuses on strategies used by activists inside the organization to get around constraints inherent in the identity and routines of organization as the activists attempt to promote a new practice.

In the first paper (Chapter 3), I investigate how activists can get around the constraint of organizational identity, more specifically temporal assumptions underlying the identity, as they mobilize justifications for a practice based on conflicting temporal assumptions. In the second paper (Chapter 4), I introduce the concept of a weak practice and investigate a weak practice lacking cultural-cognitive legitimacy can be enacted without any recourse to coercion. In particular I focus on the role of internal activists in promoting the practice through a series of legitimacy exchanges between the focal practice with several other practices in the organization. In the third paper (Chapter 5), I investigate the role that activists play in steering an organizational innovation practice through planning-oriented, risk averse organizational routines. In particular I focus on how these activists can stretch the capability of these routines to accommodate the requirement of the new practice. Finally (Chapter 6), I conclude the thesis with a discussion of the implications of the findings and some suggestions about opportunities for future research.
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DECLARATION OF ORIGINALITY

(i) The thesis comprises only my original work towards the PhD except where indicated
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ACKNOWLEDGEMENTS

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Activists and institutional entrepreneurs continually reinvent organizations. They see what others do not and stretch the realm of what is possible. The whole case of an innovation practice in a temporary organization would not have been possible but for an active collaboration between David Gann CBE and Andrew Wolstenholme OBE. I express my sincere gratitude to them.

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Dedicated to

My Parents:

Who have made enormous sacrifices for me
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CHAPTER 1. INNOVATION PRACTICE IN A TEMPORARY ORGANIZATION

Research Motivation

According to the PWC infrastructure group, infrastructure spending was $4 trillion in 2012 and is expected to become $9 trillion by 2025. Mega-projects for delivering new smart cities, mass transits, smart energy grids have also seen an uptrend. Some of these projects are so ambitious that they compare with the size of multiple small industries and even economies. They can, therefore, have a potentially transformative influence on their sectors and industries. Major infrastructure projects are often delivered through temporary organizations, special purpose organizations with a mandate limited to the successful delivery of the projects in a given duration. As these organizations are convened for a limited purpose of delivering the project within a specific budget and duration, their focus is on the efficiency regarding cost and time.

There have been multiple initiatives to promote innovations in major projects. Partnering is an umbrella term representing a range of contractual and organizational approaches aimed to address the traditional adversarial relationship between client and contractor and facilitate a more collaborative relation among them (Barlow, 2000). A partnering approach facilitates better communication and collaboration, which are crucial for successful innovations. In complex projects, partnering allows an open and continuous negotiation of both costs and specifications. This flexibility facilitates innovations (Barlow, 2000; Shaw, 1994).

Fixed specifications and cost structure in the large engineering and construction projects can constrain innovations (Barlow, 2000; Mohamed and Tucker, 1996). Industry reports (e.g. Latham, 1995) have acknowledged the need for partnering - a more collaborative orientation among clients, contractors, and the broader supply chain - in promoting and facilitating innovations.

New forms of contracts like New Engineering Contracts are used to transparently outline outputs, better integrate inputs from designers and contractors, share benefits and better allocate risks among multiple parties to stimulate innovations. They also emphasize a proportionate and fair sharing of risks, costs, and rewards among different parties. National Health Service in the United Kingdom has used such mechanisms to inject innovations and reduce the lifecycle cost of service delivery from the long-lasting fixed infrastructure (Barlow and Koberle-Gaiser, 2009).

While partnering facilitates collaborations, which in turn, allows innovative thinking and outcomes in the projects, the focus remains in the exploitative innovations. Such innovations are aimed toward the successful
project delivery and enhance its “value for money” performances. Partnering doesn’t appropriately tap the broader range of developmental opportunities for new products, processes, and technologies and instead focuses on a narrower commercial scope of the project. A narrower perspective on the immediate business case inherently disregards open and emergent opportunities for developmental innovations where the value for innovations is significant but uncertain in time and diffused among organizations. This is reflected in the findings that senior executives in project management contexts perceive innovations in a very limited sense as in better quality assurance, responsiveness to clients’ demands, and efficiency gains (Jashapara, 1993, 1995).

Tending a broader range of developmental opportunities for innovations - above and beyond the commercial scope of project relationships - therefore may require an organizational innovation practice in large projects. Such a practice can potentially improve innovativeness of not only the focal project but also of the future projects. Future projects may benefit particularly from the improvement in the absorptive capacities (Cohen and Levinthal, 1991) of organizations and by the development of routines and capabilities in the broader industry. They, in turn, can significantly improve the performance of the future projects (Gann and Salter, 1998). An organizational innovation practice in the context of a major project, however, is a very challenging proposition as delivering a large project is inherently complex. The organization is averse to any risks as they can quickly lead to cost and time escalations in these projects.

While it is true that some of the learning in large projects is carried forward through people and firms who transition from one project to another. However, the knowledge and learning processes are likely to undergo spatial and temporal loss. So if an opportunity for innovation is not acted upon and developed in time, they are often lost. This is particularly the case with temporary organizations, which are not well equipped with the mechanisms and processes for translating knowledge into more usable innovations in technology, products, and processes. An innovation practice which would facilitate and broker the pipeline of innovations in temporary organizations through the real-time harvest of knowledge spillovers in the network has potential to transform the innovation dynamics of the whole industry and sector.

While most permanent organizations have some routines for exploration and exploitation, even they find it difficult to do both. The problem is aggravated in the case of a temporary organization due to a structural problem of the tragedy of horizon. After the design freeze, these organizations does not systematically harness innovations over and above inevitable improvisations required in accomplishing their limited and pre-specified mandate.

Temporary organizations delivering major projects can easily get stuck in a “delivery” mode. However, the lack of an innovation management practice in temporary organizations delivering mega projects is problematic. These organizations sit in the eye of innovation opportunities, and they have therefore potential
ability to amplify innovations. External pressures and internal activism are forcing them to stretch their repertoire of practices and capability and adopt a more ambition “both/and” rather instead of an “either/or” approach. However, whether such organizations can have an innovation practice, a practice which would allow these organizations to systematically harness open and emergent opportunities for innovation has so far remained open and unexplored. Any temporary organizations adopting an innovation management would be at the frontier.

An organizational practice of an innovation management that can harness a broader range of open and emergent opportunities of innovations across projects and organizations would be eminently desirable. The knowledge and opportunities for innovations are plentiful in major projects. A practice of innovation management which isn’t limited to contractual incentives or commercial imperatives would have a larger catchment of ideas and partners. An organizational innovation practice that transcends individual contracts and commercial imperatives could provide such space and meaning system.

In this thesis, I use an unparalleled access to the case of a successful activism for an organizational innovation management practice in Crossrail - a temporary organization delivering a major transport infrastructure project in the UK to develop an understanding of how internal activists managed to mobilize resources, legitimacy, and capability for the new practice.

**Research Questions**

The thesis focuses on three problems in the adoption and implementation of an organizational innovation management practice in Crossrail. The first problem related to mobilizing resources for a new voluntary and aspirational practice which went beyond what the organization was meant to be doing. The second problem was about mobilizing social-political legitimacy for the practice so that the practice had traction inside the organization. The third problem was how to steer innovations through the existing administrative routines which were ill-equipped to manage them. I elaborate these questions through three vignettes as follows:

**Vignette I**

Imagine that you are the CEO for a temporary organization delivering one of the largest infrastructure construction projects in Europe. This organization has a limited mandate for the successful delivery of the project by procuring and managing large component contracts, managing their transactional risks, and keeping all the stakeholders meaningfully engaged.
You have a vision that a large infrastructure project of the size that you are managing could potentially be an arena for innovations, and therefore it should have an organizational innovation management practice that can harness these opportunities both for the organization and for the broader industry. However, you are well aware that “temporary organization” have a very limited mandate of delivering this project within budget, on time, and without any glitches and fuss that may invite a bad press. Moreover, the resources are pre-allocated, and there is not any slack except the contingency fund, a fund of last resort to manage risks and uncertainties in the project.

Dipping into this fund for a novel practice that no one expects to be part of the practice repertoire in a temporary organization would be contentious. Temporary organizations are meant to procure innovations from the market; they are not supposed to be developing innovations through an organizational innovation management practice. You, therefore, have to successfully lobby and advocate the practice.

This vignette outline an “organizational identity” challenge. The identity of “a temporary organization” is conflictual to the underlying concept of time in an organizational innovation management practice. The question that I address in the first paper is: How can activists in an organization justify, and mobilize resources for a new practice which is in an apparent conflict with the organization's temporal identity?

Vignette II

Now imagine that you were able to successfully advocate and mobilize resources for an organizational innovation management practice. However, the practice was to an aspirational practice. As the very premise of the practice was tapping open and emergent opportunities of innovation in the organization, the lack of a traction for the practice in the organization may keep the practice just symbolic. You entrust an internal team to drive traction for the practice. As the members of the team go around trying to engage individuals and groups, they have a problem of getting people on board. This is a legitimacy problem. The practice is not part of the institutional repertoire of action for a temporary organization, nor does the team have access to any coercive instruments to force the practice among members. This leads to the question that I address in the second paper: How can an activist team inside an organization enact a volitional agency for a new optional practice?

Vignette III

Now imagine that the innovation team was able to mobilize traction for the organizational innovation practice. Small developmental projects funded as part of the new practice are still to be steered through the internal administrative routines like for procurement. However, these routines were meant for procuring
large contracts. The lack of ability in existing routines to manage the funded innovations was a challenge that needed to be actively managed. This leads to the question that I address in the third paper: **How can an activist team steer an innovation practice with the need for a relative speed and fluidity through the planning-oriented administrative routines meant for risk mitigation through caution and control?**

**Structure of the Thesis**

The thesis is divided into six chapters:

Chapter 1 introduces the motivation for the thesis and broadly outlines three research questions that I subsequently examine in three self-contained papers.

Chapter 2 introduces the empirical context and an overall methodological approach which is common to all the three papers. I begin by presenting the details of the empirical context, the main arguments for its suitability for examining the research questions. I then present data collection approaches and introduce the data collected thereof. I outline the broad analytical approach and leave the specifics for the chapters where I address the respective research questions.

I present three self-contained papers into Chapters 3-5. In Chapter 3, I present the first paper. It begins by presenting a theoretical motivation for the research question about how internal activists can transcend the temporal identity of an organization to justify a practice which would otherwise seem incongruent to the organization's temporal identity. I present the arguments about how the concept of time is an integral part of the organizational identity and how activists would have to deal with identity issues to mobilize resources for a new practice. The paper contributes to the literature on organizational identity by foregrounding the concept of time as part of an organization’s identity.

In Chapter 4, I present the second paper. I begin by presenting a theoretical motivation for the second research question. The focus here is on examining and theorizing about how internal activists mobilize a socio-political legitimacy for a voluntary new practice which is in conflict with the organizational core. The paper contributes to the literature on activism inside an organization and provides insights about how legitimacy exchanges among weak practices can lead to their broader adoption across the organization. In particular, the findings illuminate micro-sociological aspects of legitimation process in an organization and provide insights about managing complexity inside the organization.

In Chapter 5, I present the third and the last paper. I begin by presenting a theoretical motivation for the third research question. In this paper, I focus particularly on the temporality in routines and how external activists can influence the pace and pattern of actions in these routines. Besides, highlighting the temporal characteristics of a routine ensemble, the paper also suggests an process model about how the temporal characteristics of these routines can be manipulated by the external activists.
In Chapter 6, I highlight the limitation, revisit important implications of the three papers, and suggest some opportunities for further research.

REFERENCES
CHAPTER 2. EMPIRICAL CONTEXT AND DATA

Organizational Context

Crossrail was a temporary organization, a special organizational vehicle, entrusted with the successful delivery of a new high capacity metro railway line in London. As a special organizational vehicle, Crossrail came into being through a parliamentary mandate in 2001. The work on the project started in May 2009 and is expected to be completed by 2018. The delivery of the projects had a budget outlay of £14.8 billion and was considered as one of the largest infrastructure construction projects in Europe.

Figure 2.1: Images showing the Mayor of London, the Prime Minister, and the Queen participating in different milestone events for the project.
The delivery would include developing a rail infrastructure for a new railway line in London comprising of ten new stations, 42km of new underground tunnels below the streets of London, and a modern signaling and control system. When complete, the new line - to be christened as Elizabeth line in honor of the serving Queen - would increase the rail capacity of the Central London by 10%. A new entity, the MTR Corporation, would then take over to operationally manage the new infrastructure asset serving an estimated 200 million annual passengers. Crossrail is thus an organizational vehicle for managing the delivery of the infrastructure the which would cease to exist after the handover and transition of the asset back to the designated owner.

Crossrail was as an organizational vehicle - a publicly owned limited company that had a specific mandate of the development and delivery of the infrastructure by the requirements of its two primary sponsors: the Department for Transport and the Transport for London. The organization was governed by an independent Crossrail Board to ensure that the delivery of the new infrastructure had the required autonomy. While certain authorities were delegated to Chief Executive and Finance Director, however, it was the Crossrail Board which was finally accountable for the compliance of the governance arrangements under which Crossrail operated. Figure 2.2 presents Crossrail’s internal organizational structure.

Figure 2.2: Crossrail’s Organizational Structure (Source: Crossrail)
Figure 2.3 sketches out the multi-stakeholder governance structure within which Crossrail operated. Boxes in green shades represent entities sponsoring or representing the principal sponsors of the project. Those in the greenish blue represent entities which would have ownership of the asset. The entities in blue box represent Crossrail or those who directly represented it. The dotted boxes indicate the agreement that constitutes the respective relationship. The entities without a box represent contracts that form the basis for organizational, project management, and major delivery contracts.

Two key agreements formed the basis for the relationship among Crossrail, Transport for London, and Department for Transport. The Sponsor Agreement between Transport for London and Department for Transport outlined the ownership and governance of Crossrail. As part of this agreement, while the major funding for Crossrail was provided by both the Transport for London and the Department for Transport as the principal sponsors of the project, the ownership of Crossrail remained a fully-owned subsidiary of the Transport for London. Crossrail’s corporate governance was by the requirements of the corporate governance agreement with the parent company - the Transport for London of which Crossrail was a wholly owned subsidiary.

The Project Development Agreement outlined the autonomous organizational role for Crossrail by setting out the requirement within which Crossrail had to operate as an autonomous project deliverer. Crossrail Board was responsible for providing assurance to the sponsors by establishing a set of organizational structures and processes for managing any potential risks (for example, risk management plan presented in Table 2.1). An internal audit was also periodically carried out to ensure the tight management and control of the program. Crossrail had to periodically report the sponsors about the progress in the project, and sponsors had the right to intervene as stipulated in the project delivery agreement if Crossrail management failed to deliver on agreed outcome in a time-bound manner.

The sponsors - the Department for Transport and the Transport for London - acted as the clients and they had specified the delivery requirements for the project in the project development agreement. A Sponsor Board with representations from each of the sponsors made a joint decision, and Crossrail’s accountability to this board was managed through a series of reviews of the reports submitted by the Crossrail’s Board. This was to ensure that specified milestones in the project development agreement were being achieved. A Joint Sponsor Team worked more closely with Crossrail through Project Representative who represented sponsors to Crossrail. The Program Board provided an integrated forum for Crossrail and its industry partners to manage their interfaces.

Crossrail had appointed two external delivery partners to assist with the delivery. The Program Partner supported the overall delivery whereas the project delivery partner was responsible for the delivery of central section - Crossrail’s largest component of work. The Program Director was responsible for the
engineering management and program controls for the whole program, and he reported to the Chief Executive Officer. Crossrail had engaged the industry partners like London Underground, National Rail, and Rail for London. Industry partners were either responsible for the delivery of a specific section or had significant interface with the program.

The program partner and project delivery partners provided the core organizational and project management staff and helped establish and manage core business and project management processes. Their contractual arrangement with Crossrail incentivized them to meet target costs and deadlines. Principal contractors (also called Tier 1 contractors) had primary responsibilities for delivering major contracts. They also shared both the benefit of cost reduction and the risk of an overspend.

Crossrail had awarded 116 major contracts for a wide range of work including those related to tunneling, station construction, over site developments, enabling works, utilities, and railway systems. Some of the major firms involved as principal contractors - either individually or as part of a broader consortium - included Alstom, Balfour Beatty, Bam Nuttall, Costain, Dragados, Ferrovial, Hochtief, Kier, Lafarge Tarmac, Laing O’Rourke, Morgan Sindall, Murphy, Skanska, and Vinci. The new engineering contracts (NEC) were used to structure these contractual relationships.
The relationships between Crossrail and its contractors were governed by New Engineering Contract (NEC). NEC was used to promote partnering and collaboration and to reconcile the adversarial relationship between the contractors and the client. The contracts had clear procedures for negotiating changes in the contracts. However, the overall thrust remained on controlling the cost and mitigating the risk. A change while technically possible in the NEC contract was very tightly controlled so as not to end up in a cascade of cost and time overruns.

Like any major project, the integration of a large number of 116 individual major contracts had contingencies which were difficult to predict. The risk and complexity primarily emanated from the multiplicity of both internal and external interfaces that had to be actively managed. The organization collaboratively managed these risks at different levels in the project. While this partnering approach had scope to allow potential innovation in the program of work. However, the inherent risk and complexity in a project of this scale meant that the focus of any innovation and change was limited to problem driven innovation in cost and risk mitigation through optimal contractor involvement.

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<th>Contingency Level</th>
<th>Source</th>
<th>Response</th>
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<tr>
<td>Board</td>
<td>Any Scope Change, Schedule Acceleration, and 3rd Party Risks</td>
<td>Formal process, initiated by CRL Executive and controlled by the CRL Board</td>
</tr>
<tr>
<td>Program</td>
<td>Excess cost arising from program level risk, and through the Investment Authorization process</td>
<td>Formal process, drawdown authorised by Commercial &amp; Change SubCommittee through a Change Proposal, recorded in SAP (enterprise resource planning application) PRISM (Cost and Change management application).</td>
</tr>
<tr>
<td>Sector</td>
<td>Interface risks between projects and the operation</td>
<td>Managed by the Sector Director who must comply with the Scheme of Authorities</td>
</tr>
<tr>
<td>Project</td>
<td>Project level risk events managed through a portfolio of contracts</td>
<td>Project Manager to manage in a way that optimizes the performance of his Project (portfolio of contracts), but must comply with the Scheme of Authorities</td>
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Source: Crossrail Risk Management Plan

A complex stakeholder arrangement in which the funding and sponsorship of the project were distributed was also a source of complexity. However, the governance structure put in place included multiple joint forums and working groups to actively manage this complexity. The role clarity among major stakeholders including a clear separation of the funding and the ownership of the project - and a singular and coordinate interface as a client was helpful in managing the stakeholder complexity. A singular interface not only helped to project a coordinated client face to the contractors and the supply chain but also helped better manage potential changes in the scope and funding commitment for the project.
The Focal Phenomenon

The specific focal phenomenon of this research was the adoption of an organizational innovation management practice - a practice of developing and harnessing new innovative ideas in an organization - in Crossrail. The impetus for an innovation practice at Crossrail came from Andrew Wolstenholme, its Chief Executive Officer. Wolstenholme had been a key proponent of innovation in UK’s construction industry, an industry that has had problems in adopting the innovation practice and culture. He championed a new and more systematic approach to innovation in the form of front-end contracting in London's Heathrow Airport Terminal 5 where he was the program director. Since then he had been an avid advocate of promoting innovations in the industry. His advocacy for an innovation practice at Crossrail eventually led to an adoption and implementation of an innovation management practice.

Andrew Wolstenholme took up the role as Crossrail's chief executive in September 2011. When he joined, Crossrail was just a year away from an intensive phase of tunneling to build the major new rail tunnels. Andrew Wolstenholme had David Gann from Imperial College in a pub called The Ram in Firle near Sussex. The conversation that had started in that pub eventually blossomed into a full-fledged collaboration with the Imperial College London for developing a systematic approach to managing innovations in a major project like Crossrail.

Crossrail innovation program was pioneered inside Crossrail as an organizational innovation practice. This program wasn’t part of project delivery agreements and was incorporated only later as a result of advocacy from the new CEO who had long been a champion of promoting innovation in the UK’s construction industry. The underlying idea was that large projects offer an opportunity to expedite new and innovative ideas that can benefit the whole industry if these ideas are actively brokered and developed within the constraint of managing a large project. The organizational innovation practice inside Crossrail was presented not only as opportunities for exploiting existing innovation but also opportunities for a successful legacy in facilitating innovations for future major projects and the future of the broader industry.

As the practice was beyond the scope of the program, its introduction into Crossrail required significant advocacy both within the Crossrail Board and with the broader group of Principal Contractors. Wolstenholme was able to mobilize a “fenced” funding of £750,000 for the practice to which both Crossrail and its principal contractors had contributed. The fund was maneuvered by mobilizing a contribution from the principal contractors and Crossrail's contingency fund.
After securing funding for the practice, the CEO had entrusted an internal team for steering the practice. The members of the innovation team were consultants working as part of the Program Partner. The team was requisitioned by the CEO for steering the newly launched organizational innovation practice.

The Innovation team thus had two primary roles i) mobilizing support for the program by recruiting members to volunteer their time and ideas, and ii) spearheading the funded ideas through the organizational, administrative apparatus to ensure their further development and implementation. The Innovation Team had to periodically report the progress of the innovation program. The performance of the members of this team was based on the broad metrics like the number of new ideas that the team members were able to mobilize and the number of ideas that eventually got funded. The team members were thus motivated to make the newly adopted practice a success. They, therefore, had incentives to entrepreneurially find a way out for the success of the newly adopted practice despite all the constraints.

The organizational innovation practice was modeled as an open innovation in which ideas were to be mobilized from organizational members and proximal supply chain. The organizational innovation process comprises the following steps. An innovation idea is first submitted via an online portal for a competition for developmental funding. Innovation Working Group which had representation both from Crossrail and its Principal Contractors scrutinized these ideas periodically. Crossrail Innovation Forum provided final arbiters of which ideas would be funded. There were overlaps between Crossrail Innovation Forum and Innovation Working Group as representatives of Principal Contractors who had contributed in funding for the practice participated both in the Innovation Working Group and Innovation Form. Innovation Forum also had representation from senior executives from Crossrail including Crossrail’s CEO. The approval of the Innovation Forum provided the required mandate to the Innovation Team to facilitate theses funded projects in developing these ideas further. Fig. represents a simplified version of the whole process.

Just to clarify, both the Innovation Working Group and the Innovation Forum came into existence as part of the newly adopted innovation management practice for brokering and funding opportunity-driven developmental projects, and they had no relationship with the management of individual contracts that formed the formal basis for the relationship between Crossrail and its contractors.
An early template of innovation management practice was piloted and fine-tuned between January to April 2013. It was an organizational innovation management practice of mobilizing and identifying ideas, scrutinizing them, selecting promising ideas, and then investing in these ideas to develop them further.

The innovation program concluded in September 2016 as the funding for the program was all used. In total, the practice had six cycles of iterations – mobilizing new ideas through developmental funding, and developmental project steering through different cultural and capability constraints of a temporary organization. In the process, it sparked more than 800 new ideas, out of which 300 been developed in some form or the other. A report commissioned by Crossrail estimate the benefit of the program in the range of £3.5 to £5.4 million.
Theoretical Justifications for the Choice of the Empirical Context

There are some important features to the focal phenomenon which made it an ideal setting to investigate the three questions. First, the duration of a temporary organization is a priori determined (Janowicz-Panjaitan et al., 2009). Members of a temporary organization share the assumption of “temporariness” (Janowicz-Panjaitan et al., 2009). This “awareness of impending termination” (Janowicz-Panjaitan et al., 2009) forms an integral part of organizational identity. Temporary organizations, therefore, have an intra-temporal focus where the underlying logic is that of allocative and intra-temporal efficiency rather than that of dynamic and inter-temporal efficiency. Innovation practice. Activism for an innovation management practice in this setting was like swimming against the current at multiple levels.

Temporary organizations are an extreme exemplar of organizations where time is a core part of organization's identity. Different organizational forms have their “logic of appropriateness” which gives an organization a coherent identity thus enabling some and constraining other practices (March, 1994). This logic governs both the behaviors of their members and the expectations that the broader group of stakeholders have from them. Time is an important element of “logic of appropriateness.” Those organizations and organizational forms having shorter or closed horizons discount practices which gestate for a longer time, leading to what has been termed as “tragedy of horizon.”

The adoption of an innovation program - a practice of developing and managing emergent ideas based on the logic of inter-temporality and open horizon- in a temporary organization provides an empirical context in which the concept of time in the organizational identity comes in conflict with the concept of time underlying the new practice. Given my interest in how activists challenge an organization's temporal identity where limited duration discounted and precluded some practices, the advocacy for an innovation practice in temporary organization provided a particularly appropriate setting.

The second striking feature about temporary organization managing a large project is the autonomy that individual project teams enjoy within their given remit. The authority structure which is present in most organization is particularly weak as most work is temporary organizations is based on pre-specified contracts. This means that unlike other organizations, the use of coercion for a mobilizing agency for a new practice is not a viable option, particularly in the case when the practice does not have a broader legitimacy in the field. The mobilization for a conflicting voluntary practice thus provided a context in which micro-level legitimacy processes were expected to be revealed. This made the empirical setting an ideal setting to examine the second question in this thesis.
Finally, Crossrail was funded primarily through public funding and had an elaborate administrative routines around procurement. These routines were geared to reduce risk and ensure adequate scrutiny of the spending. These administrative routines operated at a slower pace and have a rigid sequentiality of planning. When the innovation team started steering fleeting, on-the-fly opportunities for innovations, the conflict with existing administrative routines became “transparently observable” (Eisenhardt, 1989). This made the setting revelatory for examining the third question in the thesis.

**Development of Inquiries into a Research Program for the Thesis**

I started my participant observation as soon as I joined my Ph. D. program at the Imperial College. Shortly after the decision by Crossrail’s CEO to pilot the practice of the innovation program, I began systematically reading and archiving background materials which included the documents and data provided by the consulting team about their work, and the documents including reports, presentation slides, and memos available in the Crossrail archive.

My preliminary take on this phenomenon was that it would allow me to theorize about institutional complexity inside an organization as the adoption of an innovation management practice is driven by the logic of the dynamic efficiency whereas the project organization focusing on the delivery had the logic of the productive efficiency. I came to realize that the concept of time is part of cultural-cognitive structures in temporary organizations in the form of identity concepts and value assumptions. By late 2012, I had realized that “temporariness” of Crossrail provided an opportunity to understand time as part of organizational identity, how they can constrain some practices, and how strategic activists inside the organization could deal with this constraint in the organizational identity to mobilize justifications and indeed resources for a contrary practice. I was able to witness the tail end of this top echelon mobilization process which was led by Crossrail’s CEO. As my interest grown to pursue this, I dug into archival data, talked with one of the team members who had witnessed that part and scanned through interviews that had been conducted earlier my colleagues at the Imperial College who had been part of the consulting team advising Crossrail. This line of inquiry later evolved into the first paper of this thesis.

The idea for the second paper came as I realized that the way the innovation management practice was adopted in Crossrail did not meet existing analytical categories of practice adoption available in the literature. The existing literature on practice adoption suggests that the driver for new practice adoption is either strategic or institutional. In the strategic adoption of a new practice, people mostly to top echelons in their understanding decides to adopt a practice and coerce it through the ranks and files. In the institutional adoption, an organization ceremonially adopts practices that had got legitimacy in the field as not doing so can compromise the organization's legitimacy and its access to resources. In the case of Crossrail, the
adoption of the innovation management practice was neither ceremonial driven by institutional pressures in the field nor was it instrumental. It was projected as an aspirational practice. However, the practice did not have any cultural-cognitive legitimacy in the organization. I wondered, how a practice that lacked both cultural-cognitive legitimacy and functional instrumentality can still be enacted in an organization. This idea later evolved in the third paper in this thesis.

Finally, the idea for the third paper came when I realized that mobilization for the innovation practice was not enough as the organization still operated on the same set of routines. When the innovation projects were approved, and the innovation team had to steer each of the innovation projects through the existing administrative routines of procurement and contracts, the conflicts in the temporality of routines and the temporal needs of these innovation projects became manifest. Many of these innovation ideas were time-sensitive, and the delay in getting them on steam through the existing administrative routines would have jeopardized the very opportunity that they were supposed to chase. On the other hand, these administrative routines were meant to manage and control risks in large procurement not to chase opportunities. The pace and pattern of actions required to chase fleeting innovations represented by these ideas were very different pace and pattern of actions that these administrative routines would allow. For the third paper, I focused my attention on how the innovation team steered innovation projects through the constraint of these routines on which they had little discretion or authority.

An Overview of Data Collection

I collected the data for this paper over a period of 27 months: October 2012 to December 2014. In this period, the CEO had successfully mobilized justification for the practice, and the innovation team had mobilized and steered two rounds of funding cycles which led to a portfolio of 23 innovations. My access was facilitated by a team from the Imperial College, which was consulting to Crossrail on exploring an innovation strategy. I was embedded in the Innovation Program Team, a three-person team which later became a four-person team, and was introduced as a scholar who would observe the adoption and could provide some third party insights that can potentially be useful to other major projects adopting a similar practice. The Strategic Director who the team reported to acted as my host and mentor inside the organization. For the day-to-day issues, the manager of the Innovation Program acted to help me integrate with the team and facilitate my access to the activities related to the program.
Figure 2.5: A Timeline

**TIMELINE**

**THE FOCAL PHENOMENON**

**THE STUDY**

**MAJOR EVENTS**

- Sept 2011: Tunneling
- Mar 2013: Station construction and civil engineering
- June 2013: Railway systems
- June 2013: Trains and Railway Depot
- Public space and development around station

- 2008
- 2009
- 2010
- 2011-12
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018

- 2009: Andrew Wolsenholme Joins Crossrail as the CEO
- 2013: Crossrail Develops Innovation Strategy
- 2014: Crossrail Kickstarts Innovation Management Practice: First round of investment is made
- 2015: Second Round of investment is made in developing new ideas
- 2016: Innovation Practice is concluded after six rounds of investments
- 2017: Concludes Data Collection
- 2018: Early drafts of three papers

**Funding Enabled**
I began the data collection with a general interest in understanding i) the challenges that a temporary organization faces in the implementation of an innovation strategy, ii) how the organization would attempt reconciling these challenges, and iii) whether these attempts would be successful. The interest in exploring these themes was based on the premise that adopting the practice of an innovation program in a temporary organization would inevitably be fraught with incompatibilities and tension. As my research progressed and questions get more refined, I fine-tuned the data collection efforts to reflect that.

The main data that collected were naturalistic communications enacted in two forms: face-to-face meetings and email exchanges. I chose to draw from naturalistic communications to capitalize on the access that I had to the focal phenomenon. Being embedded as a participant observer inside the innovation team, I had access to all the internal meetings, activities, and events related to the innovation program. As they were social venues in which conflicts were grappled with and reconciled with in the face of the conflicts, I had a much better understanding of both the conflicts and the unfolding process of agency in addressing these conflicts in a dynamic way. I used various meetings and events related to the organizational innovation practice to collect the naturalistic data. In total, I participated in 110 hours of innovation program-related meetings shadowing members of the innovation team including the program manager and the program director. I audio-recorded meetings when I had permission from the participants to do so. Otherwise I took detailed notes. The audio-data were later transcribed, and these transcripts were later used for the coding.

I collected data in 120 different visits. I participated in the innovation team's various activities and other activities related to the organizational innovation practice. The range of meeting that I participated in included meetings organized by innovation team members, governance and oversight meetings of the innovation program. They periodically called these meetings to review the implementation and to discuss different issues that may have arisen since the last meeting. Most observational encounters lasted between one to three hours.

In all these social settings, the members of the innovation team either mobilized support for the innovation program, discussed and reviewed their advocacy strategy or their outcomes and deliberated on specific instances of challenges and opportunities to carve out socio-political legitimacy for the practice in promoting the practice in the organization. The team members had frequent meetings with the project managers managing different contracts, representatives from principal contractors, and Crossrail's sponsors. Moreover, the team also interacted periodically with the Director of Strategic Projects, and the senior executives at Crossrail, including its Chief Executive Officer for governance oversights, strategic inputs, and performance reviews.
<table>
<thead>
<tr>
<th>Scope</th>
<th>Funding ('000 £)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a test panel of Ultra Low Carbon Concrete and if successful pursue approval for its use on Crossrail</td>
<td>11.5</td>
</tr>
<tr>
<td>Manufacture a lightweight aggregate from London Clay.</td>
<td>20</td>
</tr>
<tr>
<td>Trial the effectiveness of messages on gloves to affect behavioural safety on site</td>
<td>4</td>
</tr>
<tr>
<td>Trial for determining whether the use of Digital Image Correlation of Sprayed Concrete Lining (SCL) is a viable option to accurately measure/survey SCL.</td>
<td>5</td>
</tr>
<tr>
<td>App to automate the submission of observation reports from any smart device, which can be adapted by all Crossrail projects for use across the industry.</td>
<td>10</td>
</tr>
<tr>
<td>Investigate the use of Thermal Heat camera technology to understand the curing characteristics in Sprayed Concrete Lining works such that advancement rates can been reviewed and risk of falling concrete from understrength concrete mitigated through early identification.</td>
<td>10</td>
</tr>
<tr>
<td>Save time on every exchange of documents/events between Crossrail and LOR by creating automatic interface for information exchange between eB and Asite.</td>
<td>15</td>
</tr>
<tr>
<td>Understand if mobile health screening units would be beneficial at Crossrail and to extend the trial at Custom House to ensure the data bank is significant in order for any trends to be understood.</td>
<td>10</td>
</tr>
<tr>
<td>Create a development proposal for a commercial model for an application which can be used to improve the workflow and increase efficiency related with the development of Lifting Plans.</td>
<td>10</td>
</tr>
<tr>
<td>Prove the concept of using Bluetooth Low Energy beacons to manage the safe use of tablet devices on a construction site and to collate lessons learned and best practice.</td>
<td>59</td>
</tr>
<tr>
<td>Trial of heat and strain sensors in primary and secondary lining to provide body of knowledge to the industry, and support commercial case under negotiation with over-site developer.</td>
<td>33</td>
</tr>
<tr>
<td>On-site Information Station intended to be a communal device for all the project participants to use. It will be placed on a live building site to enable ease of access of information to operatives and management during construction.</td>
<td>18</td>
</tr>
<tr>
<td>Investigate the reuse of grout shafts for harvesting underground heat.</td>
<td>20</td>
</tr>
<tr>
<td>Assess whether nano-tech ‘superhyrophobic” coated concrete plant, including pumps could improve workability of mega dense mix concrete.</td>
<td>15</td>
</tr>
<tr>
<td>Use of BIM models to integrate legacy asset information with Transport for London</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Innovation Management System at Crossrail
Furthermore, I used my access to the Outlook Calendar of the individuals involved in spearheading the program to examine the everyday communication of various actors to the members of the innovation team. I could also see their calendar and track activities like meetings and events related to the innovation program. I gathered 2573 emails used by the innovation team steering the development and implementation of the funded innovations. Emails provide plentiful textual data around organizational routines with greater precision, clarity, and granularity than has previously been possible by tracking the conversation among a wider set of individuals involved in specific instances of tensions and their resolutions (or lack thereof) in time.

For the first six months, I attended all activities, except when there were conflicts or overlaps between two activities in which case I prioritized attending those where the data pertinent to my research question were more likely to manifest. For a large part, this meant shadowing either the program manager or one of the three coordinators who together formed the program team. Later I reduced my meetings to 2 times in a week that focussed on crucial discussions about different issues related to program implementation. I collected detailed field data that related with early advocacy and the two rounds of innovation practice. While I had curtailed my visits after December 2014 to focus on analysis and theorization, I had maintained contact and occasion visits until September 2016 when the practice was concluded.

The use of both emails data and in-depth participant observations data helped me address the issue that most qualitative researchers confront, i.e. how to capture both depth and distribution of organizational processes in real-time. The observation of meetings and reading of email threads around the activism- formed the primary basis for answering the three questions here. The activism was around mobilizing new innovation projects (Table 2.2) and steering these projects through the procurement routines in the organization.

<table>
<thead>
<tr>
<th>Table 2.3: An Overview of Interview Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Informants</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td><strong>Innovation Team Members</strong></td>
</tr>
<tr>
<td><strong>Senior Executives</strong></td>
</tr>
<tr>
<td><strong>Project-level / Site-level Staff</strong></td>
</tr>
</tbody>
</table>
The data collected in the role of an observer was supplemented by the data collected further in two sets of interviews (see Table 2.3). The people interviewed spanned board members, executives, managers, employees, and those representing contractors working on major contracts for Crossrail. I also used the records maintained in the innovation management system -- a documentary trail of notes, observations, memos, agendas, meeting minutes, report about the innovation management practice (to which I have access) to supplement the accounts emerging from the naturalistic observations. The use of observational, archival, and interview data gathered in an intensive engagement with the program allowed me to capture both the tension and the agency in managing this tension during the adoption of a conflicting practice. In those instances, where the accounts from different sources are ambiguous or in conflict, I got further clarifications with members of the innovation program team.

REFERENCES


CHAPTER 3. ADVOCATING INNOVATION PRACTICE IN TEMPORARY ORGANIZATION

IDENTITY PLAY IN STRETCHING A “LIMITED DURATION” IDENTITY

Using a qualitative study of the advocacy for an innovation management practice in a temporary organization, I develop an inductive model of how top echelon activists can stretch temporal identity of an organization to mobilize justifications for a practice based on conflicting temporal values. The object of this paper is to foreground time as part of organizational identity and understand the agency that top echelon actors exercise over such an identity to accommodate a conflicting practice. Besides the theoretical implications for the organizational identity literature, the paper also provide insights that can potentially be useful in promoting an innovation practice to harness open and emergent innovation opportunities in the context of major projects.
Introduction

Projects, and more certainly, major projects facilitate a network of collaboration among several organizations in a field. While the role of spatial clusters and industry networks in facilitating innovations has been recognized, the role of the megaprojects as an innovation engine where open and emergent innovation opportunities in the supply chain can get facilitated is yet to get the attention that it deserves. These projects are social spaces where firms from multiple industries jostle and jockey, multiple professions intermingle, and where the scale and ambition of the project force the existing technologies to their bleeding edge. They are thus a potentially unique place for inspiring, facilitating, and curating open and emergent opportunities for innovations for the benefit of the whole industry.

An active innovation management practice in a temporary organization is an interesting possibility. However, it is far from a straightforward proposition. Unlike project-based organizations where projects are contained in their parent organizations, long-duration complex infrastructure, and engineering projects are delivered through a special organizational vehicle - a temporary organization with the limited mandate for the successful delivery of the project. Such an organizational vehicle is technically an independent organization and has a distinctive organizational identity as a temporary organization. The unique characteristics of a temporary organization are its “temporariness” (Janowicz-Panjaian, Bakker, and Kennis, 2009). This temporariness is not only about a limited or short duration of time - and indeed temporary organizations delivering a major project can exist for several years - but about “an awareness of impending termination” (Janowicz-Panjaian, Bakker, and Kennis, 2009). Organizational members know from the outset that the organization will cease to be at a specified time when a specified delivery of products, services, and processes is accomplished. Such a temporal assumption is very different from the assumption of “going concern” in most other organizations.

Temporariness as part of organizational identity is a structural problem which leads to a tragedy of horizon. While temporary organizations do improvise in real time, they overlook opportunities for innovations that goes beyond their limited mandate of accomplishing specific tasks. Developing and harnessing open and emergent innovations in the temporary organizations is, therefore, inherently conflictual to the very notion of their limited duration identities. It is not surprising that temporary organizations delivering infrastructure projects do not have an organizational innovation practice as part of their practice repertoires. The organizational innovation management practice is about actively taking risks on developing ideas so that some of them would eventually pay off.

Organizational identity defines the very premise of “Who are we?”…. “What do we want to be?” (Albert and Whetten, 1985) It is a cultural-cognitive boundary that demarcates practices and strategies that an organization can have or adopt (Santos & Eisenhardt, 2005). The lack of alignment between temporal
assumptions of an organizational innovation practice with the limited duration organizational identity is likely to lead to conflicts. While the cultural-cognitive notion of organizational identity is a significant constraint to a conflicting practice, the identity work literature suggests that organizational identity can be changed. However, changing an organization's identity is a time drawn process, and a temporary organization does not have time to engage in such a process. So this leads to the following question:

How can activists get around an organization's identity as a temporary organization to successfully mobilize justification for an organizational innovation practice, a practice that is conflicting to the organization’s limited duration identity?

I use an empirical setting of a successful mobilization of funding for an innovation management practice in a temporary organization delivering a major infrastructure project in the UK to examine this question. I focus on how internal activists at the top echelon were even able to bend identity boundary (Santos and Eisenhardt, 2005) imposed by the shared cultural-cognitive notion of a temporary organization to mobilize justification for an innovation practice. I find that strategic activists advocating the practice used two main strategies. First, they highlighted the multiplicity of membership that the organization had to higher social and symbolic categories, thus justifying the practice in the interest of this larger identity. Second, they mobilized a larger group of stakeholders, more particularly the firms in organization's supply chain by drawing upon their avowed corporate identity as innovative firms and presenting this as an opportunity to them to affirm this avowed identity. The findings suggest that an organization can use different narrative frames of its own and others’ identity for mobilizing resource and justification for a new practice in the organization.

Theoretical Background

Temporary Organizations and Innovation Management Practice

Projects are temporary organizations for the performance of a specific set of tasks within a given budget and a limited duration (Lundin and Soderholm 1995). The duration of projects can vary from a few years in short-term projects to several years in large projects. They are an integral part of most organizations as they allow organizations to a flexible mode of organizing, undertake experimental projects and coordinate a complex undertaking (Sydow, Lindkvist, and DeFillippi, 2004). Many organizations, for example in the construction industry and professional services, are so intertwined with projects that all activities in these organizations are organized in the form of projects.

While in project-based organizations projects are undertaken by “going concern” organizations, there are other settings like those of many major projects where projects are itself hosted in a temporary organization.
Such a temporary organization is created with an express purpose of managing and coordinating the successful delivery of these large and complex projects. It helps sponsors and owners of the projects a flexibility in containing risks and uncertainties associated with the transactional uncertainty of their delivery (Jones and Lichtenstein, 2007). Despite an apparent length of duration – which may run for several years - the concept of “temporariness” forms part of its organizational identity.

Major infrastructure projects are “temporally embedded” (Jones and Lichtenstein, 2007) in a specific duration and a sequence of distinctive temporal phases. Deadlines and schedules are used as boundary objects to produce a shared sense of urgency – focussing attentions and facilitating coordination among an otherwise disparate set of actors. They represent transitions between major developmental phases in a project (Davies and Hobday, 2005). The sequentiality of phases often makes “temporariness” even more salient. At each of these phases, different actors come into and move out of its fold – creating the hazard of "displaced agency" in which actors coming in a preceding phase may act opportunistically to the detriment of those who would join later (Levitt et al., 1999).

The relationship between a temporary organization and innovation is a nuanced one. A temporary organization is considered as the best vehicle for a targeted innovation where goals are well specified but the process is not. Unlike a permanent organization, a temporary organization may not be burdened by any inertia of administrative routines and can respond more quickly to the demands of getting the innovation through. Temporary organizations are also better able to improvise in real time and can be a suitable vehicle to undertake a mission-driven research and developmental projects in science and engineering. Miles(1964) reflects this sentiment as follows:

“For many reasons, permanent systems - whether persons, groups, or organizations - find it difficult to change themselves. The major portion of available energy goes to (1) carrying out routine goal-directed operations and (2) maintenance of Different employment relationships within the system. Thus the fraction of energy left over for matters of diagnosis, planning innovation, deliberate change, and growth is ordinarily very small. ”

However, the capability to harness the broad range of open and emergent innovation opportunities in a systematic way is very different from both problem-focussed improvisations and innovations. Such capabilities require an ability to put bets on some promising ideas, and steer their developments knowing well in advance that payoffs from these pursuits will be uncertain and staggered in time. Such capability is constituted by cyclical routines of idea generation, scrutiny, development, and use. This is why such a process is amenable to an organization with a longer horizon that can accommodate this inter-temporal cyclicality.
The trade-offs between exploration and exploitation (e.g. March, 1991) are more pronounced in a temporary organization. One-off nature of these projects does not allow learning to be translated into routines through which they can be harnessed (Gann and Salter, 2000) except in those cases where they are hosted in firms that can be harness learning from the past projects in executing future projects (Davies and Brady, 2000).

Those organizations with a longer horizon and circular time can distribute cost and risk of innovations over multiple cycles, however, an organization where time is both limited in duration and unidirectional, it is difficult to manage vagaries of the uncertainty of innovation. Temporal assumptions shape organizational values like openness for the experimentation, tolerance for failure, and risk-taking that the organizational members share among themselves. Some of them are associated with practices favoring exploitation and while others are associated with practices favoring exploration (Laverty, 1996).

The temporal assumption of "temporariness" lead to short-term-oriented tendencies that conflict with an organizational innovation practice. Moreover, the short-term nature of engagement means that the broader supply chain servicing the organization is primarily focussed on cost and contractual obligations. Temporary organizations do not have a formal organizational innovation practice that mobilizes innovations in a general sense. The implementation of any such practice in a major project would, therefore, necessarily require an active advocacy to deal with their temporal assumptions as a temporary organization.

**Organizational Identity and Temporary Organization**

Organizational identity has been conceptualized as the “distinctive, core, and enduring” features of an organization (Albert & Whetten, 1985). This notion of organizational identity is pegged on the broad understanding of internal members and external constituencies about what a typical form of an organization looks or should look like. The shared conception of how members of organizations see themselves distinct to other organizations of similar and different kinds demarcate a cultural-cognitive boundary delineating what the organization is and what it is not (Santos and Eisenhardt, 2005). An organizational identity boundary reduces ambiguities and forms the very basis of sense making in and about the organization (Santos and Eisenhardt, 2005).

For a temporary organization, the concept of time is an important part of organization's identity. Schein (2010) had highlighted that the assumptions about time are an integral part of prevalent cultural-cognitive beliefs in an organization. Such beliefs are a part of the organization's implicit assumptions and values constituting its “deep” structure and shapes agency inside an organization(Schein, 2010).

Temporariness is part of the cultural-cognitive notion of the very organizational form of a temporary organization. This sense of "temporariness" is different from short-termism - a temporal orientation which is
just myopic. In the case of a myopic temporal orientation, the organization chooses to discount future. In the case of a temporary organization, there is no organizational future beyond the end date to discount.

Temporary organizations delivering a major project are also akin to what Albert and Whetten (1985) referred as ideographic organizations, organizations in which multiple identity affiliations and constituent sub-identities co-exist in the organization. Sub-identities are more salient in a temporary organization than they would be in organizations where these identities have been subordinated to a more dominant organizational identity.

Major projects are complex entities comprising of clients, contractors, funding partners, supply chain partners, industry partners, owners, and many other stakeholders (Windeler and Sydow, 2001). Each of these entities can themselves be alliances of multiple organizations. They are also a venue of heightened multiplicities of identities. These identities may not be limited to affiliations to only organizations or professions but also to sectors, industries, and even countries. Such temporary networks are known to have “fractured practices” (Sydow and Windeler, 1998) as clients and contractors maintain their strategic autonomy and often motivated by their narrower interests.

Although there is little empirical works to suggest how the concept of time inside an organization affect practices, practices are unlikely to be independent of the temporal artifacts, norms, and assumptions of its organizational contexts. Shared temporal assumptions would make the implementation of these practices more or less difficult according to how strategically-reflexive, temporally-oriented actors favor actions oriented to certain temporal assumptions over the ones oriented to others.

In the context of the new practice implementation in an organization, little attention is paid to how the socially-shared beliefs about time shape the implementation of a new practice. Organization's temporal identity has rarely been part of empirical research. However, as individuals differ from one another in their temporal orientation (McGrath, 1988), organizations also differ in their socially constructed conception of time. The concept of time in an organizational setting provides an "interpretive framework" (Barley, 1988) and "a cognitive map" (Zerubavel, 1979) for the organizational members to judge what is appropriate and what is expected.

The adoption of new practices - particularly the ones whose cultural-cognitive notion of time is at odds with the organization's identity will require significant temporal “work”. Phillips and Lawrence (2012) suggest that there has been increasing attempts to understand the role actors play to challenge and change the ingrained social-symbolic structure. They enumerate fifteen types of works that have come under scholars’ scrutiny. Their enumeration reveals that the agency over the social-cultural aspect of time in an
organization is missing in the body of research which has been referred as “a turn to work” (Phillips and Lawrence, 2012).

The cultural-cognitive basis of organizational identity means that it is a social construction which is not beyond the manipulation of a human agency. Human actors can use different strategies to challenge, change, maintain, and repair an organizational identity. These strategies have been conceptualized as identity work, purposive and effortful human actions to re-shape or re-assert an organizational identity. However, changing organizational identity may not be desirable as changing an identity is likely to cause destabilization, confusion, experiences of uncertainty about members’ behavior in the organization.

Identity play, on the other hand, is not supposed to change the structural property of an identity, but they mold and stretch it by re-description, re-interpretation, and re-enacting by drawing upon its situational malleability. Language games can open up space for doing things that transcend a specific organizational identity.

In congruence with the recent literature that suggests that organizations have multiple identities which are negotiated and enacted based on the relational context, I plan to study how an organizational identity can be stretched to accommodate an organizational innovation practice. Organizational identity as a collective structural property may be difficult to change but easy to perform in the social interaction. The self-description can thus change the salience of one or the other identity elements in the existing identity structure using its inherent multiplicities without changing the primary organizational identity per se.

Methods

Data Collection

The specific context of this research was the adoption of an organizational innovation management practice in Crossrail. The details of the empirical context and data collection is presented in Chapter 2. The adoption of a general innovation management program by Crossrail was a move to pioneer a general innovation management practice for major infrastructure construction projects in the UK. The basic premise was that a temporary organization is a context latent with innovative ideas which mostly remain unharnessed for the lack of a proper organizational innovation management practice. It was argued that an organizational innovation management practice in major project would help facilitating and fostering innovations which currently remain untapped for the greater goods of the industry.
An organizational innovation Program - a practice meant for tapping open and uncertain opportunities for innovation is therefore ill-suited for a temporary organization. While the temporary organizations are known to be innovative as is the case in adopting specific innovations, improvising on a specific task, and solving complex problems, the practice of an innovation program in a temporary organization is a completely different ballgame. While I was exploring archival materials - particularly early internal memos that were exchanged internally for making the case for an innovation program, they made it apparent that limited duration organizational identity was an important constraint in the justification for an innovation program.

**Data Analysis**

I conducted data analysis in the iterative fashion (Locke, 2001). For clarity, I describe the steps as follows:

*Step 1.* The first step was data condensation. I went through archival data, transcripts of audio-recorded meetings to extract data related either to identity conflict or the response of the activists advocating an organizational innovation practice to these conflicts.

*Step 2.* I began the analysis of the condensed text-based data, which were specific instances of tensions around managing the temporal constraint in the organizational identity. I coded these instances using the descriptive terms used by the participants (Locke, 2001). Following multiple readings of transcripts and emails, I gradually combined codes which overlapped substantively in their core essence. To illustrate, a statement by a senior executive - “We need to think about our legacy. There's the legacy benefit of the innovation program, of being able to tell the government that being one of the largest construction project in the UK, we are moving the industry forward. Our industry needs to be innovative, and both contractors and clients have responsibility here. The innovation program is going to be our legacy of how clients and contractors can work together to innovate in the construction industry” - was coded as “reputation” (later grouped in the more abstract code of “Abstracting to an higher-level categorical identity”). Through this process I also coded multiple instances of tensions and how these tensions were responded to in an iterative way. I continued moving, rearranging, and consolidating the codes until a saturation was reached.

*Step 3.* I went back and forth between the data, emerging codes, and existing literature to extract theoretically explanatory dimensions of an inductive theory (Eisenhardt 1989) and then integrated them into a coherent conceptual framework. Figure 3.1 presents data structure and Table 3.1 presents the representative evidence in the data for all the second-order codes.
FIGURE 3.1
Data Structure

First Order Category

- Extreme risk aversion
  - Lack of slack

- Client-contractor disjunction
  - Contractor-contractor disjunction

- Being remembered in discourse
  - Largest project
  - World class organization

- Industry affiliation
  - Future projects

Second Order Themes

- Limited duration collective identity
- Unreconciled constituent sub-identities
- Highlighting atemporal identity elements
- Abstracting to a higher-level identity affiliation
- Bringing identities of other organizations in play

Theoretical Dimension

- Identity Constraint
- Strategic Activism
Table 3.1: Supporting Data for Each Second-Order Codes

<table>
<thead>
<tr>
<th>Limited duration organizational identity</th>
<th>We do get in this mind-set of thinking of risk only as the down sides associated with it. I guess, we always focus on downsides and overlook that any sort of development… may have an upside associated with it.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>You know, the opportunities for innovation are there, however you have got to be in really early. So the sites which are already mature … are very difficult to get into. They think we are alright, we are doing well, we do not really need innovation.</td>
</tr>
<tr>
<td></td>
<td>Several people keep saying to me, oh, why can not we innovate like other companies? I say, well, because we are a client, you know. We are not a manufacturing company… We have these periods. One, two, three, four that you have organized around. Which would not normally happen in an organization? And then you have got these different key moments in the project. You have got milestones. You have got transitions. So, it is like race all the time.</td>
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<table>
<thead>
<tr>
<th>Unreconciled sub-identities</th>
<th>It is a different… each team, despite the fact that they work for the same organization, have a different contractor, a different project manager, a different director and in my experience it is whether or not those guys want to do it that makes the different. Crossrail now had four or five sites doing SCL, and they were not talking to each other. They do not have time for this. Each of them are on their own.</th>
</tr>
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<td></td>
<td>Because of the short-term nature of individual contractsFor them it is got to have an immediate benefit… Immediate benefit. It is not worth it because they could be doing the kind of, all of the work and if they do not see the benefit from it then they are, you know, manager will say, why have you wasted, you know, 20 hours working on this.</td>
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<tr>
<th>Highlighting atemporal identity elements</th>
<th>We are the largest infrastructure project in Europe, and for that reason we have some obligation for leadership. I would like Crossrail to [inaudible] provocateur and the facilitator in the industry.</th>
</tr>
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<td></td>
<td>… we certainly determined, right, we have got a lot of people agreeing it is a worthy cause…If the worst happened…we are going to be criticized for trying, but if that's the biggest crime we have committed, we are better off. Well, I, kind of, think that even the innovation program gets the reputation that we have got the app but not application, we set a higher bar for the future projects by just demonstrating that at least stuff is happening…</td>
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<tr>
<th>Abstracting to higher level identity affiliation</th>
<th>You may not think it is going to be a benefit to Crossrail, but I think it is certainly a benefit to the industry. We do not actually as an industry celebrate innovation. We are looking to set an industry challenge. Instead of looking at it from client and contractor perspectives, we look at it from an integrated Crossrail perspective, because the innovation program can affect everybody positively.</th>
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<td></td>
<td>Our industry needs to be innovative, and both contractors and clients have responsibility here. The innovation program is going to be our legacy of how clients and contractors can work together to innovate in the construction industry.</td>
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<tr>
<th>Bringing identities of other organizations in play</th>
<th>You know, Thames Tideway and HS2 are coming on steam, we will have choice to handover the innovation program to them, and we have good chance of continuing beyond Crossrail, therefore the innovation program well might have continuity beyond us as other major projects buy into this. We are nowhere near there. … we”ll figure that out. … so, we are pioneering this but this can potentially become link between the major projects. … managing innovation across their temporary boundary.</th>
</tr>
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<td></td>
<td>…it is collaboration, one of the things that everyone wants more of in this industry. So it gave us lot of credibility with the TFL, as our parent company sitting over as it were, and others too were ready to join the innovation club!…</td>
</tr>
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Findings

Identity Constraint in Temporary Organization

Limited duration temporal identity

Crossrail was a temporary organization, and its time bracketed identity often conflicted with the notion of an organizational innovation practice. The innovation practice became a point of tension as the innovations being explored and experimented had irreducible risk and uncertainty, and the prospective value of these innovations often transcended Crossrail's temporal boundary as an organization.

The proponents of the organizational innovation practice faced reservations and frictions with those members who considered that the organization has a rather well-specified mandate and little slack for a general innovation management practice. They often expressed the concerns about the "value for money" for an innovation program given the temporary nature of the organization. The identity of Crossrail as a temporary organization made the intra-temporal allocative efficiency more salient than that of inter-temporal dynamic efficiency. One team member summarized this as follows:

…you need to look at it from the perspective of the assurances that we give to stakeholders. We have got to bring them on board, we have got to bring sponsors with us, and we have got to bring all sorts of other people who need reassuring or need confidence. They ask questions, and it is only natural. The culture internally… or expectation from us externally… means that there is always a tendency to say, justify, why is this value for money?…

A high intra-temporal outlook manifested in aversions to risk and to slack. Unlike organizations where the time is conceptually open to distribute cost and risk of innovations over multiple cycles, the “closed” time made the vagaries of the uncertainty of innovation more salient. The risk mindset came in the way of seeing the opportunity as is reflected in the quote:

We get in this mindset of thinking of risk only as the downsides associated with it. I guess, we always focus on downsides and overlook that they… may have an upside associated with them.

Moreover, the time-bracketed identity meant that the organization had to progress forward through chasing milestones and transitioning phases. This induced an irreversible directionality as movements through milestones in the organizational identity marked by distinctive transitional markers. For example, as the civil works gave way to mechanical and electrical work, they were reflected in the internally perceived identity. It
was this movement that the temporariness and transience of the organization was salient. One of the innovation program member put it as follows:

…everything here is sort of calibrated around time in a different way. We have these periods. One, two, three, four that you have organized around. Which would not normally happen in an organization? And then you have got these different key moments in the project… milestones and transitions… At the moment we are in a transition here. It is a little bit delicate. Very delicate. It is more around the fact that the, the organization is shifting away from tunneling and construction. You are aware of that, are not you? So it is just… it is just (that the) transition needs to happen before you start working out how innovation is going to play into those new environments. They are interested in finding out how their job’s going to operate… you see. If I press, they will just say …go, f* off, you know? We do not know what system wide's going to look like in a year's time, we have got to figure, you know…

The moving “temporal” identities not only manifested at the organizational level but also at the level of individual contracts. Project managers and staff who worked for individual contracts in Crossrail calibrated their sense of “who we are” with the temporal loci that they were at. Some of these contracts were coming on steam and while others had entered their last lap and were close to closure. Those who were more than half their way were less likely to engage as they thought of themselves as soon exiting the collective identity and were in a withdrawal mode. The project personnel were in rapid turnover as many of the work streams had started closing off. They considered any exhortation to innovation not only misplaced but laughable.

They are sixty percent through their contract. I was in that meeting yesterday…they were laughing when I turned up, are you serious. That was the joke, and I was like okay!

On the other hand, those contracts which were at quite an early stage saw themselves as too ambiguous “pie in the sky” and ignored overtures by the innovation program.

This is sort of pie in the sky stuff… you know, sort of cloud world… (that) I would not feel too worried about … until (it) is set up. And we do not have ownership because the contract is not yet in place or they are at very early stage. If we go to them, they just say bugger off.

Unreconciled sub-identities

Crossrail was convened as a temporary organizational vehicle, and their constituent actors had multiple identity affiliations. Given temporary nature of Crossrail, multiplicity and complexity of identities were far from fully resolved as the internal constituents carried over their own identities or affiliations which transcended their involvement at Crossrail.
In particular, two distinctive identities that were particularly salient in day-to-day activities in Crossrail were that of clients and contractors. These identities had dynamics of their own. For example, those affiliated with the “contractor” identity considered each other competitors. Some contractors had their own in-house innovation management practice, and they were unwilling to fully share their innovative ideas as doing so would mean opening up their knowledge to a broader group of peers to which they would usually compete in the market. The innovation program, on the other hand, was premised on the idea that there would be sharing of knowledge and resources to develop innovations. The identity cleavages between different individual contractors often meant that open-sharing their knowledge for innovations seemed misplaced. While the program did lead to some sharing, it did not address the big ticket sharing as is reflected from the quote below:

The idea that I give access to members of each the contractors to be able to see through their remit work and those of their peers … and pay them to see whether they can come up with improvements in program… It may cause pain to one contractor but create a huge benefit to the overall Crossrail delivery… but we cannot do that…we have the confidentiality clause in the individual contracts.

The identity cleavages that came in play were not limited to contractors. The distinctive client and contractor identities were also at play. The autonomy enjoyed by individual contracts also meant that even when the value of the practice was demonstrated, the engagement across contracts remained uncertain. The distinctive client and contractor identities often manifested itself in an arm's length element of the relationship as is reflected from the quote below:

…I wanted a collaboration agreement and, they go like, what the hell is a collaboration agreement?… it is either purchase order or it is a contract. I was like no, no…they rolled their eyes at that point. To be fair to them, you know it is a bit of a slog and they are always helpful and we always get it done. It is interesting because they will say there is no such thing…

Identity Play: Justification Mobilization for an Innovation Practice

**Highlighting atemporal identity elements**

The identity boundary of a temporary organization was stretched, if only in an abstract sense of an aspired symbolic identity in social memory and discourses in the future. This opened up new space for action which otherwise may not have been available if the emphasis would have remained in identity only in an instrumental sense. Identity talks created new accounts for “legacy” and “memorialization” that expanded
the concept of time in the organizational identity from a transient instrumental one to a perpetual one in the discourse and memories of the organizational field. It was argued that that delivering the project within the resource and time constraints is well expected and doing just that may not be sufficient to distinguish the organization in the social memory. However, pioneering a new practice of brokering innovation within and beyond a temporary organization would be a distinctive legacy, which would memorialize Crossrail a place in the social memory and discourse in the field. These identity talks invoked the social memory of how the organization would be remembered in the field-level discourse.

Narrative accounts were inventively used to get around the concept of time in organizational identity at the cognitive and cultural levels by foregrounding different identity elements and categories. Identity talks to categorically claim membership to specific social and symbolic groups to highlight specific atemporal identity elements. The foregrounding of other identity elements loosened or diluted the concept of a delimited time in the organizational identity.

These identity talks highlighted identity elements like “the largest infrastructure project in Europe” to underline that the identity constraints of a typical project organization should not be constraining in the same way for Crossrail. The innovation program was presented as an example where the Crossrail is going over and above to assume a leadership role for the major projects in the UK as Crossrail, being the largest project, should do. The identity elements like “one of the largest infrastructure projects in Europe,” it was claimed, almost made it imperative to assume a “leadership role” in the field to establish a new benchmark for the industry and to move the industry forward.

To avoid any pushback, it was made explicit that the innovation program was not part of a "day job" but as an aspirational over and above practice. The practice was presented as simultaneously both optional and aspirational and as a practice that should be available in the repertoire of practices for a “world class” organization. The positive valence of being associated with a "world class" organization, and a proud legacy of "moving the industry forward" were repeatedly used to underline that the practice is is a positive and desirable deviation for willing, able, and entrepreneurial actors in the organization.

Abstracting to an higher-level identity affiliation

The abstraction of organizational identity to higher-level social groups like construction industry and infrastructure sector was repetitively invoked. The adoption of an innovation practice was advocated as an advancement in the construction industry in the UK, in the delivery of major projects in the UK, and in client-contractors collaboration. By aligning with these abstract identity and aspirations, in turn, helped the proponents to make a case for a practice which might otherwise have been considered out of place as a
desirable behavior in the interest of a larger collective. The cost of the innovation program was often portrayed as an investment in fast forwarding innovation in the construction industry.

The construction industry in the UK needs to be more innovation. The question then is, how can we, as an industry, collaborate to innovate. As a major project, it falls upon us to demonstrate to all the stakeholders, that the industry can innovate…

Innovation team members also used accounts of the collective symbolic identity of “all major projects” in the UK. This allowed the team to create a collective identity that linked Crossrail with other upcoming future major projects in the UK. Unlike the previous supra-category which was meant to join up identity cleavages of the different actors in the present, this latter supra-identity joined up the present and future actors to share a common symbolic identity. Crossrail was presented as an episode in a trajectory of major projects including those which were yet to come on steam. This shifting of identity to a higher-level of aggregation allowed the identity as a temporary organization to become a more contiguous “major projects in the UK” identity.

You know, Thames Tideway and HS2 are coming on steam, we will have the choice to handover the innovation program to them, and we have a good chance of continuing beyond Crossrail; therefore the innovation program might have the continuity beyond us as other major projects buy into this. We are nowhere near there… We will figure that out… but this can potentially become a link among the major projects to manage innovation across the boundary.

**Bringing identities of other organizations in play**

Proponents of the practice realized that the implementation of a practice which conflicts with the cultural-cognitive core of the organization would need a broader mobilization of actors, resources, and legitimacy from various sources both inside and outside the organization. They tapped into the status of Crossrail as one of the biggest projects in Europe and an ascendant discourse about the need for “collaboration” between the client and the contractors in a large project to make the innovation practice as an obvious imperative. Reaching out to a broad group of stakeholders including the clients, the principal contractors and the firms that formed the part of the broader supply chain allowed to create a bigger set of stakeholders and resources for the practice.

An important part of the strategy of those advocating the innovation practice was presenting this as an opportunity to a broader group of organizations in the proximal field to enhance their corporate identity. As this was framed as an opportunity to move the whole industry forward, providing resources for the practice would allow other firms and organizations to share the credit in the discourse in the field. What made this
proposition compelling was the scale and visibility of Crossrail in the field. Therefore, when the CEO, who had sponsored the innovation team at Crossrail, wrote to the principal contractors to seed an innovation pot and join in Crossrail's efforts to promote innovation, it was akin to an invitation to join in a privileged club and was difficult to decline.

Reframing the innovation practice as an opportunity to distinguish oneself by going above and beyond the business as usual to be a world-class organization was a compelling corporate identity enhancement opportunity. This partially helped to address the institutionalized mindset, which instinctively focused on the narrower economic interests by presenting a distinctive identity enhancement opportunity in exchange for the resource contribution. The reputation was constantly referred as “a big mover” to nudge other actors to go above and beyond their minimal mandate.

The mobilization of resource for the practice more broadly was then used to do away with any internal resistance for resource allocation from the contentious contingency fund of the project. Such a move tapped in the broader ascendent logic of “collaboration” in the field and thus legitimated partially tapping the contingency fund available with the project given the fact that half the funding was coming from the principal contractors’ kitty. The compelling framing of the funding as a gain rather than loss as contributing half would automatically bring in another half highlighted win-win narratives and kept the skeptics from openly contesting the funding. Such a contestation was otherwise quite likely given the fact that the organizational innovation practice exceeded the organizational identity boundary of Crossrail as a temporary organization. As one team member put it:

…it is collaboration, one of the things that everyone wants more of in this industry. So it gave us a lot of credibility with both TFL, as our parent company, sitting over as it were, and the supply chain partners, everyone ready to join the innovation club! Otherwise, the contingency fund is difficult to touch. It is sort of for things as a very last resort…

Without this broader mobilization, it would have been rather difficult to tap the contingency fund, a pot of money which was set aside to ride through uncertain risks in the organization and which can be tapped only as a last resort. Framing the innovation practice more as a beginning of potential a broader “collaboration” that can potentially mobilize more resources also helped. For example, there were actors and resources in the field with a mandate to promote innovation and collaboration in the industry. They came up in the “resource” narratives to amplify a perceived potential for the practice:

I have been looking at TSB [transport strategy board] and if you see some of the stuff that we are doing around energy, there is an opportunity to submit competition entries then we can pitch for funding. Depending on whom you talk to, anywhere between 50 and 150 million pounds is up for grab in the
industry for innovation stuff. But we would need to align with the funding cycle, just something to be aware of. For example, there is this new funding that's now up for grab that could be available to us. It is European funding, which is managed by Horizon 2020. As we do next cycle of innovation ideas, we can tap some of these funding.

Moreover, the innovation practice at Crossrail was presented as a space in which the industry can potentially work together on drawing upon ideas and opportunities which presented themselves. The distinctive opportunity for “a story to tell” in the context of the largest infrastructure project meant that more resources were available for the practice than what met the eye. Many of the firms in the supply chain already had routines for managing innovation-related projects. Three of the eleven principal contractors had innovation related practices. They were later used as an interface to manage small & entrepreneurial companies, as they were better placed in managing the smaller vendors for innovation-related developmental work. Many firms, particularly entrepreneurial ones, were keen to get engaged as such an engagement enhanced their credentials in the industry just by association - increasing their visibility in the industry and beyond. These firms in exchange got access to a ‘starry path” or enhanced image. As one team member suggested:

... the fact that we offer them a starry path is really helpful as we give them credit for engaging with us…

A Suggestive Inductive Model

Figure 3.2 presents a suggestive model which summarizes the findings. The findings support that activists inside an organization can exercise some agency in dealing with an organization's temporal identity. In the advocacy for an organizational innovation management practice, activists had to face the constraints inherent in the organizational identity as a temporary organization. These constraints manifested from the limited duration organizational identity and unreconciled multiplicities of its constituents. Box-A in the figure represents these two constraints.

Box-B represents in the figure represent strategies used by activists to circumvent the constraints in mobilizing resource for an organizational innovation practice. Activists promoting an organizational innovation practice used three archetypal strategies to deal with the organizational identity constraints. First, they used identity talks to invoke an abstract higher-level identity to justify the practice. Narrower and unreconciled identities were subsumed in the identity of a bigger collective like an industry. Second, by making atemporal elements in the organizational identity salient in their narratives, these actors made an alternative justification for an organizational innovation practice. The identity claims like “the largest project in Europe” or “world class organization” were used to suggest an imperative for Crossrail to go above and beyond the limitation of a narrower and more “typical” organizational identity as a temporary organization.
Third, the self-professed identity claims of other organizations in the proximal field were inventively used to mobilize complementary resources for an organizational innovation practice from other organizations proximal to the focal organization. An association with a pioneering of an aspirational practice was presented as identity affirmation opportunities to other organizations. A combination of these three strategies eventually allowed the mobilization of resources for the new practice. These strategies led to a successful mobilization of resource for an organizational innovation practice in a major project as is reflected in Box-C.

Figure 3.2: Suggestive Inductive Model for Identity Play

A. Identity constraint

- Limited duration organizational identity
- Unreconciled sub-identities

B. Strategic Activism

- Abstracting to a higher-level identity
- Highlighting atemporal identity elements
- Bringing identities of other organizations into play

C. Outcome

Resource Mobilization
Discussion

Time in organizational identity

First and foremost, this paper highlights that the concept of time is intrinsic to the notion of organization identity. There is little empirical work to elaborate on how the concept of time in and about an organization play out in organizational identity processes. The empirical work on the role time in organizational identity has so far focused time as a context rather than content in organizational identity (e.g. Gioia et al., 2000). However, the findings in this paper highlight that the concept of time is very much a part of the organizational identity. The foregrounding of time in the identity processes by making explicit an organization’s temporal identity is an important contribution to the organizational identity literature as the concept of time remains overlooked in the organizational identity research (Pratt, 2012; Schultz and Hernes, 2013). Moreover, Schein (2010) had underlined the need for understanding the concept of time inside an organization by asserting that there was probably nothing more important than the study of “how time is conceived and used” in an organization.

The findings that strategic activism can open up space for a new set of actions even without directly challenging the institutionalized temporal identity of an organization adds to the insight from the social movement literature that focuses more on the political mobilization to challenge and change identities in the field (Fligstein, 1996). The role of agency in "forming, repairing, maintaining, strengthening, and revising” organizational identity (Alvesson and Wilmott, 2002) is a much narrower conceptualization of identity work as it does not allows the scope for an entrepreneurial agency that taps performative affordance available in the performative reconfiguration within the existing set of identity elements. Actors can use frames, narratives not only to change an organizational identity but just to make one or another of its identity elements situationally more salient. An entrepreneurial agency may rather like to inventively play with an existing identity than to expend scarce resources in changing an identity. The agency over identity is therefore much varied than the ones captured in the current conceptualization of identity work.

The concept of time is an important structure of not only in a temporary organization but all organizations. For example, an organization may have a myopic concept of time, which means that it would choose to focus on a near future despite having assumptions of a going concern. The insights about activism about temporal identity in a temporary organization may, therefore, be relevant for other organizations as well. Many of the pressing societal problems like climate change and unsustainable natural resource depletion are
rooted in an agency with a temporally proximate identity. Tempering this agency with a greater sense of future will require orientating the agency to an extended temporal horizon. One case in point how opportunities for innovation in the context of a temporary organization can potentially be curated in real time feeding into a pipeline of innovations for the whole industry. The adoption of innovation in major engineering, construction, and infrastructure projects has been advocated for various reasons including the reasons that these projects are often late, over budget and fail to achieve their original objectives (Flyvbjerg et al., 2003 and Morris and Hough, 1987). The Egan Report in 1998, in an industry-wide review in the UK, had called out the complacent attitude toward innovation. However, an innovation program in these projects would need to address the contradiction around the confictual concepts of time. The narrative framing of the concept of time in identity needs to be further examined as they indeed can potentially be an effective intervention in promoting innovation in the major projects in future.

Strategic activism in stretching an organization’s temporal identity

Among the social institutions, identity is a potent force which can both fracture and facilitate cooperation and needs to be better investigated in the context of hybrid organizations where multiple identities coexist and interact at different levels. Research on identity processes and dynamics in a setting where multiple identities are salient can provide insight into how collaboration within and between groups can be facilitated using an identity-level intervention. Most major projects have actors with multiple identities based on their various affiliations. In political science, Rocas and Brewer (2002) have developed the concept of identity complexity to capture the multiplicities of identities elements and their relative overlap within and between members of different groups. Members and groups become sorted through simultaneous convergent and divergent processes of identity activism in which political activists mobilize partisan and transcendent identities of individual members.

The evidence in this paper suggests that members of organization enact the organizational identity through situated actions of “tweaks and edits” (Mc Adams, 1993) of identity elements using the available meaningful social and symbolic categories in the context. Identity work inside an organization is primarily about the narrative framing - and a communicative performance of identities. The findings that activists can situationally perform time in organization’s identity is in alignment with a multiplex and dynamic notion of identity (Glynn and Watkiss, 2012). Pratt (2012) have conceptualized organizational identity to have multiplicities of identity elements related with membership claims, means-ends strategies, and meaningful narratives.

Strategic mobilizations can use situational salience and available cultural resources in an inventive use of self-categorizing rhetoric to generate and to heighten a certain collective sense of self (Turner et al., 1987).
Organizational identity, this paper indeed suggests, acts in the same way as a complex "frame" (Goffman, 1974) of multiple elements, and the individual identity elements, in turn, can be foregrounded and backgrounded in varied ways. The performance of the organizational identity can combine “similar as,” “not similar as,” and “uniquely ours” categorical claims. The particular foregrounding and backgrounding in the identity elements allows activists to perform a favorable identity that suits their agenda.

The findings also suggest that identity talks that invoked affiliations to higher levels of collective identities allowed to internalize more constraining “temporary” time in the organizational identity. The association with larger aggregation of social selves - like "construction industry in the UK" or "major projects in the UK" - and membership claims to these bigger groups, helped make a case for a cost-incurring behavior in the interest of a larger social self. While we have known about such “identity fusion” (e. g. Buhrmester & Swann, 2015) in the context of an individual actor, and the dissolution, bridging, and crossing of symbolic identity boundaries in the social movement literature (Mc Adam et al., 2001; Greve and Rao, 2006).

Mobilizing narrative accounts that tap the desire of organizational members for positive identity and a favorable self-concept can be deeply motivating (Dutton et al., 2010). For example, acts of positioning a practice as part of a desirable identity could have large emotional effect as the alternative would be accepting a less-than-favorable identity positions (Burke, 2004). The present of a new practice as an optional and aspirational space for action can trigger competitive identity work of their members (Kreiner & Sheep, 2009). Shame and embarrassment can threaten a sense of self if social actors fall short of their sense of self (Owens & Goodney, 2000). How these emotions operate at the organizational level needs more investigation as they will have implications for how and in what way these emotions can be tapped both to assert and to transcend cultural-cognitive boundaries inherent in an organizational identity.

Self-categorization theory (Tajefel, 1981) focuses on the cognitive aspects of identity and how cognitive processes related to the notion of identity can explain dynamics within and between members of different groups. Later Turner and colleagues (Turner et al., 1987) incorporated both cognitive and motivational factors in this dynamics. Besides the cognitive notion of the self, members also have a positive differentiation motive. The use the cold or cognitive and hot or affect-based identity triggers needs to be better examined in the context of a strategic use of the available identity elements in an organizational identity. In particular, identity interventions can broadly be classified into identity threats and aspirations. Future research should examine whether and how these two different approaches play out in the identity dynamics in the strategic processes in the organization.
Opportunity and limit of strategic activism over identity

One of the findings of how identity narratives about other organizations were used to mobilize resources for a new practice in another organization suggests that a variety of actors can use organizational identity narratives as a resource to their ends. Brands and corporate identities are organizational images used to carefully project reputational advantage in a “symbolic” marketplace (Schultz, Hatch, and Larsen, 2000) are often used by activists to enforce the values these organizations claim as part of their identity narratives (Fombrun and Rindova, 2000).

There is also need to examine how organizations may resist activism within its boundary. This is particularly important for the larger and more visible organizations as they often become a target for activism from activists within and beyond the organization. Activist groups often target bigger and more visible organizations (Greenwood et al. 2011). Such targets create more media stories. They are sensitive to their reputation, and their behavior is likely to have a greater impact for the desired change in the field. The findings in this paper do indicate that such an identity stretch is possible, however, as this paper does not examine the organizational cost of such an identity stretch. Further research should examine the conditions under which such a stretch is beneficial and how an organization can resist those attempts of identity stretch which may not be beneficial to the organization as a whole.

Another related question is about limit of identity-related intervention. For example, leaders and entrepreneurs are likely to have significant headwinds in redefining the category or meaning of an identity. A greater insight into who are likely to be more successful, with what strategies, and what are the underlying cognitive mechanisms or motivational forces that shape the efficacy of their different interventions - will inform both theory and practice. The interaction between a broader identity and narrower economic interests is an interesting area of study. Many conflicts are shaped the social construction of the identity of the self and the other. Such identity structures often become self-perpetuating. From an economic lens, the relationship between the client and the contractors is seen as a simple Principal-Agent problem. This perspective would suggest that while this relationship can be improved, there is an irreducible structural duality of the self and the other in this relationship, and any alignments are temporary and would likely unravel at some point.

While identity and interests are often intertwined, it is a fallacy to not distinguish identity-based groups with interest-based groups (Gutmann, 2000). While identity-based affiliation may overlap with interest groups, identity groups are based on shared meaning and values over and above shared instrumental goals that the
members may share or couldn’t otherwise obtain (Gutmann, 2000). What identity specifically taps is socially distinguishing and consequential features that places an individual or organization in a relationship with each other, and as is demonstrated by a large body of research in social sciences - particularly social psychology and political science - is independent of the pursuit of narrowly defined interest. Identity-based interventions do not preclude interests nor do they predicate them.

In fact, identity-based interventions are particularly efficacious way of mobilizing and organizing agency when interests are irreconcilably divergent as they taps a broader range of meaning and motivational forces and are not limited to those that are narrowly instrumental. Identity processes focus on deeper cognitive and motivational factors what constitutes agency and interest rather than just a strategic alignment of interests among the parties involved in the project. Even nominal and symbolic labels can potentially induce identities and are used frequently by political and entrepreneurial actors to create, define, and even redefine identities for mobilization (Reicher, 2004).

The study of policy preferences and political mobilization in the US highlights that narrowly defined interests have limited predictive power for the political support of policies related with taxation and social welfare among the populace in the US (Sears and Funk, 1991). The interests are predictive of action and decision preferences only when the relationship between actions/decisions and effects is large, clear, and certain which leaves a very large set of action repertoire open for strategic influence and mobilization.

The advantage of an identity-based mobilization is that such mobilizations often change what is perceived as interests in the first place. It is not a surprise that identity-based mobilization is key to any entrepreneurial mobilization both inside and outside an organization. This would also, therefore, suggest a better recognition of identity-based interventions in organizational context of multi-organizational major project where pre-existing interests don’t get reconciled to the same extent as in other more typical organizations.

However, social identities, as in membership to social groups and symbolic categories are central drivers of within and between group processes (Huddy, 2003). Ingebritsen and Larson (1997) examined this interaction in the context of different response to Norway and Finland for the European Union (EU) membership despite having very similar economic interests. For the Finnish, European membership was seen as an opportunity to assert their European identity and to distance themselves from their recent affiliation to the Soviet block. On the other hand, the Norwegians perceived this as a dilution to their independent Norwegian identity. So despite having very similar economic imperatives, the different implications that the EU membership had to their respective identities resulted in very different outcomes. Identity is, therefore, a more potent driving force as it constitutes the very essence of the self by drawing upon the social process and meaning structure.
Social identities of individual and organizational actors provides an important intervention point for influencing their agency in a complex inter-organizational setting. The recent emphasis on partnering literature that focusses on the cultural aspects rather than a simplistic alignment of interests is indicative of the role identity processes play in the multi-stakeholder, inter-organizational, major projects.

Identity processes through which a sub- or supra- group use identity claims for mobilizing change in attitude of the members needs to be better investigated in such settings. Brewer (2007) suggests that identity provides the key mechanism to understand the processes of cooperation and trust in a collective setting. She even goes further in suggesting that because identity can be formed on a nominal category, seemingly irreconcilable identities are only just manifestation of our cultural, political and technological inability.

All identity affiliations or categories are not equally consequential. Some are more paradigmatic than others as they tap institutionalized social and symbolic categories. These identities are more elaborate and developed. However, entrepreneurial actors can use nominal, fluid categories and categorizations as a resource. While such mobilizations may not fully transcend more paradigmatic identities, they can create enough space so as to expand the scope of action under a more favorable of circumstances where doing so does not necessarily threaten the more paradigmatic identities of actors but add to it.

The time is long overdue for a better understanding of the relationship between interest and identity-based dynamics in an organizational setting. While in many organizations, a shared mutual identifications in the form of an enduring, cohesive, and collective organizational identity overlaps with shared instrumental interests of members, there are other organizations where organizational identities are temporary and conflictual rather than cohesive. In such settings, sub-identities or other identity affiliations are stronger and more salient than the collective identity at the level of a temporary organization. Usually, there are multiple identity groups and affiliations of these groups are both inside and outside the formal temporary organization.

An invocation of salient identities through linguistic frames and narratives can shape the relationship between a network of interests. Social movement scholars argue that such interventions can tap both collective grievances and opportunities to mobilize members (Snow et al., 1986). While identity is a potent force in mobilizing agency, it is certainly not sufficient. This is a subject for more research. Some preliminary questions to develop this understanding should include the interaction between instrumental and moral identities. Large projects certainly provide a setting where economic interests and instrumental identities are to the fore. The focus in changing the adversarial relationship in these projects, particularly between clients and contractors, have incorporated new approaches like partnering and relational contracts. Identity perspective is expected to provide further insight on the untapped opportunity in facilitating a collaborative orientation. This should, however, be distinguished from other approaches to innovation in
major projects like partnering and relational contracts where the focus is on shared instrumental interests in motivating and mobilizing individual parties in the contract toward a particular pattern of behavior.

Organizational Identity Beyond Organizational Death

The finding that organizational actors can construct and reconstruct accounts to enact “elasticity” (Kreiner et al. 2015) of an organization's temporal identity is an important finding. They indicate that identity work and temporal work may be related, particularly when the concept of time is an important part of an organization's identity. Kaplan and Orlikowski (2013) studied inter-individual differences in the concept of time in a strategy making group in an organization. They suggest that these actors were able to resolve their temporal differences through “temporal work” that included “reimagining the future and rethinking the past”. The social psychological studies of “time work” (Flaherty, 2011) have also emphasized the agency that individual actors can exert in controlling experience of time to a degree.

One another aspect where temporal work and identity work overlaps is the case of an organization’s memorialization of its identity. While we know that future-oriented identity can be deeply motivating in the present (e.g. Foreman and Whetten, 2002; Brown and Humphreys, 2003), the assumptions had been about the continuity of the organization as an entity. The findings in this paper suggest that social memories for a future continue to be motivating even for the period that goes well beyond the death of an organization as a functioning social entity.

This paper suggests that organizations despite their impending death can invest resources in shaping their after-death narratives. While we have a greater understanding of motivations that underlies the memorialized identity for an individual, a similar understanding is missing at the organizational level. Is the organizational quest for a “memorialized” identity for a temporary organization being driven by senior executives at the top echelons? These executives may see these organizations as stories of their life and want to preserve and celebrate them as their personal achievements. However, whether organizations as social actors may have their own need for memorialization need further investigations.

Organizational death is more common than apparent. In some cases, like early stage companies and temporary organizations, organizational deaths are endemic. However, we have not engaged with the question of how organizational behavior in the face of an imminent death can be influenced by a sense of organizational identity and the preservation of a memorialized self. The organizational identity literature had hardly engaged with the notion of an imminent organizational death. The use of narrative and identity frames to over or under emphasize one of the two temporal frames - before death and after death - may potentially induce bias for different behavior and practices in an organization. The empirical settings like those of
organizational bankruptcies and start-up failures provide ideal empirical settings where the interaction of an impending organizational death and organizational identity and identification can further be explored.

**Conclusion**

A temporal identity of an organization may keep the organization from adopting certain practices that conflict with this identity. Activists promoting such practices, however, can use a play on identity elements to address this constraint. In a particular case of a major project adopting an organizational innovation practice, I find that the foregrounding of some identity elements along with a broader mobilization in the organization's proximal field can help enact an aspirational organizational innovation management practice. While highlighting the concept of time as part of organization's identity, the paper also highlights the role that activists can play in getting around this notion of time in organization's identity. As some temporal identities may constrain desirable practices, future research should further examine the relationship between temporal and atemporal identity elements in a greater variety of organizational forms where such conflicts are known to exist.
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CHAPTER 4. MAKING DO AND GETTING BY LEGITIMACY EXCHANGES

In this paper, I use the active steering of a voluntary innovation program in an organization to develop an inductive model of how a weak practice lacking cultural-cognitive legitimacy can be enacted without any recourse to coercion. I find that the group promoting the practice brokered a series of legitimacy exchanges between the practice with several other marginal or peripheral practices in the organization. In doing so, they created traction for not only the focal practice but also for other practices which otherwise would have remained ceremonial. The findings have implications for the literature on legitimacy processes, entrepreneurship, and institutional complexity inside an organization.
Introduction

In the context of innovations in organizational practices, we often take a perspective which is either a “naive top-down-ism” (Nelson and Winter, 1982) or outside-in institutionalism. The literature in organizational strategy often places too much emphasis on an authority structure of coercion and control inside an organization. On the other hand, outside-in institutionalism emphasizes institutional processes in the organizational fields as the key drivers of the practice adoption. The problem with both these approaches is that they do not sufficiently engage with the ecological multiplicities of social and political micro contexts in the organization.

There is a need to pay more heed to the weak form of practice adoptions, a practice adoption in which an internal activism in the organization promotes an organizational practice as an aspirational stretch that goes over and above the day job for the members. Unlike a coerced practice adoption where an internal mandate or external institutional pressure forces a practice on the organization, the weak form of practice adoption is driven by a non-coercive activism from within the organization. The intent for the weak form of practice adoption is deliberately stretching space of actions for members of an organization rather than conforming to what is considered legitimate or being constrained by what is instrumental. The weak form of practice adoption, therefore, should not be confused with a ceremonial adoption of the practice in response to institutional pressures from the field.

The adoption of a weak practice is a form of entrepreneurial activism. Entrepreneurs often use social-political activism to deal with blinders of cultural-cognitive beliefs of their social context. The literature on social movements examines the entrepreneurial activism in organizational fields. Institutional entrepreneurship literature expressly engages with the innovations in the structure, boundary, and practices of organizational fields (Lounsbury, Ventresca, and Hirsch, 2003; Scott et al., 2000).

Entrepreneurial activists working from beyond an organization's boundary can afford to be disruptive or confrontational. However, entrepreneurial actors working from within an organization may prefer stretching existing organizational structures to accommodate new actions rather than disrupting them. Therefore, unlike entrepreneurial activism in a field where conflicts and confrontation are not eschewed to coerce organizations to comply with demands, the activists inside an organization may have to eschew an overtly antagonistic posturing. In the terminology of Nelson and Winter (1982), these activists may prefer stretching an apparent truce rather than breaking it as breaking the truce can have detrimental consequences for the activists as well. Entrepreneurial activism inside an organization is, therefore, likely to be different from the activism that targets an organization from beyond its boundary. This leads to the following questions:

How can entrepreneurial actors in an organization enact socio-political legitimacy for a "weak" practice - a practice that lacks both top-down authoritative and outside-in institutional mandate?
I use a case study of the "weak form" adoption of an organizational innovation management practice in a major infrastructure project to examine this question. I explore strategies used by an activist team sponsored by the CEO to enact the practice despite the lack of cultural-cognitive legitimacy that the practice had. In the following, I place the question in the existing literature, sketch out the methodological approach, present the findings, and finally, I discuss the implications of this study.

**Theoretical Background**

**Introducing The Weak Form of Practice Adoption**

An organizational practice is a “shared bundle of behavioral routines, tools, and concepts used to accomplish a task” (Canato et al. 2011; Westphal, Gulati & Shortell, 1997). Some examples of organizational practices include business process reengineering, zero-based budgeting, or total quality management (TQM). Most practices consist of multiple elements, including written or unwritten rules about how a certain function is to be conducted, concepts that describe these rules, and values and beliefs that underlie these rules (Kostova, 1999). What we see as an organization is a configuration of practices that has become ingrained in our minds as an organizational whole.

Organizations often adopt a practice from a completely different social environment (Boxenbaum and Battilana, 2005), they often have to contend with the lack of fit between the new practice and the organization (Martin, 2002). The literature suggests that organizations address this challenge in two ways: ceremonial adoption of a practice and coerced adoption. Ceremonial adoption is the case in which a practice is adopted for the “optics” and is devoid of “real” actions (Brunsson, 2002). Coerced adoption, on the other hand, is the case in which the normative and operational elements of the practice is forcefully integrated with the core of organizational activities.

However, the empirical reality of new practice adoption does not match this binary characterization (e.g. Fiss and Zajac, 2004, 2006). Practices are neither imported as “whole cloth” nor do they remain just symbolic (Dimaggio and Powell, 1991). Multiple empirical investigations have established that practices are adaptive symbols and their performativity often manifest as actors within and outside organizations start using them to pursue their own goals.

Moreover, an “audit culture” has created a "heightened emphasis on transparency and accountability” making a purely symbolic adoption much less likely and much riskier (Strathern, 2000; Bromley and Powell, 2012; Bromley, Hwang, & Powell, 2009; Coburn, 2004). Therefore, there is a need to conceptualize and to
characterize the intermediate ideal-types of practice adoption to enhance our understanding of the whole range of dynamics of practice adoption and innovations.

There are many cases of practice adoption, in which the practice is deemed desirable and is actively promoted from the top as an aspirational practice in the form of top-down activism. In the top-down activism, executives in top echelons work with an activist team inside an organization to promote and advocate a practice as an aspirational organizational practice for the members. The key point to note here is that activism for a practice is done without any recourse to a formal mandate or coercion and requires winning over members in deliberately stretching the scope of actions in the organization.

The weak form of practice adoption is very different from the ceremonial adoption of a practice. While institutional pressures from outside drive the ceremonial adoption, the weak form of practice adoption is promoted through activism from within the organization. Moreover, in a ceremonial practice, the intention is not to act but just to show conformity, however, in the weak adoption of practice, the intention is to expand the scope of action in the organization. The executive leadership has a genuine interest in enacting the practice. However, the conflicts or complexity involved in enacting the practice makes an explicit mandate for the practice difficult or even detrimental. The weak adoption of practice is thus stronger than just a symbolic adoption but weaker than a coerced adoption.

An advantage of a "weak" form of practice adoption is that such adoption is less likely to be explicitly challenged, and easier to justify. In a sense, a weak practice is similar to predisposing rather than predetermining likelihood of agency for the adopted practice. A weak practice expands the repertoire of actions in organizations by providing partially open material and symbolic resources that individuals and groups, particularly the more entrepreneurial ones can inventively use to their ends, and in the process, increasing the general propensity to action aligned to the values of the adopted practice.

A disadvantage of the weak form of practice adoption is that other actors in the organization can co-opt the weak practice - thus resulting in the further continuation of the status quo. Actors in the organization are known to adapt a new practice to reconcile it with their goals, priorities, and with other existing practices (Czarniawska and Joerges, 1996; Westney, 1987; Zbaracki, 1998).

**Starting up a weak practice in an Organization**

Legitimacy is a key process in instantiating a new practice (Johnson 2004). Dornbusch and Scott (1975), building upon the Weberian formulation of legitimacy, identified two aspects of legitimacy, which they named as validity and propriety. Validity relates to the belief about the action conform to existing social norms whereas propriety relates with an individual's belief that an action is “desirable, proper, and
appropriate.” Aldrich and Fiol (1994) similarly distinguish between the socio-political and the cognitive legitimacies. Cognitive legitimacy is related to how taken-for-granted a practice is whereas socio-political legitimacy is to do with whether the practice conforms to the “recognized principles, accepted rules, and standards” (Aldrich and Fiol, 1994).

Organizational practices that do not fit in with the cultural-cognitive notion of an organization require an active legitimation. This is because, unlike established practices, new practices are not yet grounded in established institutional logics, and thus lack cultural-cognitive legitimacy. As attaining cultural-cognitive legitimacy is a time drawn process of changing deeply held beliefs, activists working under the shadow of a legitimation deficit would need to mobilize socio-political legitimacy so as to compensate for the lack of cultural-cultural legitimacy.

Activists in an organization directly “engage in collective action to remedy a perceived social problem, or to promote or counter changes to existing social order” (Briscoe & Gupta, 2016). They have to construct socio-political legitimacy by engaging with actors and audiences both inside and outside organizations so as to get their acceptance, support, or at the very least, their tolerance for the new practice (Archibald, 2004).

While social movements span a long period of collective activism in which actors develop a formidable organization to drive long-term transformational change in organizational fields (e. g. Rao, Morrill and Zald, 2000; Haveman and Rao, 1997), top-down activism in an organization is somewhat more evanescent. It is often a quickly put-together team which has to enact a weak form of practice. It should also be noted here that enacting a weak form of practice adoption in everyday activities of members of the organization is not simply innovation in routines or technical features but a complex social process in mobilizing socio-political agency for a new category of action.

Activism for socio-political legitimation of a weak practice would likely bear resemblance with very early stages of a social movement (McAdam, Mc Carlyn, and Zald, 1996) in which an early activist group instantiates emergent beliefs, norms, and values in the field. The research on social movement (Bartley and Child, 2014; Baron and Diermeier 2007; Kellogg, 2011; Lounsbury, 2001; Baron 2001) has incorporated the role of politically savvy activists who instigate change by targeting organizations from outside. However, the process that internal activists in an organization use to advocate a practice remains unexamined despite explicit suggestions about activism “within the confines of organizations” (Zald and Berger, 1978). This is reflected in numerous empirical work on political activism to promote diversity and equity in the workplace (e. g. Meyerson and Scully, 1995; Meyerson, 2001; Scully and Segal, 2002; Dutton et al. 2001). However, the activism for new operational practices has not received any attention.

Legitimation for a practice may be derived from different sources (Stryker, 1994). Suchman (1995) suggest three sources of legitimacy: pragmatic, which relates with self-interest; moral, which relates to what is right
or wrong; and cognitive, which relates to taken-for-granted cultural accounts. Besides different sources of legitimacy, legitimacy may also be targeted at a specific audience (Johnson, 2004). It is a collective perception of what an audience supports or accepts. Finally, legitimation can be associational as the legitimacy of an object depends upon the legitimacy of other social objects that it relates to (Walker et al., 2004). The legitimacy of each object additively shapes the legitimacy of the social context that they are part of. The additive nature of legitimacy implies that a highly legitimate actor doing less legitimate action is more legitimate than a less legitimate actor doing the less legitimate action when everything else is comparable.

Activists in an organization can play with the multiplicity of sources and audiences of legitimacy to garner socio-political legitimacy for a weak practice. However, the very nature of the weak practice makes it open to being strategically co-opted by other actors and practices in the organization. As new practices become available in organizations, different groups and individuals use them as part of their enhanced “tool kit” to pursue their goals (e.g. Currie et al., 2012) rather than what was intended by the proponents of the practice. Practices are adaptive, and therefore, will always be open to different uses by the actors. This is particularly true in the weak form of practice adoption.

Any insistence on an archetypal form for a weak practice may have only a few takers in the organization in a different field, particularly when the organization's cultural-cognitive context does not fit the values underlying the new practice. On the other hand, a more accommodative version of the practice may make practice attractive to a larger number of intra-organizational actors but only by losing its purposive thrust. Actions that substantially deviate from the value underlying the new practice are also likely to invalidate the practice in the eyes of external constituencies providing resources - as an excessively diluted practice will be considered a breach of what is “desirable, proper and appropriate” (Suchman, 1995). Activists promoting the practice thus have to walk a tightrope to steer a bottom-up “embedding” (Czarniawska and Joerges, 1996).

The theorization of practices as “settlements or truces” in organizations (Nelson and Winter, 1982) and an organizational field (Helms et al. 2012) means an adoption without any coercion may be about stretching the truce through the use of “affirmative-tactical” strategies of advocating the practice. While we have some understanding of this process at the level of an organizational field (Helms et al. 2012), there is little understanding of this process inside an organization.

**Methods**

**Research Setting**
The empirical setting of this paper is the work undertaken by an internal activist team to “start-up” an organizational innovation management practice inside a temporary organization by mobilizing support for the practice among the members and intra-organizational groups inside the organization. The socio-political mobilization by the team for a nascent practice provided an appropriate empirical context in which micro-level legitimacy processes in the organization were revealed, and therefore, the empirical setting is ideal to examine the question outlined in this paper. The details of the empirical setting and the data collection are presented in Chapter 2.

Data Analysis

This study was focussed on generating inductive theory through an in-depth investigation of qualitative data obtained from the participant observation. I used an inductive qualitative approach to data analysis which involves iterative coding of multiple data sources (Lincoln and Guba, 1985; Strauss, 1987; Langley, 1999).

First, I categorized field notes, transcripts, and other texts, and wrote research memo - extracting insightful excerpts and logging them for a more systematic analysis. Accounts from these sources were collated to identify extended interactions for creating a socio-political legitimacy for the practice by members of the innovation team.

I then went through individual emails and transcripts of the audio records to trace these interactions. To keep the analysis manageable I focussed on the first cycle of innovations that had launched with six different ideas. This is appropriate as the legitimacy processes are most salient during the early phase of a novelty in an organization. Organizing notes, texts, and transcripts around these six different ideas resulted in six loosely-aggregated multi-perspectival narrative accounts of the process in which multiple voices and perspectives were retained (Langley, 1999; Van Maanen, 1988).

In my second phase of the analysis, I focussed on social and political exchanges that the innovation team members were using with members and practices in the core and the periphery of the organization. Through an iterative process, I developed codes and found an arrangement of the emergent codes into a data structure. Figure 4.1 presents the data structure, and Table 4.1 presents the evidence in the data for all the second-order codes.
Dynamic Gatekeeping

Conceding

Accommodating demands

Exchange with the margin

Exchange with the core

Distancing

Offering opportunity for entrepreneurial action (margin)

Offering opportunity for entrepreneurial action (core)

Aligning

First Order Category

Second Order Themes

Theoretical Dimension

Mutual justification

Resource sharing

Offering opportunity for entrepreneurial action (margin)

Offering opportunity for entrepreneurial action (core)

Playful space for exploration

Agenda shaping influence

Mainstreaming skunk work

Flexible boundary

Offering resources

Offering solution

Mutual justification

Resource sharing

Shared value narratives

Shared success narratives

Identity narratives

Offering opportunity for entrepreneurial action (margin)

Offering opportunity for entrepreneurial action (core)

Shared claims in the narratives in and about the organization

Aligning

Conceding

Distancing

FIGURE 4.1: Data Structure
Table 4.1: Supporting Data for Each Second Order Code

| Offering opportunity for entrepreneurial action (Core) | If I think about [name redacted for anonymity]... she was over the moon after the Innovation celebration event, and she started off a little bit sceptical...I remember going out there and talking to...and she eventually got there, did not she?

...yeah, but I do not get to see PM's on my sites. We have an unofficial engagement. It just kind of worked up from the relationship with one of the guys who thinks what we are doing is cool, and it should be promoted a bit more. It is a connected empowered team, empowering people on sites to choose which ideas and initiatives they’d go on. So it is really picked up a lot of momentum, but that's all bottom up...

In the engagement meeting, the focus the conversation is focussed on identify hot and cold spots. I guess we now have a kind of a mental map of where the kind of hot spots are and what could be the best interventions. And behaviours too, a couple of weeks ago I meet, now who was it, she had sparkle in her eyes about the innovation program. These are the people we engage.

| Offering opportunity for entrepreneurial action (Margin) | We should start working together as a collaborative team, there's obvious benefits we’ll be handing over to the industry...well, we can go further if we collaborate...to innovate...

...the re-use of tunnel clay as a lightweight aggregate (arguably sustainable dependant on kiln) for concrete back used in our main works or even used as temporary fill is a potentially great innovation...Besides contributing to an innovation, we can also push forward sustainability agenda...

Well, for instance, the digital railway piece is managed by [name redacted], The point is that some of these ideas might come down into that space... So what [name redacted] and I are doing at the moment is we are looking at that space and thinking about how do we work on this level, okay?

| Shared claims in narratives in and about the organization | You’d put a little bit of a sort of stories on it around environment, then you’d put another stories around safety and then another one around sort of sustainability...they’ll just go yes, great, love that, like that...unless they see something that really just does not sit well with them. Yes. We have done one of these and they just sat there and we just gave them a glass of milk and then drank it.

I mean, we have just had a challenge thrown at us last night from the communications team to step up the use of innovation in terms of getting the message out, particularly as we go into a, you know, the, sort of, wiring up all the tunnels and it is a less sexy and, sort of, innovation becomes more interesting part of the program. And this sort of thing... I think it is got some mileage for us in terms of engaging the wider audience.

We get the project director and the principal contractors together over the strategic objective, health and safety or delivering a world class health and safety performance... I can go out there with my innovation coordinators and [unclear] on the sites and facilitate that workshop. We can use that in the next article [for internal newsletter]

I just say, hey, I have looked at all the people at the bottom, and I am looking to try and see what we can do to help improve this because these things go all the way up to Chief Exec. So if you are happy to be at the bottom of that list, be my guest. Continue as you are, but I am here to sort of pull you up that.
<table>
<thead>
<tr>
<th>Table 4.1 (contd.)</th>
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</thead>
<tbody>
<tr>
<td><strong>Aligning</strong></td>
</tr>
<tr>
<td>We need to encourage them. Because we can frame that around Aldo Common which is a direct importance to the programme. You know, if we are able to say that we are helping clear Aldo Common as a priority for Crossrail because he will just be like [unclear], because it is a huge risk to our program at the moment, because it completely unlocks a lock.</td>
</tr>
<tr>
<td>We are finding out what to do. This process can be slow, really slow, and often feel like stuck really. Well, I should not call them stuck but to discover and to take to the point where we can roll on…I have had problems with sites because if you do not get the right person you just get a soggy response. Okay, all right, so, you know, we have got some detractors…they are not interested. How do I deal with that? We have to be patient to it. We have to size them up . . . are they doing something else that's important to them, we will offer to bring in resources. So we need to adapt.</td>
</tr>
<tr>
<td>…there was a lack of alignment between whether people really thought yes it needed to go and all this innovation potential needs to be used, and actually what Crossrail should do. So to address that piece we have brought in the idea of challenges and we have invited you as the senior layer within the company, within the organisation, to develop those challenges and provide a challenge for the innovation network to draw it in, to better align it…</td>
</tr>
<tr>
<td>They have not told me this but I think they would like us to offer something. There's going to be something that they have got to take action on. It is, it is hard to get it running, because we had many ideas that just never got up and running because no one bothered to do it.</td>
</tr>
<tr>
<td>So they are doing everything, defining an initiative or challenge? What I want you to try individuals of the working group thinking about, speak to them individually. If we were going to set a challenge from your side, solving a problem, what would it be?</td>
</tr>
<tr>
<td><strong>Conceding</strong></td>
</tr>
<tr>
<td>It is helped along the way of, and a simple way for something that cheap. Because is not there a risk of mandating the mandate of innovation program. Because here the idea is demonstrate it and let everyone know and let them choose [overtalking]. Because if you become too much possessive that it is now my baby, they are not interested.</td>
</tr>
<tr>
<td>I acknowledge your concerns that you wish to hold a tight rein on the works based on your experiences with your Vinci site team to date and I am very happy to accept your offer to take a lead role in managing the delivery of the innovation project.</td>
</tr>
<tr>
<td>Tim tries to align this with the lessons learnt coordinator from each site. They were given by the PM, but in some cases and in most cases actually the lessons learnt are very engineering lessons. So we were given like an engineer who's not interested in innovation, you know, just interested in hard engineering. So it was not always the right person that we were given.</td>
</tr>
<tr>
<td><strong>Distancing</strong></td>
</tr>
<tr>
<td>We ended up with a whole heap of ideas, and that is a problem. Things, instead of moving, are sitting around and clogging the system…so we have tightened up the discovery process.</td>
</tr>
<tr>
<td>…as soon as I started talking with him, he was using words like legacy and innovations almost interchangeably, and I am like, that is quite interesting. No, you have got to stop that. We are trying to create a category here. I think what people should know that we are innovation program. We should not be an excuse for something else…</td>
</tr>
<tr>
<td>…we are not investing in these projects just to play lip service to the innovation program. We are investing in the innovations for the industry. So the point is that we should not…we are not using the investment just as a carrot for engaging these projects with the innovation program…</td>
</tr>
</tbody>
</table>
Findings
Dynamic brokering of legitimacy exchanges: Constructing Socio-political legitimacy

When the innovation practice was launched in Crossrail, the idea was to provide space and resources to tap the fleeting opportunities for the innovation in the temporary organization. The team steering the innovation practice in the organization had created a procedure which included an online portal to gather ideas, an evaluation procedure to screen and assess them, and provided facilitation in dealing with existing administrative routines like the ones related to contracts and procurement. Their emphasis was on the seeding of the practice by undertaking some early innovation projects that would start-up a weak aspirational practice.

The innovation program had the sponsorship and endorsement from the CEO. However, the participation in the practice was voluntary. It was left to the innovation team to advocate the program. Despite opportunities and resources that the innovation team made available for developing innovative ideas, the team soon realized the headwinds. Crossrail, as a temporary organization, had a planning orientation which was meant to manage the multiplicities of interfaces and the uncertainties underlying their complex interactions. So, culturally the innovation practice did not fit into their attitude of risk aversion. Most of the members of the organization were at most curious while others were openly skeptical about the organizational innovation practice. The onus was on the innovation team to co-opt a network of people to start off the practice.

The team member joined in existing meetings and forums to size up opportunities and potential champions, which informed their subsequent efforts. The team used extensive face-to-face campaigns to understand and even to cultivate traction with different members representing different groups and practices in the organization. Internally, the team used discovery meetings and engagement meetings to translate their knowledge of the socio-political landscape and the traction (or the lack of it) that the team members gauged through their direct interactions with individuals on the ground.

The innovation team took on activists’ role to enact the practice by an active campaign for engagement and outreach - actively seeking out opportunities for the practice. The activism that the team engaged in was akin to advocacy in a democratic polity. The team reached out to directorates, projects, teams and actors advocating other practices in search of alignments to enact the innovation program. The following quote illustrates their modus operandi:
…we have to figure out what we can and can not do and where opportunities are. However, we do not know until we engage because often things come up from the long grass at a later time even when it seems there is nothing to do here…

The team mobilized an informal and voluntary network of individuals across the organization which the team referred as referred as a “liquid” network. Some of these individuals in the network were volunteers, while others were carefully cultivated. To start things off, existing social resources were tapped as is reflected in the following excerpt:

…we aligned with the lessons learnt coordinator from each site. They were already there even before the innovation program was launched as part of our legacy program. They were not always the right persons, but that is how we got some presence initially…

Team members had a series of visits to different groups to explore opportunities and then identify individuals which they would co-opt for this network of champions and proponents. Innovation team members will walk to a field site or project office, and hang out to get hold of people for quick chats to gauge their interests and to actively solicit their participation. Such informal information gathering was then followed up with a more targeted interaction. For example, if there was an interest, there will be some more scheduled meeting in the form of a local working group to gather innovative ideas. Such groups also then took on the role of a working group that the innovation program used to steer its engagements across the organization.

An alternative social space was carved out in which local champions will gather periodically. The relational-social space that the program team created was presented as a new playful space, and as one team member put it “a different environment, different mindset - an opportunity to do some cool stuff.” The individuals and groups who participated were celebrated in internal communication forums and social events. The groups and contracts were compared against one another to highlight those doing well “by coming up and implementing cool ideas” making those engaged with the practice to bask in glory and others to play catch up as they risked “being put on the spot” in the social comparison processes in the organization. New social comparisons were made more salient through the celebration, prizes, and different innovation scores. As one team member put it:

…I just say, hey, I have looked at all the people at the bottom, and I am looking to try and see what we can do to help improve this because these things go all the way up … So if you are happy to be at the bottom of that list, be my guest. Continue as you are, but I am here to pull you up that…

Such social space came into being in the very first place by bringing together those who had shown interest in the innovation program and was thus self-selected. Such groups would create legitimacy for the
innovation team at different loci in the organizational core. By having multiple such groups and empowering them with some local governance, the innovation team asserted a space for the innovation practice. The small number of more entrepreneurial individuals who had got engaged became instrumental in providing agency for mobilizing ideas, and their elaboration, scrutiny, and development. The team promoted these individuals by nominating them in working and steering groups in managing the implementation.

This drew upon engagements with more entrepreneurial individuals who saw the innovation practice as opportunities to garner resources and legitimacy to their ideas and projects as the innovation practice allowed them to an alternative space for action without any significant collateral cost. A direct and de-centralized engagement by even a smaller number of individuals helped the team to make case further to those at the executive level who were less receptive to the team's outreach as reflected in the quote below:

. . . I mean he was primed because I had spoken to him [unclear] and said look, we want to bring you into the innovation piece and we already have quite a bit of traction . . . so he was put on the spot…

A deliberate entanglement with the emerging issues and problems was another strategy to legitimate and to create a “positive” account of the innovation practice. For instance, when the environment directorate had a problem about the complaints about construction-related “noise” from the local community, the team offered “trials” for noise reducing ideas. Similarly, given public outcry about increasing incident of a lorries-related accident causing cyclists’ death in London, Crossrail had started Cycle Safety Initiative. The innovation team actively engaged with them to solicit and develop new ideas for the Cycle Safety Initiative. These tactics gave the innovation program socio-political legitimacy, as they presented themselves as a ‘solution” to various “problems” in the midst. On the other hand, when the members get a sense that the group or the project team is engrossed with some major commercial issues, and is less likely to engage, they will "back off”.

The team members soon realized that the amenability of individuals and groups for the innovation program in different contracts, directorates, and micro contexts was variable. Some of these individuals had shown keen interest or as one team member referred, “had a sparkle in the eyes about the innovation program” while others were impervious to active persuasion. These outreaches helped identify, as one team member put it, “hot and cold spots” for the new practice by “sizing up blokes”. Here hot and cold spots respectively referred to individuals and groups who comparatively were easier to engage with and those who were rather indifferent or even outrightly antagonistic to the outreach.

The individuals and groups that the innovation team tried to engage with were of two kinds - those representing core contracts and others representing peripheral practices. The innovation team played an early role constructing and linking resources through what I will call legitimacy exchanges. By legitimacy
exchange, I mean a tactical affirmation for practice by another practice in return for a tactical affirmation for itself. The seeding of such a liquid network started with mobilizing legitimation in which people promoting other aspirational practices like sustainability were tapped in championing the ideas and mobilizing support.

The early one-sided activism of the innovation team was replaced by a mutual cultivation of each other. The ideas that came from the sustainability practice were aimed to increase the sustainability profile, the innovation team facilitated the development of these ideas and claimed innovation credential for the organization. A similar exchange was enacted with the group promoting digital and mobile technology inside the organization. Engagement at the level of these aspirational practices rather than a disparate group of individuals not only provided a somewhat structured framework for interactions but also legitimated each other. The exchange between the practices was often of “what” and “how.” For example, practices like ‘sustainability” provided the object whereas “innovation” came along as the method to accomplish the object. This complementarity between practices is what led to their mutual cross-legitimation.

As the innovation team reached out to individuals and groups to soliciting their engagement with the innovation practice, the team also realized that such engagement meant lessening the control on the contents of the practice. While the innovation team mostly tried to accommodate them, the team also had to maintain some perceived “integrity” for the innovation practice. This, in turn, required pushing back to assert a boundary for the practice when an engagement was considered distinctly unfavorable and was likely to result in legitimacy dilution rather than legitimacy enhancement. In one such case, one team member opined:

…we are not investing in these projects just to play lip service to the innovation program. We are investing in the innovations for the industry. So the point is that we should not…we are not using the investment just as a carrot for engaging these projects with the innovation program…

How much leeway the team would allow often depended on upon the situational factors shaping the power of actors in the exchange. For example, when the innovation team had abundant ideas, the team had greater power and thus dictated the term of exchange whereas in the alternative scenario the innovation team more actively solicited and accommodated the entrepreneurial actors.

The intent here was to protect the integrity of the innovation program as a “category.” So any attempt to dilute the identity as the “innovation” practice was resisted as one team member reminisced referring to a conversation that he had:

…as soon as I started talking with him, he was using words like legacy and innovations almost interchangeably, and I am like, that is quite interesting. No, you have got to stop that. We are trying to create a category here. I think what people should know that we are innovation program. We should not be an excuse for something else…
The innovation team used dangling practices, aspirational add-on practices on the organizational periphery to legitimate the innovation program. By dangling practices on the periphery, I mean those aspirational practices or strategic initiatives – which were not part of the core delivery mandate for the organization. These initiatives related with sustainability, information modeling (BIM), target zero (an initiative related to health and safety), and very much like the innovation program, were yet to be entangled and entrenched with other deeply institutionalized practices in the core.

The institutionalized practices in the organization were entrenched with each other in various truces forming the core of the organization, thus breaking into these practices were difficult as this was likely to break the established truces and were likely to have detrimental collateral consequences. While the action in the core of the organization was bound by a narrower means-ends logic and was under the stricter scrutiny of the organization's governance & control mechanisms, the action in the periphery was more open to the possibilities of play and entrepreneurial experiments. Those involved with practices on the periphery of the organization were looking opportunity for actions which they can capitalize on making claims that the respective practices were indeed grounded in actions rather than just being the fluffy talks. These actors were, therefore, more willing and accommodative in expanding the scope of action beyond the narrowly constructed rationality of the organizational core.

The presence of multiple dangling practices on the margin of organizational core opened up the opportunity for legitimacy exchanges. The legitimacy exchange took the form of contributing resource in exchange for the credit for the practice or attributing credit in exchange for the resource for the practice. Many times this just involved playfully exploring possibilities together between the innovation practice and other peripheral practices in cross-legitimating and cross-enacting each other.

…we should start working together…there is obvious benefits…well, we can go further if we collaborate … to promote both innovation and the sustainability agenda…as an industry, we have to achieve eye-watering targets for reduction in carbon as part of sustainability 2025 emission agenda. Innovation program at Crossrail and the similar program to future major projects can help the industry…

For example, those responsible for sustainability initiatives were looking for support, funding, and legitimation to act on their 'sustainability” agenda. The innovation team members were looking for an entrepreneurial agency to act on their “innovation” agenda. They soon found and tapped each other to cross-legitimize each other. The two components of practice - what and how - of sustainability and innovation entangled reciprocally. From the perspective of those responsible for promoting sustainability agenda, the
innovation program became an instrument or one of the instruments to do so. From the perspective of those in the innovation team, the sustainability initiatives in the organization became an instrument to promote the value of organizational innovations.

An active innovation program depended on a pipeline of concrete actions with an active engagement from other parts of the organization. Tapping these practices afforded the innovation practice an active agency for the innovation practice in the organization. The active engagement of the innovation team with sustainability group, Building Information Modeling group, and Health & Safety Directorate created socio-political legitimation space which the innovation team then used for gaining the traction. The team used these dangling practices to garner socio-political legitimacy. The following justification account used by the innovation team members for one of the innovations that they were championing attest to this fact:

…the re-use of tunnel clay as a lightweight for concrete back used in our main works or even used as temporary fill is a potentially great innovation. Arguably other projects could also benefit from this in addition to Crossrail hence my thinking that we attempt to engage them as they start to think about their construction/ waste/ logistics plans. Besides contributing to innovation, we can also push forward sustainability agenda…

The association with these practices afforded the innovation program a stronger rationale as the innovation program presented itself as a tool to increase "sustainability," and "digital-physical interface" by drawing upon innovative ideas from both within Crossrail and its existing supply chain. While the innovation practice brought in some slack or resources for innovation, the core of the organization in the form of highly structured contracts provided little space for innovation. Dangling practices like sustainability initiative, on the other hand, provided an opportunity to which the resources availed by the innovation practice could be directed for concrete actions. The team promoted the innovation practice as an instrument in promoting "sustainability," driving "digital-physical interface," and achieving health and safety benchmark of “target zero” to open up and sustain legitimacy exchanges with aspirational practices dangling in the organization and the broader organizational field. As one team member put it:

we became a hub in actioning the ideas. It is hard to get an idea, unrelated to a planned contract running here, so when we had many ideas about sustainability, about digital, health and safety that no one else bothered to do. Those ideas got us started. What we changed is that we provided leadership and resources getting some of them up and running.
Legitimacy exchange of the innovation practice with other practices on the periphery was at parity in the sense that such an exchange helped to legitimize both the practices somewhat comparatively. On the other hand, the “legitimacy exchange” of the innovation practice with organizational core was skewed in the sense that while it allowed that innovation practice claim traction, it was specific individuals or groups who used it to distinguish themselves as “going over and above” rather than a claim or enhance their legitimacy. The innovation team, therefore, afforded more weights for following through with ideas emanating from the core rather than those emanating from peripheral practices.

This unequal legitimacy exchange between the innovation practice and the organizational core did mean that innovation team had to be more accommodative of what comprised “innovation” to engage the agency and to mobilize support and engagement for the program in the organizational core. The onus was on the innovation team to create a buy-in for the new practice by making the practice more relevant to the entrepreneurial actors in the organizational core. This was expressed in the preference for allocating resources and allowing some leniency to ideas emanating from the core in the scrutiny of what qualified as an innovation.

Such leniency led to individual-level engagements that came from across various contracts and directorates. The innovation program had become an open space for entrepreneurial individuals in the organizational core. Many of them either had an idea that they wanted to pursue or were already doing so. The innovation program not only provided them with some resources but also legitimated their innovative skunkworks. The affiliation with the innovation program allowed this individual to find justification for the work, thus getting credit and kudos rather than a censure.

The innovation team, while shepherding the practice "non-conflictually" adapted around the core and the innovation practice remained unequivocally optional. However, the innovation team needed “evidence” and “numbers” to manage the claims of “progress” and the “momentum” of the practice in the organization to manage both internal and external audiences. As the number of implemented ideas remained small, other categories like “published ideas,” “shared ideas,” “submitted ideas” were invoked to present the volume of the innovation practice. The correlation between some ideas and the “world class” performance from a separate performance assurance audit was highlighted to suggest that innovation program was “working”. Moreover, other actions and initiatives were logged into the innovation register to claim and to broaden sharing of “innovation” credit with others in the organization. Such claims and attributions helped with the propriety of the innovation practice with the “evidence” of the broader uptake for the practice in the organization.
An alternative legitimacy exchange with the core was orchestrated by providing voice and influence to “progressive” individuals and groups representing different parts of the organizational core in the decision-making process inside the innovation practice. By providing a “say” in the scrutiny of ideas and the larger control & governance of the innovation practice, the innovation team had created a legitimate space for actively taking up ideas coming from peripheral practices and distal organizations in the supply chain and still had a broader socio-political legitimacy and goodwill. This opening up of practice more broadly in the organization also paradoxically sheltered the practice from being fully co-opted as the innovation team can play the core and the periphery to assert some independence to dynamically manage the practice.

Active engagement with progressive core allowed the innovation team to create a negotiated space in which they maintained autonomy by ceding some orchestrated control to them. One team member reflected on one such negotiation with the finance and accounting team:

"I had to say some of the things I have said in there just so that they could hear what they wanted to hear. Now when they go back and if someone [asks] how are the innovation team going? Are they okay? Are they doing the right things? The girls are saying yes, yes, they are talking about auditing…"

Ceding control to the actors in the operational and administrative core was not without a cost. The innovation team had to chase these individuals, which often slowed down the decision-making about whether to progress these ideas further and frustrated those sponsoring these ideas. As one team member put it:

“…to talk about this concept of ownership… involving people are not very engaged and involved in the evaluation process is a drag … they do not come back to you without chasing them several times.
It is just typical…”

However, without orchestrating a broader legitimacy for the practice, the innovation practice may not have sustained, and this partial ceding of control was necessary to maintain a socio-political space for the organizational innovation practice in the organization.

The exchange between the innovation program and other dangling practices not only created traction for the innovation practice but also propelled it from the very margin to the core. As it got traction through legitimacy exchanges in the organizational periphery, it took off in narratives which showcased the practice as “progress” and “movement” for the industry. Different media spaces were claimed through a stream of narratives from the innovation program showcasing “progress” and “movement”. The narratives about the organization increasingly drew upon the narratives about the innovation practice to buttress its image and identity. The internal newsletter regularly highlighted innovation program's activities including its
collaborations with others inside and outside the organization. The innovation team promoting the innovation practice then used this to further evangelize it to those who were managing a large portion of contracts and had remained indifferent to the outreach so far. The efforts were meant to “convert” them by leveraging the social and political capital mobilized through legitimacy exchanges with other dangling practices.

The members of the innovation team tapped the internal entrepreneurial actors who were feeling constrained. A quote from one of the engineers in his interaction with the innovation team will illustrate this:

It is a little bit frustrating to me that there was not early contractual involvement in the projects as a whole. It seems to be rushed through designs to get the job going. Moreover, now, it is the contract that's getting in the way of a little bit of innovation. I mean, I, I understand why they have done it, they have done it to get the job going, you know. However, I mean, it just is a little bit frustrating to me as an engineer that you know, nobody thought about.

The team members tapped such self-selected and self-volunteered individuals organize in the form of a sparse net. They became an active hub of this sparse net, playing the varied roles including the ones of matchmakers, instigators, and problem solvers to mobilize action around particular ideas. As the participation and engagement in the innovation program were voluntary, those with a general interest in innovation took it upon themselves to find their way around organization identity constraints through their initiatives and ingenuity. The willing and entrepreneurial individuals who had their reasons - seeking resource for their pet projects, gaining visibility in the organizations and woking on some projects on the side sought the innovation program in the same way as the innovation program sought their takers. As one of the innovation team members put it:

… we certainly determined, right, we have got some people, some people willing to invest time in the project, for others, it is just fun…some just wanted support for their ideas and projects…

However, despite the efforts to undertake "bigger prize" innovation in major contracts in the organizational core, these efforts toward deepening innovation to the organizational did not have the same traction as the practice had with other dangling practices in the organizational periphery. The problem was two folds. First, the fledgling innovation practice did not have the “bandwidth” to take on “big ticket” innovation touching on deeper “systemic” issues. They not only required far more resources but were also more politically contested. Given somewhat tenuous standing that the innovation practice had, it had to avoid contentious issues which were referred as “hot potatoes”.

Second, the willingness of the innovation team to engage with the core of the organization in the form of major ongoing and upcoming contracts was hardly reciprocated. Repeated attempts to activate innovation
steering group in major contracts and directorates did not fructify into active engagements in the way intended. Both the client and the contractors of the project focussed on cost and immediate contractual obligations and had little appetite for any uncertainties and complications.

While the uptake of the innovation practice in the core remained limited, the practice was now “real” and “available” to more entrepreneurial members in the core. They started to playfully engage with the innovation practice as the engagement with it had become a source of pride in the internal and external narratives.

I find that by giving the practice an optional yet aspirational twist, the proponents of the new practice directly sought to engage with members’ self-enhancement motives to differentiate themselves inside the organization. Aesthetically appealing and emotionally resonating narratives and frames around a practice created new wins and losses - unleashing self-enhancement motives of individual members.

While the innovation team had managed to create multiple innovation steering groups at the grassroots through direct outreach and inter-personal mobilization, it was perceived that this "bottom-up" approach was not enough to take the innovation deeper in the organization. The idea was “from moving away from the more opportunistic approach to a much more strategic and top-down approach to innovation” would allow the innovation program take up “meaty” innovations that were so far eluding them. It was argued that the creation of innovation steering groups or hubs in major contracts and directorates in which senior managers and directors would provide leadership and greater socio-political legitimacy for engaging with the major contracts more substantively.

However, the limit of such orchestration soon became apparent. The exercise for the identification of core themes by directors almost resulted in mostly reiteration of their operational goals. One team member put it thus:

… the bottom line is that people are looking at their priorities and if you try to bring the innovation in, it is the contract that gets in the way…they are not getting their hands dirty because they think we would not know what to do…people are like, Oh, that bloody innovation program again, you know…

While potentially many innovations were possible and even desirable, they were foreclosed because undertaking them would undo the ongoing certainty and equilibrium of governance and control opening up uncertainties inherent in conflicts and complexities of divergent interests. Moreover, any change in the existing contractual arrangement was not even conceivable. As one member put it:
the idea that we give access to each of the contractors to be able to see through their remit work and those of their peers and pay them to come up with improvements may cause pain to one contractor but has a potential to create a huge benefit to the overall delivery. However, doing something of this sort will be a political minefield... too sensitive for us to touch...

The exchange between the core and the innovation practice required repeated mobilization. Getting and keeping engagement was always a challenge given that participation in an innovation practice was an aspirational add-on rather than the part of any explicit mandate or contract. The team would engage and mobilize a group, would then let it run on the momentum generated. When the momentum waned, the Innovation team members would again turn around to remobilize.

A Sketch of the Suggestive Model

The process of legitimacy exchanges that activists promoting a "weak" practice can use to enact it is summarized in Figure 4.2.

FIGURE 4.2: Legitimacy exchanges in legitimating a weak focal practice in an organization
Box-A illustrates the activists promoting a focal practice enact exchanges with other practices both on the margin and in the organizational core while ensuring that the practice isn’t fully co-opted in the process. The horizontal arrows in Box-A represent two forms of agency exercised by the activists. Arrows pointing toward the focal practice suggest mobilization done by the activists to engage with other actors either in the organizational core or its margin. Arrows pointing away from the focal practice represent the gatekeeping agency exercised by the activists to scrutinize and block attempts in co-opting the practice by other actors in the organization. Activists have to maintain a balance of the exchange and the gatekeeping agency for the successful enacting of the practice. A restrictive gatekeeping of the practice may not allow the mobilization of adequate exchanges in enacting the practice. On the other hand, a very permissive exchange may allow more entrepreneurial actors in the organization to fully co-opt the practice making the practice merely namesake or ceremonial. Depending upon how tactful the innovation team members were in these two strategies shaped the socio-political legitimacy for the practice (Box-B).

In the legitimacy exchange between the organizational core and the focal practice, the power dynamics was skewed against the activists promoting the focal practice. This was because practices in the organizational core were already taken for granted. However, the power dynamics in the legitimacy exchange between the focal practice and other practices on the margin was more balanced. This is because, similar to activists promoting the focal practice, activists promoting other practices on the margin were by necessity also seeking an opportunity to enact these marginal practices and the legitimacy exchange was mutually reciprocal. The early legitimacy exchanges, therefore, were limited to other practices on the margin. The exchanges between the core and the focal practice started to materialize once actions on the margin were started to be used in the internal communication for a distinctive identity narratives for the organization. The positive valence created by early exchanges of the focal practice had opened a viable opportunity for more entrepreneurial and politically savvy actors in the core to appropriate this positive differentiation opportunity by an association to the focal practice. However, the shift from legitimacy exchange on the periphery to the legitimacy exchange with the core wasn’t a case of the progressive deepening of the focal practice into the organizational core. The activist team dynamically changed the balance of their gatekeeping and exchange solicitation with the core and the peripheral actors to ensure that the practice isn’t coopted. This meant that the engagement with the practice with the core and the peripheral actors remained dynamic and fluid.

Discussion

The micro legitimation process of a weak practice adoption reveals the role activists inside the organization play in mobilizing legitimation through legitimation exchanges. It illustrates that it is the interaction of practices in the broader ecology that shapes its scope and space of action for activism for a weak practice. In the following, I discuss the boundary conditions for the findings, and then their implications.
Legitimacy work as Legitimacy exchanges

Legitimation is an important hurdle in all radical change spanning most entrepreneurial actions of. Institutional innovations and entrepreneurship necessitate that politically savvy activists skillfully navigate and even resourcefully mobilize legitimation for the novelty in organizations and organizational fields. The current literature of legitimacy work often focusses upon the extant opportunity-resource structure on how actors can use the cultural-cognitive or political structure to get new practices legitimated. It has been argued that an alignment with deeply entrenched cultural-cognitive and political structure can facilitate legitimation of a new practice while a conflict hinders it (Johnson, 2004; Zelditch, 2001). The focus on the deeper structural - both cultural-cognitive and political opportunities for legitimation - as in using strategic framing to claim congruence with the entrenched and institutionalized beliefs, values, and interests and claiming alignment with powerful actors overlooks legitimation opportunities immanent in fluid and emergent practices. What is missing in this present elaboration of legitimacy work is the fact that most social spaces are dynamic arenas in which actors and coalitions constantly seek and grant legitimacy.

The socio-political legitimacy involves multiple sources, objects, and audiences for legitimation (Thomas, 2013). There has been little empirical work to elaborate legitimation process revolving around multiple sources, objects, and audiences (Johnson, 2004). The findings in this paper illustrate that those seeking legitimacy for practice can also be a source of legitimacy for another. The multiplicity of sources, social audiences, and objects of legitimacy – which are also alternatively referred as the basis, subject, and object of legitimacy (Thomas, 2013) means that legitimation is not a zero-sum gum. This very nature of legitimation provides entrepreneurs the scope and space for mobilizing socio-political legitimacy not only through strategic alignment with practices already taken-for-granted but also through cross-legitimating strategic exchanges with another practice or practices not yet taken-for-granted. One of the ways such a synergy can materialize is through the alignment of the programmatic and operational contents of practices.

Like social exchanges lead to new social capital and economic exchanges, lead to wealth creation, legitimacy exchange constructs legitimacy which then can be used to legitimate innovations in the interim when they are yet to be taken-for-granted. Legitimation exchanges, however, in itself does not guarantee the legitimation. The adaptability of weak practices makes them adaptable to more inventive uses including in the incubation a new practice before the practice can become legitimate on its own. However, whether and which of the practices would benefit is likely to depend on how entrepreneurial or politically savvy activists promoting these practices use these exchanges. When the legitimacy surplus created through an exchange is tapped by one of the practice rather than shared equitably among those involved in the exchange, it is likely that the one missing out in tapping the surplus would eventually just degenerate into oblivion.
Pioneering a new practice in an organization is inevitably an act of enacting exchanges between the new and other practices. Friedland and Alfred (1991) suggested that the innovation in institutions is a process of “individuals competing and negotiating, organizations in conflict and coordination, and institutions in contradictions and interdependency”. The theoretical developments in both institutional (Clemens & Cook, 1999; Dorado, 2005; Friedland & Alford, 1991; Seo & Creed, 2002; Whittington, 1992) and cultural analyses (Swidler, 2013) suggest that the enriched repertoire of institutional and cultural models open up new space for actions. However, it should be pointed out that the emphasis here is only on culturally and institutionally available toolkit that the social agency can play with. In contrast, this paper identifies a unique opportunity in which the marginal and marginalized practices lacking taken-for-granted status themselves - can be tapped for the legitimation of a weak focal practice.

All practices are somewhat adaptive, and therefore, open to different uses by the actors. Weak practice is more adaptive as actions implied by these weak practices are not yet fully institutionalized. They can, therefore, potentially be very useful part of a deliberate strategy in a variety of situations including, for example, when an otherwise desirable practice in the currently available form is in conflicts with the organizational core or when organizations have very limited central coercive authority. As weak practices become available in organizations, different actors use them for creating or enhancing legitimacy to their strategic action and internalized values. Somewhat counterintuitively such co-option can enact weak and dangling practices, which otherwise might have remained latent, in an organization.

The findings in this paper suggest that such ceremonial practices create “legitimacy slacks” for other organizational practices to which they share some programmatic or operational content. The set of weak practices - marginal and marginalized practices on the organizational periphery- that allow entrepreneurial actors to activate a weak practice is, therefore a symbolic free space which complements the notion of social and relational free space.

**Limit of legitimacy exchanges in constructing socio-political legitimacy**

There are likely to be moderating factors in whether legitimacy exchanges between a focal new practice and other marginalized practices of the organization would lead to increased legitimacy for the focal practice. While some literature on legitimacy has used a binary conceptualization of legitimacy, other have taken a more nuanced position of legitimacy in alternative universes of meaning. The latter approach on legitimacy would suggest that economic and moral legitimacy taps different meaning universes. These meaning universes may be salient in different resource and opportunity contexts.

In the present case, the main mechanism through which the legitimacy exchange on the periphery created a traction for the practice in the organizational core was driven by the positive narratives. The positive valence
associated with the aspirational practices like innovation management and sustainability in the context of a major project helped these exchanges become part of identity enhancing organizational narratives. The positive coverage in the media became a resource that others in the core wanted to co-opt, which in turn created traction for the focal practice in the organizational core. This would suggest that the outcome of legitimacy exchanges of the focal practice with other marginal practices would likely depend upon the valence associated with these marginal practices in the media and the discourse in the field.

Internal socio-political propriety and external validity judgment in the exchange with aspirational practices on the margin tap into what is called global hypernorm (Warren, 2003; Vadera, Pratt, & Mishra, 2013). A hypernorm are moral and ethical aspirations that supersede lower-order legitimacy evaluations. As legitimacy is about a social evaluation of whether things are right and proper (Zelditch, 2001), such an association with hypernorms is likely to lead to positive legitimacy judgment for the focal practice. This mechanism also suggests that a legitimacy exchange with those practices that are marginal and stigmatized would likely to decrease the legitimacy judgment for the focal practice.

The fact that a team, sponsored at the very top level, was involved in actively advocating and steering the practice likely to have favored the focal practice. In Weber-Michels model of legitimacy (Zald and Ash, 1966), new mobilization eventually gets appropriated. An active and dynamic brokering agency of the activist team in the case acted against any damaging appropriation of the focal practice through countervailing and compensatory exchanges to assert and maintain a reasonable integrity. While the appropriation risks will also be present in longer legitimacy interactions (e.g. Selznick, 1948), the presence of an active boundary-setting agency for the focal practice may mean that the focal practice may be kept from getting fully co-opted.

Such an agency needs to ensure that legitimacy of the focal practice met the twin goals of propriety among organizational members and validity among the important stakeholders outside the organization (Bitektine and Haack, 2015). Missing the mark on any one of these two judgments - propriety judgment about the focal practice in the organization and the validity judgment about the focal practice outside the organization would likely unravel the practice. It is therefore only within a narrow limit that legitimacy exchanges are likely to enhance the legitimacy of the focal practice.

**Balancing Act in Brokering Legitimacy Exchanges**

Like any open and emergent process, whether a weak practice would unleash the intended change in the organization is far from certain as the weak practice also runs the risks of being fully co-opted. Organizational practices are like any cultural objects are always be one to some co-option by strategic and entrepreneurial actors.
The findings here suggest that activists made the practice more accommodating or more stringent based on who was engaged and in what context. Thus the scope and content of actions that can be construed as a valid practice were actively negotiated. During the early stage, to enroll various individuals and groups into the practice the scrutiny of what comprised as the practice was lenient. However, as the practice got some foothold and the claim over resources in the name of the practice by individuals and groups increased, the "sanctioned" content of the practice shifted from more lenient to more constrained. On the other hand, when the participation reduced, the "sanctioned" content of the practice again became more permissive. This was to ensure a continued traction for the practice and to support the narratives that the practice was “working”.

The new cultural analysis considers cultural elements as more of a “tool kit” (e. g. Swidler, 1986; Weber & Dacin, 2011). The adoption of a weak practice triggers a process in which entrepreneurial and strategic actors in the organization start actively using the practice. The use of the practice may take the form of “hijacking” (McPherson and Sauder, 2013) in which the programmatic or operational elements (Power, 1997) of the practice get coopted to ends not intended by the “archetypal” (Greenwood and Hinnings, 1993) practice. In a counterintuitive way, I find that promoting these little “hijacks” that flex the practice's programmatic and operational elements can allow politically savvy activists to harness a broader range of entrepreneurial and strategic actors in incubating the new practice. The “programmatic” elements in practice relate to the logics for the practice while the “operational” elements relate to “concrete tasks” that operationalize the practice in action (Power, 1997).

Most institutionalized organizational practices are under some top-down or field-level oversight and scrutiny that maintain the integrity of the practice while allowing some adaptation. However, when a weak practice is being pioneered in a social context where there is not any precedent for the practice, such mechanisms are not yet developed. As weak practices in organizations are somewhat fluid and flexible, strategic or entrepreneurial actors can use their programmatic or operational opportunistically, even compromising the integrity of the link between the programmatic and operational elements (Sahlin-Andersson, 2001). It falls onto the activists promoting the practice to steer it actively. To increase the likelihood that the practice is enacted by distributed improvising in the voluntary acts of organizational members but without losing its intended overall thrust, those promoting the practice have to balance their activism between practices’ “uptake” and “integrity”.

The empirical case examined here illustrates how activists can tap distributed entrepreneurial agency in an organization towards enacting weak practices. It suggests that both the overzealous puritanism about the integrity of the practice as well as a laissez-faire approach to its integrity will be detrimental to the practice adoption. The former is likely to reduce the uptake of the practice in situated improvising of other actors. On the other hand, the more accommodative approach may make the practice attractive to a larger number of
intra-organizational actors but is likely to lose a directional thrust on the agency that activists may be aiming at. A judicious mix of legitimacy exchanges with the multiplicity of peripheral and marginalized practices can enact a weak practice.

Such exchanges both enable and then tap into the agency of micro-level strategic and entrepreneurial actors who otherwise would have been either constrained by the core cultural-cognitive expectation or disinterested by a sharply restrictive version of the new practice. The activism for a weak practice differentially engages with micro-level strategic actors embedded with marginal practices to tap them for a gradual, bottom-up “embedding” (Czarniawska and Joerges, 1996) of the focal practice. These activists do not prescribe any simplistic “edition and translation” but work with a larger group of actors to broaden and deepen the practice through a series of dynamic and differential exchanges.

This activism-based dynamic brokerage allows activists to harness a fluid, emergent, and uncertain process for a progressive adoption of the practice. A focus on an activism-based agency inside an organization helps to reveal how the exchange and contingencies with the focal practice with all other practices can be tapped in a dynamic way for increasing the socio-political space and thrust for a new practice. The process of activism-based enacting and embedding of a practice necessarily becomes the interplay between those advocating the new practice and those involved with somewhat aligned and conflictual practices in the organization's core, periphery, and beyond. The efficacy of a weak practice in an organization thus depends not only on a structural “fit” but also on entrepreneurial “thrust” that activists can mobilize through the mobilization, pruning, and consolidation of playful exchanges for the focal practice.

A focus on the wider ecological affordance and entrepreneurial agency beyond the organizational core reveals a multiplicity of marginalized agencies and plurality of peripheral practices which are available to activists for the advocacy of a weak practice. Unlike a “strong” practice adoption (Kostova and Roth, 2002), the activism-based adoption of a “weak” practice is a dynamically iterative process of inducement, incubation, and incorporation that simultaneously harness the ecological affordance and micro-political agency to embed a new practice. Activism-based adoption of a weak practice also highlights generative and ecological micro-processes in an organizational system to gradually embed a new practice—thus contributing toward the calls for the increased emphasis on the micro-processes around institutions and institutionalizations (Powell and Colyvas, 2008).

**Organization as an ecology of, and exchange between practices**

The findings in this paper suggest an ecological perspective on practice adoption. As practices exist only in nexus with other practices (Nicolini, 2013), the adoption of practices should be analyzed at the ecological level in which the interaction with different individual practices are brought forth rather than abstracted
away. This should draw our attention on the dynamics around ecology of practices rather than the adoption of a single practice and its relationship with the core – an approach that has been the main staple of the empirical examination of new practice adoption in an organization.

An organization can be conceptualized as an ecology of many practices at the different level of institutionalizations - the deeply institutionalized practices making the core and other practices on interstice niches and the periphery. In the organization, some practices are universally enacted; some practices are mostly symbolic while others are only enacted in some situation or some of the time.

The mechanism of legitimacy exchange identified here suggests that a practice conflicting with the core can survive and become enacted if it is entangled with other weak practices on the periphery, and even enacting these weak practices which otherwise might have remained just symbolic. This provides further insights into the potential mechanism behind the empirical findings of how symbolic policies can get enacted in due course of time despite their conflict with the dominant cultural-cognitive core of organizations (Edelman, 1992; Sahlin and Wedlin, 2008; Hallet 2010). Weak and ceremonial practices incompatible with the core can get enacted through legitimacy exchanges and thus explains what is called means-ends decoupling (Bromley and Powell, 2012). In means-ends decoupling organizations enact practices that have little to do with any organizational goals.

While socio-political legitimacy created through legitimacy exchanges among practices on the margin can push a weak practice deeper into an organizational core, this can also work the other way. Exchange actions leading to a legitimacy depletion of a given practice can degenerate a strong practice entrenched into core into a weak practice on the margin. This means that policy-practice decoupling and means-ends decoupling are dynamically related. Policy-practice decoupling can lead to means-ends decoupling. On the one hand, and means-ends decoupling can degenerate into policy-practice decoupling.

The ecological perspective on practice adoption also suggests that an organization have different ecological niches. Collins and Porras (1996) distinguishes between enduring core values and purpose and somewhat more dynamic policies and practices in an organization. Organizations is likely to have much larger tolerance for incompatibility in the periphery than that in the core. The dynamics between organizational core and periphery can be a generative engine for new organizational forms. In an extreme case, a multiplicity of practices with means-ends decoupling to the organizational core can potentially marginalize the core and push the peripheral practices into the organizational core. Such a radial reversal in the practice ecology of an organization is likely to give rise to new and radically different organizational forms.

Organizations often have to endure complexity of disparate and conflictual organizational practices. It has been argued that while the complexities of disparate practices are inevitable as organizations manage the
varied expectations of stakeholders in their field both for economic and social reasons, such complexity inflicts costs. However, an ecological perspective suggests that the complexity and multiplicity of logics inside an organization are not just a source of conflicts and challenge, but it also provides new opportunity and affordance for activist-entrepreneurs (Friedland and Alford, 1991; Seo & Creed, 2002; Powell & Colyvas, 2008). Brokering relationship and exchange across a focal practice and other practices can not only increase organizational capability but also help enact other practices that may benefit from these exchanges and new contingencies that they create.

Complementarity with some and contradiction with other practices simultaneously shape interaction that constitutes a social space (Friedland and Alfred, 1991). The adoption of a new weak practice can, therefore, be potentially used an intervention to reduce the cost of institutional complexity as the introduction of new weak practices can introduce new interactions, which in turn can potentially ameliorate the earlier conflictual thrust between two conflicting practices. An exchange and interplay among the multiplicities of practices can, therefore, inform the institutional complexity literature (Greenwood et al. 2011). The dominance of an either/or notion of institutional complexity - of conflicts and alignments between two practices- hides the complexity of interplay among practices and activist agency in an organization. A practice can simultaneously be both compatible and incompatible. For example, an incompatibility of a new practice with the institutionalized cultural-cognitive core can be compensated by enacted compatibility with other practices in the broader ecology of practices in the organization.

Conclusion

Weak practices provide an opportunity for activists in organizations to promote new practices without incurring the cost of detrimental conflicts. A successful activism of a weak practice requires that activists balance the trade-off between two simultaneous goals: a broader mobilization of the agency for the weak practice and an assertion of its core value. A puritanical assertion of a narrowly defined practice may not lead to adequate traction. Similarly, not containing the cooption of the practice by others in the organization can make a weak practice loose its intended thrust. Activists can use dynamic legitimacy exchanges with other actors in the organizational core and margin to enact a weak practice. Their activism can result not only in enacting the focal practice but can also help enacting other practices, which otherwise might have just remained symbolic.
REFERENCES


CHAPTER 5. DISTAL AGENCY IN ORCHESTRATING TIME IN ORGANIZATIONAL ROUTINES

In this inductive study, I use the conflicts in the temporality of an organization's routines with the temporality of a new practice to theorize how distal actors outside a routine can orchestrate its performative temporality. Distal actors are those actors who have a stake in how routines are performed but have no direct role or discretion over their performance. I find that these actors use two strategies. First, they used narrative accounts to shape the social cognition of actors embedded within the routine. Second, they mobilized compensatory routines in the broader ecology of routines. I contribute to the literature on organizational routines by drawing attention to their inherent temporality and theorize the process of the influence over these routines. The core contribution of this paper is highlighting how the use of narrative accounts and the mobilization of compensatory routines can allow strategic activists to enhance the capability of a planning-oriented organizational routines to harness fluid and fleeting innovation opportunities.
Introduction

The concept of time remains under-developed in the studies of organizations and organizing (Lee and Lebenau, 1999; Bluedorn and Denhardt, 1988). A set of reviews have challenged the simplistic assumption of time in organizational studies and theories (Gherardi and Strati, 1998; Jaques, 1982). A dominant conceptualization of time as an exogenous clock-calendar time in organizational studies has obscured multiplicities of "time" that exist at individual and social levels. The lack of engagement with the human and social experience of time blindfolded scholars from inquiring the social, cultural and psychological aspects of time in routines and everyday work in organizations.

The current literature conceptualizes time in organizational routines as an external medium for the performance of routines. Time is inherently social and cultural in organizational routines. It is through social and cultural time that organizational routines provide predictable order and structure for human actors to collaboratively participate in the collective enterprise of organizations. We often intuitively grasp routines socio-cultural temporalities in their distinctive pace, pattern, periodicity. For example, these temporal aspects of invoicing routines in an organization are very different from that of hiring. The manifest temporality of organizational routines is grounded in deeper assumptions about time in the organization (e. g. Schein, 2010).

The reviews of the literature on organizational routines (e. g. Parmigiani and Howard-Grenville, 2011) suggest that after having developed a solid foundation, the research on organizational routines should expand to look into overlooked aspects of the routines. In this paper, I respond to the calls that we incorporate the social nature of time in the empirical work on organizational routines. Using an empirical setting of activism in steering developmental innovation opportunities through planning and control oriented temporalities of administrative routines, I examine how activists outside a routine can respond to the temporal constraint inherent in the focal routines.

I make three contributions in this paper. First, I draw attention to the fact that the social nature of time in organizational routines. Second, I show how external actors with no discretion or authority over the routines could use narratives and other routines in the proximal field to assert influence over the capability of these routines. Third, the findings provide insights about how an event-based time becomes operative in the everyday routines in an organization.
Theoretical Background

Organizational Routines

Organizational routines are “the forms, rules, procedures, conventions, strategies, and technologies” that constitute an organization and through which the organization is operated, administered, and governed (Levitt & March, 1988). Some examples of routines include personnel hiring and training (Feldman, 2000), new product development (Howard-Grenville, 2005), pricing (Zbaracki and Bergen, 2010), and technical support services (Pentland and Reuter, 1994). Organizational routines are not only building blocks of organizational capabilities but also part of the broad social structure through which human actors act. They are the intermediate link between individual predispositions and habits - and field-level logics and practices to provide order at the level of groups in the organization (Schulz, 2008).

The economic perspective conceptualizes routines as a gene-like entity that gets expressed in the actual behavior patterns and constitutes executable capability (Nelson and Winter, 1982; Cohen et al., 1996). However, the practice perspective on organizational routines - the one that this paper draws from - conceptualizes routines as ongoing accomplishments by multiple actors working together in an environment of physical and technological artifacts, and specific social norms of behavior (e.g. Feldman 2000; Feldman and Pentland 2003). The practice perspective explicitly incorporates a reflective agency in organizational routines by conceptualizing routines as having two distinctive aspects - ostensive and performative. The ostensive aspect of routines is abstract and generalizable principles whereas the performative aspect of routines is about specific behavior situated in a specific place and time.

Time in Organizational Routines

Time is an integral part of all actions and activity systems including a seabird’s dive, a musician's strokes, and more pertinent for this paper, organizational routines. Activities in organizational routines have a characteristic socio-cultural time that shapes their temporal characteristics.

Adler, Goldofus, and Levine (1999) compares model changeover routines in a Toyota-subsidiary in the US (NUMMI) with model changeover routines in other large US-based car manufactures to highlight differences in their temporal characteristics and outcomes. For example, the time taken to complete a changeover cycle were significantly shorter in the Toyota subsidiary thus suggesting that the model changeover routines in NUMMI operated at a higher speed. Moreover, routines at NUMMI were much simpler and required only five days of the plant’s closure. On the other hand, the model changeover mobilization in other manufacturers was complex and required more than 60 days of closure.
Routines in Taylorian manufacturing conceptualize time as a resource exogenous to the routines. The time and motion studies, which Taylor had pioneered in examining the routines of factory production, underline this notion of time in routines. Routines are deployed to attain efficiencies in using time as an available resource (Karim and Mitchell, 2000). Unlike routines in a Taylorian manufacturing, routines in Toyota quality circles is more like a jazz orchestra in which what is happening in the patterned and emergent activities of the routines and their surrounding environment constitute routines’ temporality.

The operative structure of time in these two routine ensembles are very different. Taylorian manufacturing routines are pegged on an external and explicit notion of time whereas NUMMI routines are more implicit and are based on an event-based notion of time. The explicit and implicit time in organizational routines have their advantages and limitations; the former reduce the need for environmental information and the interdependence thus allowing a longer-horizon planning and resource efficiency, whereas the latter require real-time information thus facilitating better responsiveness in a fast-moving inter-dependent environment. Turner, Mitchell, and Bettis (2010, 2013) found that generational product innovations in firms had an explicit calendar-like periodicity. Similarly, Brown and Eisenhardt (1997) reported that new product development routines in the computing industry had an explicit temporal periodicity of 18 or 24 months. Firms introduced new generation products every 18 or 24 months to facilitate planning, coordination, and resource allocation efficiency. On the other hand, in a high-velocity market, the temporality of new product development routines became implicit and event-centric as the firm had to respond to the emergent competitive events (Turner et al., 2010).

Empirically, time in routines is accessible to human experience through the throughput time. Throughput time is about how long does it take for a specific routine to accomplish its tasks from start to finish. For example, if procurement routines take five working days for a specific procurement to get through various routines involved in the procurement, the throughput time for the procurement routine would be five working days. Throughput time actually conceals two very different aspects of time: one related with the urgency that the embedded agency in the routine assigns to a specific task and the other with its elaborate procedural structure. If all the structural arrangement of constituent parts of a routine is removed, throughput time will primarily be determined by the urgency that the embedded agent has for a specific task. On the other hand, if constituents parts of a routine are structured in an arrangement of an elaborate conditional sequentiality, throughput time in routines is no longer only to the discretion of the embedded agency. Different structural arrangements of coordination and interdependence among the constituent sub-routines can lead to very different throughput times.

Routines’ speed and sequentiality also conceptually capture different but related aspect of their temporal characteristics. Routine speed is the speed through which tasks progress through the routine to produce an outcome, and routine sequentiality is the degree of interdependence among steps of actions that form the routine. While routine speed and sequentiality conceptually capture the different aspects of routines, they
may overlap. Routines which are faster in speed and more flexible in the arrangement of their constituent parts are likely to be more responsive in responding to opportunity in the environment.

**Organizational Routines in Ecology of Routines: Asynchronies**

Temporal characteristics of organizational routines have social and cultural bases. The ensembles of organizational routines get established and institutionalized as conventions or practices in a social context. Two extreme temporal archetypes of organizational routines are planning based routines and improvisation based routines (e.g., Brown and Eisenhardt, 1997, 1998). Planning based routines are more appropriate under low uncertainty, and improvisation-based routines are more appropriate in what is called high-velocity environment.

However, the time in organizational routines is mediated through human actors and their cognition of time, in turn, is shaped by a wide variety of social and cognitive processes. Gersick (1989) found that time in a project group quickened as the project group moved closer to the deadline. The group had a relaxed pace, but as the group crossed the midway to a deadline, the pace suddenly quickened (Gersick, 1989). This finding has long been interpreted as a demonstration that the concept of clock time is inadequate to explain time in organizational and work settings. Social, cultural and psychological processes can muddy the actors’ experience of time.

How human actors can interactively shape the social and inter-subjective time in these routines in a way that links the human cognition of time and the deeper social and cultural assumptions about time thus remains an open question. A starting point would be Ricoeur's insights that time becomes accessible to human "to the extent that it is articulated through a narrative mode" (Ricoeur 1984) and the performativity of these narrative acts (Austin & Urmson, 1962). As our shared comprehension or the social cognition of time comes from the interaction that primarily happens through the language, it is reasonable to expect that it may play a vital role in a shared cognition and performance of time in organizational routines.

The other opportunities for enacting a social time in routines comes from the availability of multiplicities of proximal routine ensembles in and around the ecology of organizational routines. Such an ecology of routines is likely to have both pockets of temporal synchrony and temporal asynchronies, which could be intra-routine, trans-routine, and inter-routines. An intra-routine temporal relation is a relation between the temporality of the constituent activities of a single routine. Trans-routine relation refers to the relation between constituent activities forming part of different routines. An inter-routine relation refers to the relation between the temporality of two sets of routines that manifest both at the level of activities and at their level core temporal assumptions. This multiplicity of temporality can potentially provide a resource which can be used to get around or to compensate the throughput constraint in and across routines.
Considering organization as a bundle of practices, the adoption of new practices can lead to asynchronies in the new pattern of interactions as the working consensus to facilitate coordination in the social time of the new practice with other routines in the organization is yet to be established. The transposition of practice to a new context can thus be a potential site for temporal asynchronies in an organization. Routines that are entrenched in an organizational, occupational, or work settings - acquire a specific temporality (Gersick and Hackman, 1990) which can lead to dramatic consequences if same routines are transported in a new context. The crash of Air Florida Flight 90 (Gersick and Hackman, 1990) happened because new pilots ingrained with a particular pattern of actions skipped de-icing as it did not form part of their earlier experience.

The problem of asynchrony is common in organizations. Routines with elaborate rules and structural procedures for accountability and risk mitigation are known to have slow throughput under uncertainty. Such an insight is the basis of differentiating between entrepreneurial and planning oriented routines. Entrepreneurial routines are more responsive in tapping novelty whereas planning-based routines have greater efficiency and governability. The latter type of routines not only induce cautious predisposition in the agency embedded in these routines but also curtailed their agency by introducing structural accountability of these actors to explicit rules and procedures. Organizational routines designed for mitigating risk or ensuring accountability are likely to be poor in tapping fluid and fleeting opportunities for organizational innovations (Cohen and Bacdayn, 1994).

The interaction between temporalities of two different ensembles in an ecology of routines in the organization, which reflects the relationship between pace, periodicity, and pattern of activities across multiple routines can lead to conflicts. For example, the adoption of an opportunity-based innovation management practice in a major project operated through planning-oriented routines will be problematic. Tapping a shifting and changing opportunity landscape of opportunity for innovation would require a high level of responsiveness. However, the planning-oriented routines in these projects are designed to mitigate risk and avoid uncertainty. Moreover, the nature of governance routines in public funded projects requires high-level of accountability of any discretion to ensure an integrity of their use. So overall orientation in these routines is to minimize any uncertainty by elaborate routines that have very explicit rules and procedures for exercising any discretion.

**Methods**

**Research Context**

Crossrail (see Chapter 2 for details) had adopted an organizational innovation management practice to harness on-the-fly innovation opportunities in the organization. The operational working of the program was managed by an Innovation Team. The team had the role of spearheading the funded ideas through the procurement routines so that their developments could begin in earnest. As the team tried to steer innovation
projects through the internal procurement routines to get them off the ground, the team had to actively manage asynchronies between the planning-oriented procurement routines and the temporal needs of the innovation opportunities. The setting was thus ideal as it made asynchronies “transparently observable” (Eisenhardt, 1989a).

Data Analysis

I consider the process of steering innovation process around the individual idea as the unit of analysis to examine the tension and how actors manage the tension of steering an implementation through the procurement routines. I used a two-step process for data analysis. First, I went through individual emails and transcripts of the audio records to construct individual accounts innovation journeys through the routines. Such accounts are considered useful for the capturing rich and ambiguous process data (Langley, 1999; Van Maanen, 1988) and “involves a construction of a detailed story from raw data” (Langley, 1999). The second data analytic process was the detailed coding of these accounts to capture observations of the temporal tension and to the strategies of action of the team members in dealing with this tension.

For coding of the conflicts in the temporality, I focussed on instances where the frustrations about steering innovations through the administrative routines were expressed. I found that these instances represented conflicts of two kinds: one related to the slow pace and the other to the sequential pattern of action in the planning-oriented procurement routines. After getting clarity about the general type of conflicts, I started coding the actions that the innovation team members had undertaken to get around these conflicts. As I had access to the accounts of both the conflicts and how the innovation team had responded to these conflicts through their naturalistic conversations, I could trace them.

After enlisting these strategies and coding them, I found that the team used two broad strategies: the strategy of orchestration and the strategy of brokerage. Narrative strategy was to target and to influence the discretion of the agency embedded in the focal routines. Brokering strategy mobilized compensatory routines to circumvent the constraints in the focal routines. I present the data structure in Figure 5.1 and the representative evidence for each second-order code in the data in Table 5.1.
<table>
<thead>
<tr>
<th>Table 5.1: Supporting Data for Each Second-Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow pace</td>
</tr>
<tr>
<td>… [name redacted for anonymity] and I would sit there staring at each other going, really? A f* purchase order for £1000, or whatever it was, £3000. And I was saying, yes, well. And the last thing that the working group said to me is, would not it…Tim, if you do nothing else, try and find a way of bypassing the standard system of contracts. And I went, yes, best of luck. Because I know how this place works…</td>
</tr>
<tr>
<td>This could take a considerable period depending on who we request to review this for us. Should the request for additional funding for kiln delivery and the further small electric furnace be approved, I will have to produce another remit for signatures prior to any [name redacted for anonymity] procurement or physical works commencing, therefore we may still have a long way to go before we can even start to produce LWA from clay I’m afraid. We are doing all we can to support you, however internal processes do not allow us the flexibility we would like to respond to change therefore please bear with me.</td>
</tr>
<tr>
<td>I fully understand your frustration (and I share this). I”m sure all will be fine… its just moving a bit fast for them and I have to manage their expectations! Like you, I would very much appreciate if this task order was issued asap, however in my experience working with finance and procurement, whilst they are very helpful, they are also very thorough!, hence I would be surprised if we were able to transfer the budget that quickly! We are getting better at this but it is currently taking a few weeks.</td>
</tr>
<tr>
<td>That's what happens when you have to wait for our glorious procedures. You get what you want, just ask for it four months before you need it.</td>
</tr>
<tr>
<td>Sequential</td>
</tr>
<tr>
<td>Additional funding… we are been made aware of the need for an additional funding… this is already into the implementation process and requires a little bit more effort. This is about tests we were not aware, and now this is stuck as we would need to justify the additional funding.</td>
</tr>
<tr>
<td>We are not able to complete the task order yet as the innovation remit is not complete. Until we get the implementation plan, timings, logistics… we can not issue any instructions as we do not know how they are going to do it…So, it is a chicken and egg scenario. We can not do the remit until we know what to do… and we can not do the task order until we have done the remit!…</td>
</tr>
<tr>
<td>We should not have had to do… we should not have to amend contracts. We should not have to sign up, you know, to become a supplier if you are not actually going to be actually providing anything apart from your details. There's a number of admin and process issues we should have taken out but we cannot. This is a public project and we need to make everything auditable and that is lot of paperworks. You know, we have amended £40 million pound contract and put three grand on it. I find that absolutely nuts, I really do, you know. And even that is not easy.</td>
</tr>
<tr>
<td>The budget transfer (for implementing the innovation) still needs to go through 6 more reviewers before the work order can be instructed. Tedious, I know.</td>
</tr>
<tr>
<td>While the CRA may amend the amount in your SAP, it does not give us Investment Authority and the ability to spend this money. This IA can only be given via a BT (with IA) or via an approved ICSCC change paper. Hence, the easy way for to get the money to us, is via the BT, which should be shown in PRISM. When we then vary the Contract Target via an ICE to the Contractor, my team will then raise the CRA so that a PO can be raised to elevate the Contract value in SAP.</td>
</tr>
</tbody>
</table>
| Fast moving | …[name redacted for anonymity], things move fast in the innovation world! Last note I had from you suggested that a contract amendment to would be required, however [name redacted for anonymity] and [name redacted for anonymity] asked for an internal budget transfer for the agreed amount. Is this a problem for us?

The people are just getting fed up with, kind of, waiting around, and I think we are all getting fed up with chasing it and I think they are probably fed up with getting battered for not delivering for us so it is a bit of a vicious cycle.

The problem with Crossrail is that everything is moving forward, so we are always sort of mindful of what we do with ideas because we have limited window of opportunity and that's why we are chasing them because otherwise there is no point.

The plan would be to perform a trial panel on site before performing a permanent works demonstration if the trial is deemed acceptable. The area of permanent works ear marked is the vehicle restraint wall which is currently in the initial stages of construction, though a large extent still remains. Based on this, and if all goes to plan I would like to target the trial panel in mid-February, with the possibility of permanent works demonstration in March. If we are to implement at this site we need to act fast to ensure we have available sections of wall to cast.

On my sites, so you know, the opportunities for innovation are there, however you have got to be moving really quickly. Once the sites mature a bit … they are very difficult to get into. They think we are alright, we are doing well, we do not really need innovation. There is only a small window of opportunity to carry out this work.

I think the first thing is that it would have to be a lot sooner than that. The design work would be completed in about a year, 18 months at a stretch so this has got to be…it is got to happen in the next six months…if we are going to do anything to affect the outcome it has to be done in the next six months.

| Emergent | …that's what I mean, the whole process. I was talking about that with [name redacted for anonymity] today. He asked me… how easy it was to deliver these, and I said, you are trying to put a round peg into a square hole. And we are trying to create an idea that needs collaboration agreements, that needs to find suppliers that are willing to engage with us, take risk. This is not set up for this.

Everything is going fine and then palletiser is not working, so everything went back to square one almost. I have 10% contingency. This will eat up all my contingency in one go before we have even started work. I have not told Tim because he's not well and this will make him feel even worse. I do not know. You could either increase budget and that is very difficult.

…it has been like going down a rabbit warren, a rabbit hole, a f* shambles.

We are not able to complete the task order yet as the innovation remit is not complete. Until we get the implementation plan, timings, logistics and information, we can not issue any instructions as we do not know how they are going to do it… So, it is a chicken and egg scenario. We can not do the remit until we know what to do… and we can not do the task order until we have done the remit! |
<table>
<thead>
<tr>
<th>Table 5.1 (Contd.): Supporting Data for Each Second-Order Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social orienting</strong></td>
</tr>
<tr>
<td>...[name redacted for anonymity] mentioned that he is leaving, he was so responsive and cooperative... [name redacted for anonymity] is likely to be a replacement. We just need to get a bit closer to [name redacted for anonymity].</td>
</tr>
<tr>
<td>I had to say some of the things I have said in there just so that they could hear so that if someone like [name redacted for anonymity] says and how are the innovation team going? Are they okay? Are they doing the right things? The girls are saying yes, yes, they are talking about auditing, they are talking about this, they have got this, yes. Whereas if we do not talk about it they’ll go away saying, well they did not mention that...So, but we have to do a kind of light touch...keep them engaged.</td>
</tr>
<tr>
<td>Happy to work will [name redacted for anonymity] and all parties to facilitate transfer asap, however in terms of a gentleman's agreement, the innovation programme can re-assure you that we are committed to funding this project (with the backing of the Crossrail Innovation Forum) and therefore any help you can provide to issue the TO in advance of transfer would be in the spirit of collaboration and much appreciated.</td>
</tr>
<tr>
<td>I have some second hand information that you may have some reservations as to the approach that we are taking. The approach has been a combination of direction from the Crossrail Innovation Forum, Procurement and Legal &amp; Commercial and of course Connaught Tunnel. I understand that [name redacted for anonymity] and [name redacted for anonymity] have been working very hard to progress this innovation into implementation and we are almost there. Please pass on my thanks to Eshan. I would be more than happy to discuss the approach with you to ensure you remain happy to progress as planned.</td>
</tr>
<tr>
<td>The budget transfer still needs to go through 6 more reviewers before the work order can be instructed. Tidious, I know. For records, when is your meeting next week? I will accordingly chase this to ensure this happens as quick as possible.</td>
</tr>
<tr>
<td><strong>Cognitive orienting</strong></td>
</tr>
<tr>
<td>That puts them over four weeks behind the new program which was already two weeks behind due to the late delivery of the burner! Now I can lean heavily on them and get me some dates.</td>
</tr>
<tr>
<td>My request is ready to go but I’m awaiting your actual costs for all the additional equipment and scope as a result of this. If you could provide tomorrow that would be great! On another note, there is a meeting of the Crossrail Innovation Forum next week. So far, there is very little to report in terms of deliverables on this project.</td>
</tr>
<tr>
<td>Let's see how it plays out. [name redacted for anonymity] does not hold much regard to their approach within the... He does not really think they do very much, or much of what they should be doing. He just can not believe it is taking this long to get a group together... Yes, which is what I have been saying as well, so I, I’m almost tempted just to let, let them run their course to a point where I can then turn around to [name redacted for anonymity] and straightforwardly say and then go, what the fuck is going on with all these ideas which is pending now for three weeks...Okay, so you have got to deal with that first, then [name redacted for anonymity] and I can come knocking on the new doors and say, okay, we understand you have this... Yes... So it is a little, a little complicated. So you have just got to let that play out.</td>
</tr>
<tr>
<td>Table 5.1(Contd.): Supporting Data for Each Second-Order Codes</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Compensatory agency &amp; routines inside the organization</strong></td>
</tr>
</tbody>
</table>
| As we need to ensure that London clay is secured whilst readily available (i.e. right now!) please can you assist us in issuing a PMI to [name redacted for anonymity] asap? I trust we can use the "get on with it" PMI route and respond to an invoice later. The innovation team are happy to retrospectively internally transfer to CRL or [name redacted for anonymity] direct to reimburse the instruction costs.  
It seems that we have got a bit of implementation going on before we have finished the procurement. So low carbon concrete we have got 30 percent of the implementation but we have only done three-quarters of the contractual legal and only 20 percent of the procurement.  
To get this moving, would you like to call the CRL PM, [name redacted for anonymity] and explain our needs/intentions and to confirm how he can help us. If necessary you can offer that if he would be happy to issue a PMI with the scope you describe below, we can internally transfer for the instruction costs on application.  
It would be easiest therefore for me to recharge via our current account monthly invoice this cost to Paddington JV. We could raise an Internal Transfer in November and this would then be included in our Monthly invoice to JV. |

| **Compensatory agency & routines outside the organization** |
| Should an accident occur, the liabilities are unclear … We have chosen the approach to contract with [redacted for anonymity] and let them hold the liability of instruction to [redacted for anonymity]. [redacted for anonymity]. We will pick up any issues should phase-I be successful.  
I’d honestly prefer to let [redacted for anonymity] manage [redacted for anonymity] and [redacted for anonymity] as they have experience in delivery at the tech centre of new materials. There would have to be contract amendments anyway…so perhaps could worry about this later.  
We can only really progress CRL approved contracts. Obviously some clauses may need changed but the core clauses need to remain. I appreciate there is formality but part of the service for this contract includes [redacted for anonymity] going out to site – so the formality is entirely proper and justified. Also although this is an innovation agreement, it is a contract for payment and supply of items plus other services so it does fall into the formal camp. But [redacted for anonymity] will manage it. So we should leave it to them. |
Findings

The difference in the temporality between the pace and flexibility required in steering fluid and fleeting innovation opportunities through the procurement routines of a temporary organization soon made the conflict very apparent. The efficacy of the innovation practice, particularly in the time-constrained environment of a project organization depended on how quickly the innovation program team could tap on-the-fly innovation opportunities when they arose. The conflicts manifested quite early when the first round of innovations got off the ground. The team also had to respond nimbly when these opportunities themselves evolved. However, steering on-the-fly opportunities for innovations in a project organization was very challenging as the team had to steer on-the-fly opportunities for innovation through the risk averse, and planning-oriented procurement routines meant for managing risk in procuring large delivery contracts. Most of these routines were geared towards procuring large construction contracts and had an emphasis on elaborate planning and control. The elaborate planning and control orientation of these routines were reflected in their complex procedural “requirements”.

Given the requirement of extensive formal procedures that required extensive justifications for any deviation, progress through these routines was often slow. While these demands were justified for a large outlay contract, using the same routines for smaller developmental projects led to protraction as getting through these routines made a simpler task “overcomplicated” and navigating through these “requirements” took quite a long time. For example, the requirement to be able to become a supplier at Crossrail was extremely elaborate. The very burden of going through this extensive process meant that the process would take long as those who were involved with routines like procurement did not want to adapt or change the routines for procurement for developmental projects which were taken up as part of the organizational innovation practice.

The sequential interdependence of routines further complicated things. For example, legal routines like those around confidential/commercial agreement had to precede the procurement routines which in turn had to precede the transactional routines related to the actual transfer of money. The sequentiality of administrative routines conflicted with emergent and fluid temporality of innovations with large uncertainty and ambiguity. Given the sequentiality inherent in these routines, incorporating even a small change meant starting the process again from the very beginning. This often led to a repeated cycles of delays. Temporal circularity was a specific case of temporal conflicts between two sets of administrative routines that either required incompatible sequencing of the tasks or where sequencing was not possible as these tasks had non-linear relationships. The procurement routines used here were not meant to manage an emergent process where ambiguity and uncertainty were high.
Strategies of Distal Agency

The very nature of steering fleeting and emergent opportunities for innovations through procurement routines of slower throughput and sequentially linear structure meant that the innovation team had to actively steer the post-funding steering of the innovations through these routines. The team used two broad strategies which I call: 1) strategy of orchestration and, 2) strategy of brokerage. The strategy of orchestration induced urgency in the embedded agency. The strategy of brokerage involved mobilizing new routines to compensate the constraint of the focal routines. In the following, I elaborate on these strategies.

Strategy of Orchestration: Socio-cognitive orienting of the social time

The slow throughput of the routines through which implementation of innovations needed to be steered risked the implementations. That meant that these routines had to be constantly “chased”. I find that narrative accounts of events were used for changing the social cognition of time, and eventually shaping the discretion of the human agency embedded in these routines. Overall the strategy of orchestration can be categorized into two broad categories: the one where the focus was on inducing a desirable social-relational context and the other where the focus was on shaping the cognition of the actors who had discretion and control over the routines. I now elaborate these two strategies.

Social Orienting

The administrative routines were not set for processing innovations-related task, and the first rounds of innovations made it abundantly apparent. In the absence of purpose-built routines, the members of the innovation team had to follow-through with these routines. This required frequent interventions and problem-solving. Innovation team members had to canvass with actors and find “solutions” to keep the ball rolling through the administrative routines. The following quote reflects the friction:

The reality is - the minute they are faced with something that outwits their conventional purchase order that would have all come back to us. That's the practicality. That is what delay things.

The team had an appreciation of qualitative differences of different delays. Some delays were accepted, tolerated, and locally dealt with, while others were considered unacceptable and escalated upward to be resolved. As one team member suggested:

… there is a point when we might want to have a quiet word with the power that is…this becomes the case of pulling the right string…
Most of the problem solving took the form of discovering faster paths or navigating around a highly structured procedural pathway. Innovation team did not have any authority on actors involved in these routines. Cultivating the relationship with those in the administrative routines allowed the innovation team to broker slower and planning-oriented organizational temporalities with faster and emergent temporalities of routines in specific instances by developing mutual trust, empathy, and reciprocal expectation. Trust enhanced the “performative” range and flexibility of the routines. The social frames like that of “gentleman's agreement" was invoked to loosen sequential structure between the anterior and the posterior parts of the routines. On the other hand, the loss or the absence of the rapport resulted in the regression of the routines to their narrower and more constraining performance.

Strategically constructed inter-personal relationships were used to pace up slower routines and open up sequentially rigid routines. Innovation program members intentionally and proactively developed the relationship through what was colloquially referred as face time. The members had the view that "friendly" actors were more responsive and more accommodating. “Friendly” actors not only accommodated the temporality of innovations through their routines but also reached out to others in the proximate routines which further increased likelihood of a favorable outcome. They therefore actively sought out opportunities to develop the rapport with the actors involved in the administrative routines. Direct and informal liaison meetings were often used to resolve complex temporality particularly to resolve deadlocks and breakdowns in the routines by creating mutual trust and empathy. These meetings often became a venue where issues about temporal conflicts arising from rigid sequentiality and overly elaborate scrutiny were creatively resolved. As trust developed, some of these intractabilities between theses distinctive temporalities were streamlined by tapping resourcefulness and discretionary agency of these actors.

Informal interactions provided important venues for the exchange and engagement with the actors involved in routines and an opportunity for shaping discretionary and interpretive agency of these actors. Some of the temporal conflicts were addressed by adaptive action that inventively complied with routines. For example, the innovation team often invoked a "PMI route" which is a much faster way to respond to an action. But for the willing accommodation of those having discretion and agency over routines such option could have been contested.

Better interpersonal relationships induced actors inside the administrative routines to exercise their discretion more favorably for successfully steering of the specific innovations through the procurement routines. Another example where “friendly” actors expedited actions related with dealing with the uncertainty associated with innovations. To be able to enjoy a somewhat autonomous space for developing on-the-fly innovation opportunities in a highly risk averse organization, the innovation team required support from the actors involved in finance, procurement, and legal-related routines. Frequently meeting people in finance and
updating them and constantly providing them with the assurance that the innovation program was not “deliberately contravening any law on procurement or whatever” reassured these actors who then allowed greater say over the routines.

For example, when the funding of innovation was found to be inadequate, the team strategically presented the additional funding to the innovation as funding a “second phase”. While it did not materially change anything, it accommodated new funding without getting bogged down with negotiating changes in an earlier contract for additional funding which would have upped the ante in the commercials. That would have meant that the agreed contract of delivering innovation had broken. The latter framing represented success and progress of moving through phases while the former in which the changes in the existing contract for a cost which was not envisaged earlier would have represented cost escalation, which was often frowned upon in the institutionalized logic of risk aversion through planning and control.

Interpersonal rapport mattered to such an extent that the exit of a particular actor often challenged the whole tenuous arrangement. It was not surprising that the members of the team used most opportunities of social exchange to induce positive emotion and affect. The team members even downplayed conflictual cases, and the emphasis was always on the "progress" and "movement" even when the team members internally talked about frustrations of routines which required frequent interventions and problem solving on their part.

The innovation team also compensated for the lack of flexibility and speed of the administrative routines by volunteering “help”. The members of the innovation team volunteered to undertake actions to reduce the demand on the actors in some of these routines. As the speed of the routines, among other things, also depended on upon resources allocated for action and the demands placed upon the actors, providing self-volunteered actions and resources eased progress through the routines. Moreover, such activism reduced the burden of the "day's job" on the part of the bearer agency in these routines which in turn helped the innovation team members get a more favorable disposition from these actors.

Cognitive Orienting

The narrative framing of social time was done using narrative event-based accounts. The team members developed these accounts by the selecting events and the framing of narratives. The efficacy of these curated event-based accounts in creating urgency not only depended upon the choice of the event but how the events were made meaningful. Events were made meaningful by linking these events to politically-consequential actors, socially-consequential frames, and motivationally-consequential identities. These accounts created urgency and induced discretionary agency of these actors to actively pace up the routines. I call it narrative squeezing.
The innovation team used narrative accounts of events which entangled events with the identity and interest of powerful actors in the arena. They particularly accounted prospective alternative courses of actions and how some of them would violate the political and social exchange expectations. Focalization through such narratives was used to induce social and political urgency. For example, to accelerate a task through the administrative routines, the innovation team would refer to upcoming executive-level “innovation forum” meeting and how the lack of getting through the administrative routines would leave the innovation team with “little” to report back to the forum.

Not only event-based accounts were used to create a sense of urgency, these events were invoked to even “measure” delay and construct a justification for an escalation in the form of active “chasing”. Chasing usually meant following with the persons embedded in the routines or having some discretion over them, mostly through emails to draw attention, and to underline urgency. In the cases where the chasing had to be repeated, the accounts and rationales changed as these accounts built upon each other into a calibrated escalation. In the dyadic chase, the members of the innovation team direct reached out to the actors inside the routines with accounts and rationales of why and in some cases even how some tasks should and can be expedited. However, when they were not effective, a larger group of people were mobilized using these accounts and rationales which increased their persuasiveness and legitimacy.

**Strategy of Brokerage: Tapping Entrepreneurial-Ecological Affordance**

The social and cognitive orchestration of the social agency in these routines was not always sufficient. The innovation team members had to mobilize latent routines, entrepreneurial agency, and external routines to compensate when an orchestration of the existing routines was found wanting. While the earlier section focused on shaping the socio-cognitive perception of the social time in the routines, this section focuses on how the innovation team used affordance in the broader ecology of routines and entrepreneurial agency. The innovation team did it by mobilizing broader routines and agency both inside and outside the organization.

*Mobilizing compensatory routines and agency inside the organizations*

First, as the innovation team members had to engage with multiple routines, they often had a better knowledge of the latency in these routines. As the team became more conversant with the available routines, it used this knowledge to came up with the inventive solutions. The latency was then advocated and made available to actors who were otherwise blindfolded by their de facto routines. However, actors embedded in routines often needed to be reminded of a more expeditious route as a potential solution. For example, the organizational routines ostensively had what the innovation team referred as “PMI route” which afforded a more expedited course of actions as the following excerpt illustrates:
…to get this moving, would you like to call the CRL PM and explain our needs and intentions. If necessary, you can offer that if he would be happy to issue a PMI with the scope you describe below, we can internally transfer for the instruction costs on application. [We can] agree on the PMI route of "get on with it and issue a price later…"

Moreover, the innovation team used the mobilization process in the early stages of innovations - a phase of open, emergent, and opportunistic jockeying to discover resourceful actors who had a stake in the focal innovation to identify resourceful actors who would play important role in the implementations. Unlike in the first cohort, in which, the ideas were picked up and funded, the latter cohorts engaged in longer discovery. The innovations that were taken further for “delivery” benefited from this early mobilization of entrepreneurial agency and resource set. As one team member described:

…the first time that we did it. We were just like oh f*, we do not even know if we can do this. The first six ideas were bom-bom-bom…But we learned our lesson. Now we have a smoother slicker process [of an early mobilization] than what it was last time…

The processes in the innovation program across successive cohorts evolved to move to become more fluid in the discovery phase and more structured in the latter “delivery phase” as the innovation team alternated between dealing with early stages of emergence and latter stages of engagement with the existing administrative setup. This dynamic and adaptive response, in a more general sense, helped to cushion the conflict with the "planning" orientation of the routines.

*Mobilizing compensatory routines and agency in the proximal field*

The innovation team used external routines, more particularly the proximal supply chain of principal contractors, small sub-contractors, and even up-and-coming entrepreneurial start-ups, to partially absorb the lack of speed and flexibility in the internal administrative routines. This allowed compensating the lack of "bandwidth" in the internal administrative routines for speed and flexibility. Entrepreneurial actors and organizations were tapped to compensate for the slow throughput in administrative routines.

While some entrepreneurial vendors were able to compensate for the lack of speed and flexibility in the administrative routines through their entrepreneurial actions, there were cases when the extreme divergence in the routines between entrepreneurial actors and Crossrail created problems of it own. The extensive processes often were ill-suited for an entrepreneurial start-up like vendors, which often emasculated their entrepreneurial resourcefulness. For example, the administrative routines at Crossrail were infused with risk-averse values often broke down to interlace with the entrepreneurial routines of SME's and required
intermediation. The members of the innovation team acted as a go-between these entrepreneurial actors and the internal administrative routines.

While speed was not a problem with entrepreneurial routines, these routines had greater risk. The administrative routines at Crossrail infused with risk-averse values often broke down to interlace with the entrepreneurial routines of partners engaged in developing innovations. Similarly, setting up formal requirement by commercial and finance directorate tested the wit of smaller entrepreneurial firms, an important set of actors engaged in the innovation process. This happened when the entrepreneurial and fluid approach of much smaller vendors clashed with administratively heavy, risk-averse routines inside the Crossrail.

The gap between entrepreneurial routines of the smaller service providers and vendors and the administrative routines for procurement were very large. These procurement routines were meant for procuring large contracts and required extensive paperwork. The procurement has to be fully specified; the vendor needed to be scrutinized, the legal and commercial agreement needed to be agreed, and risks needed to be assessed before any concrete action. The following two excerpts, first providing the perspective of an entrepreneurial vendor and the second providing a contrasting perspective coming from within the routine - captures the dichotomy.

…we are also getting concerned about the contract you are proposing … We would much prefer a simpler contract direct with [name removed]Limited. [name removed] has the experience and skills to do the work; it can operate the kiln to produce lightweight aggregate to the required specification from the clay provided by Crossrail which will then be tested in the concrete laboratory…

…John and Catherine are rightly concerned that the facility is no more than a garden shed and should there be an accident Crossrail would hold a liability…

This required intermediation in which a third party was roped in to reduce the incompatibilities between two very different routines. The tapping of entrepreneurial routines was meant to induce urgency by compensating the constraints of existing routines, whereas the bridging with an intermediary to intermediate these routines and those of Crossrail was meant to reduce risk and ensuring a broad compatibility with internal administrative processes.

It still fell on to the innovation program team to manage the relationship between administrative routines of the host organization and the routines of other entrepreneurial vendors that the team had mobilized for specific innovations. The innovation team used interfacing to moderate the large chasm between entrepreneurial routines and internal administrative routines. Where the difference between entrepreneurial...
routines of the smaller service providers and vendors and the internal administrative routines were too large or where entrepreneurial actors were unwilling to absorb this tension, the team often used the principal contractors as an interface to bridge the chasm. These contractors were often better placed to intermediate as they had worked earlier with smaller vendors. They were, therefore, adept at in dealing with both the routines in large projects and the requirements of smaller suppliers. A sandwiching of two different routines in the field - distal entrepreneurial start-ups and proximal principal contractor thus provided the right mix to bridge the gap. The conflicts, while didn't completely disappear, they became less manifest and problematic.

A Sketch of A Suggestive Model

The findings in this paper are summarized in Figure 5.2. Following Feldman and Pentland (2003), I have represented organizational routine has been as a composite of an ostensive structure and a performative agency.

The side A of Figure 5.2 illustrates the strategy of orchestration. The strategy of orchestration targets performative agency embedded in the routines using: social and cognitive interventions. Social orienting uses social-relational strategies as interpersonal influence tactics. It is about the active cultivation and use of social relationships to benefit from the discretion that the actors who are embedded in the routines often have. Moreover, by actively seeking opportunities for social, face to face interaction, and developing a friendly disposition of these actors, these activists facilitated trust and understanding which expanded the performative range of the routines. Cognitive orienting, on the other hand, used event-based accounts of time to shape the cognition of time and induce an interpretive urgency in the situation. These two interventions, when combined, would likely to be more efficacious. The model suggests that after the interventions, the performative agency in the routines would be more likely to accommodate fast and emergent innovations. This accommodation is despite the fact that ostensive structure of the routines remains unchanged.

The side B of Figure 5.2 illustrates the strategy of brokerage. The strategy of brokerage mobilizes compensatory routines or entrepreneurial agency to get around the constraints in the organization routines. This strategy is likely to be used when the activists have failed to favorably influence the performative agency embedded in the organizational routines and therefore need to mobilize alternative routines either inside or outside the organization so that the constraint of the internal routines can be compensated. The strategy of brokerage covers two sub-types, mobilizing alternative routines from within the organization and mobilizing routines from outside the organization. The illustration suggests that after the brokerage, both the performative agency and ostensive structure in the focal organizational routines remain the same. However, the mobilization of a compensatory routine or agency in the mobilized composite ensemble internalizes or absorbs this constraint in the focal routine.
A. Strategy of Orchestration

Organizational routines: Before orchestration

- Agency: Slow, Sequential
- Structure: Slow, Sequential

Organizational routines: After orchestration

- Agency: Fast, Emergent
- Structure: Slow, Sequential

B. Strategy of brokerage

Organizational routines: Before Brokerage

- Agency: Slow, Sequential
- Structure: Slow, Sequential

Organizational routines: After Brokerage

- Agency: Slow, Sequential
- Structure: Slow, Sequential
- Compensatory Structure / Agency: Fast, Emergent

FIGURE 5.2: Strategies of Distal Agency
**Discussion**

Organizational routines often are in contact with new practices, forcing the activists promoting the new practice to deal with these routines. The findings in this paper suggest that activists’ strategies range from the use of narratives in influencing the embedded agency to the mobilization of alternative routines to compensate for the constraint in the focal routines. Now I turn to discussing the implications of the findings.

**Agency from within and beyond the routines**

In this paper, I find that distal actors can shape the performance of the routines by using narratives and by actively recruiting routine ensembles from the field. While the social agency in organizational routines is distributed among different actors, these actors analytically can be conceived as of two kinds: proximal and distal. Proximal actors are involved in the performance whereas distal actors have a stake in the performance of routines without having any ostensive role. As I find in this paper, these distal actors can shape the performance of routines through the activism of their own.

This highlights that the social agency in the socio-material assemblage (Orlikowski and Scott, 2008) of organizational routines is located in the dual network of actors (proximal agency) and constituencies (distal agency). It is also congruent with the recent emphasis on developing a better understanding of the roles that a more open-ended set of distributed actors play in the performance of routines. An analytic distinction between actors with discretion on the routines and other actors who may have a stake in how a routine is performed but no direct discretion will allow us to distinguish endogenous and exogenous agency and the relationship between these distinctive forms of agency in organizational routine processes.

In the context of organizational routines, we need to better understand the role of proximal and distal social agency. While this distinction is an analytical one, it allows us to theorize better about performance and orchestration - two different types of agency in organizational routines— and thus respond to the calls for exploration of ecological mechanisms in organizational routines. A greater scrutiny of the role audiences plays in creating, modifying, and maintaining a nexus complements the greater scrutiny of the role of human actants at the nexus of different routines (Nicolini, 2013). The participatory role in routines may not be limited to those participating in a role, but also others who may choose to engage out of situated, emergent stake in the performance. There are multiple actors in the organization without having any direct bearing or any authority in the routines, yet, they may have a stake in these routines and addressing their rigidities (Gilbert, 2005).
Distinguishing embedded and external agency can help link the literature on the organizational routines to the literature on activism and influence inside the organizations. Those advocating innovations as Gilbert (2005) has pointed out may need to mobilize resources as well as find a way around the routine rigidities to usher these innovations into an organization. External actors are currently overlooked in organizational routine literature as the empirical work on routines have overlooked distal agency and has focussed on a narrower conception of social agency limited only to a narrower set of actors who are directly involved. The contribution of this research is that by explicitly recognizing the role of this distal agency, it expands the theorization of social agency in routines to a broader and more heterogeneous set of actors. The analytical elaboration of organizational routines as having a duality of performative and otensive parts allowed us to bring in the situated agency in the theoretical framework (Feldman and Pentland, 2003). The addition of a distal agency which can partially shape and accommodate a specific performance of routines should be a further welcome addition in elaborating the dropper and more distributed social agency in and around the organizational routines.

Narrative agency and social time in organizational routines

While the objective of this paper has been making a contribution to the literature of organizational routines, an important implication of this paper is to the literature on the social time in an organization. Our understanding of the social time in work groups and organizations has mostly been under-developed (Lee and Lebenau, 1999; Bluedorn and Denhardt, 1988; Ancona et al., 2001). The findings in this paper suggest that the performance and experience of time in organizational routines is through an exchange of narrative accounts of events. While this finding is in some agreement with the more fluid event-based notion of the social time (Heidegger, 1953; Sinha and Gardenfors, 2014), a narrative time is a more complex cognition than just an event-based cognition of time.

Narrative accounts of time have an implicit acknowledgment of the notion of subjectivity in the social time as it tries to predispose the hearer to understand the temporality from the speaker's perspective. The effective of narrative account can be through the cognitive and affect-based mechanisms. We have known the generative and causal role of the language in interaction for long. In narrative studies, we have long known the relationship between cognition and narratives. Ricoeur's insight that time becomes accessible to human "to the extent that it is articulated through a narrative mode" (Ricoeur 1984) is pertinent here. However, this literature remains disconnected with the literature on organizational routines. Organizational routines get constituted through interactive links among ordinary human activities (Salvato, 2009). Socio-cognitive processes of sense making and sense giving mediates the relationship between micro-level activities and the performance of routines (e. g. Feldman 2000; Feldman and Pentland 2003; D’Adderio 2009; Parmigiani and
Howard-Grenville 2011). Narrative cueing of cognition can play an important role in shaping the performative time in routines.

Narrative accounts constructed out of events affords an agency over time which events in and of themselves don’t afford. Constructing intelligible narratives by selecting some events rather than others, parsing them coarsely or finely, asserting one rather than the other sequence, and suggesting one meaning rather than other meanings can construct varied and sophisticated social reckoning of time. More importantly, narratives allow incorporating more varied events including those which are beyond actors’ recently experienced context. It is this ability of narrative accounts which allows tapping a broader variety of events including those that are in actors’ recently experienced context with others that are experienced by other actors in other contexts. Narrative accounts, therefore, help to transcend a human cognition to a shared social cognition as they connect various ego-centric perspective of time to a shared sense making involving a fluid multiplicity of events and their consequentiality to self and significant others.

All narrative accounts are meant to focus attention on narrowing down contingencies of events in a coherent and acceptable form and thus impose an inevitable choice and focalization (Ricoeur, 1983, 1984). As narrative accounts are woven around actors and events through either the choice of events in these accounts or framing their meanings to the focal actors can potentially shape their experience of time. By drawing upon cultural and political structure these narratives, narratives can impart meanings to events by the strategic framing of these events. They can relate to relevant interests and identities and draw from the social and cultural resources like the “vocabulary of motives” and the “sense of self” (Friedland and Alfred, 1991) to frame the meanings of the events. However, the "constructability" of narrative accounts of time is not infinite as any asymmetry about the understanding of events, and their relationships can lead to friction and fissures.

Actors often exercise agency in disregarding the sense giving that are in contrary to their understanding. The choice is not exclusively of the narrator but also of the audience as they can invoke their choice of which of the events are relevant and what relationship between these events is meaningful. Although a detailed framework that would outline all these issues around the construction of time through strategic references to events, actions, agency, and power in a narrative is not in the scope of this paper, it is a potential area for further research.

Affective orienting of the performance of routines through narratives is the use of strategically triggered feelings and emotions in turn shape behavior through affect-based arousal. Actors can use narrative accounts of events to evoke social emotions like shame, guilt, and pride. These emotions can be a powerful tool of influence in shaping the performative temporality in organizational routines. Interpersonal and social emotions play a central role in orienting actors. Such emotions can predispose social actors for a more favorable use of their discretion towards those who can invoke them. The role of social emotions in the context of organizational routines remains mostly overlooked and needs further research. If actors can
construct narrative accounts to induce such group-level emotion, they can be a powerful force to get around ostensive and performative limitations of organizational routines (Huy, 2011). In this context, the work of micro-sociologists - like Goffman's work (1955) on face saving and Sheff's (2000) work on shame - can be helpful.

The social agency in any settings cannot exclude the social cognition and emotion that we create in interactions through an exchange of narrative accounts. Therefore, micro-level aspects of how routines are enacted in practice (e.g., Feldman 2000; Feldman and Pentland 2003; Parmigiani and Howard-Grenville 2011) should better investigate these exchanges in the performance of organizational routines. The difficulty in getting the detailed naturalistic data may have constrained research to understand the social nature of time in organizational routines. The use of detailed textual data traces (Pentland et al., 2009) in digital communication systems like emails can, therefore, be very useful in further elaborating our understanding of the dynamics of social time in organizational routines.

**Tapping the affordance in the broader ecology of routines and entrepreneurial agency**

Innovations in the performativity of routines at the ecological level relate with brokering two routines to harness their complementarity. In cases where these routines are distant, other routines may be required to brokering distant but complementary routines. The empirical investigations of the ecological interaction among routines have been rather limited. The mechanism of how conflicts can force interactions of routines across organizational boundaries through an activist broker championing a new practice is an important insight.

Given the recent conceptualization of routines as an affordance network of actions, actors, and artifacts, it is important that performance of routines is also understood as an interaction of all these three networks. These networks may or may not fall within the boundary of an organization. Incorporating new actors who would bring their actions and artifacts in a situation can add new capability and meet new demands on the routines (Turner and Fern, 2012; Turner and Rindova, 2012).

The lack of capability inside an organization may also be compensated by mobilizing routine ensembles in its proximal field. Tapping into ecological and entrepreneurial affordance can allow both the continuation of the truces and the accommodation of innovations in an organization. By tapping relationships that can be brokered between the focal routines and other routines can help organizations respond to new problems and opportunities. The generative performative at the level of an ecology of routines rather than being confined within a specific routine can provides new capabilities and we need more empirical work to better understand this.
The strategic agency in tapping affordances in routines through brokerage without disturbing truces (Zbaracki and Bergen, 2010; Turner and Rindova, 2012) may be very useful. Even a flexibly performed routines are sticky as they are embedded in organizational culture and technologies that constrain any significant deviation in enacting them (e.g. Howard-Grenville, 2005). Thus significant political and cognitive barriers act as stabilizers for routines in the form of “truces”. Pandering and compensating for rather than challenging the inadequacies of routines may expedient in the short-term as it will avoid disruption of established interrelatedness and patterns in the organization routines (Feldman, 2003; Howard-Grenville, 2005). However, this may not be a successful strategy in the long term as it may only delay the required adjustment in the internal routines (Feldman, 2000; Feldman and Pentland, 2003; Rerup and Feldman, 2011).

**Conclusion**

The current emphasis on the performative agency of actors embedded in the routines is unable to incorporate the role of activists in stretching organizational capability. In this paper, I find that activists can tap intra- and inter-routine affordance in and between routine ensembles to increase the scope of actions in the organization. They do so either by using narrative orienting of the embedded agency or by mobilizing compensatory routines in and around the *bottleneck* routines.
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CHAPTER 6. FINAL COMMENTS & FURTHER RESEARCH

Using a qualitative research program on the advocacy for an innovation management practice in a temporary organization delivering a major project, I have addressed three questions related with how to stretch temporal identity through identity play, enact a practice in the repertoire through micro-legitimacy exchanges, and actively navigate through the bottleneck routines. The thesis has particularly focused on developing a better understanding of the role that activists can play in steering an organizational innovation practice in an organization when doing so is beyond the organizational identity and capability. In this chapter, I discuss the limitation of the research, summarize important implications of findings and then finally suggest opportunities for further research.

I start with the limitation of the research undertaken here. The empirical context used in this thesis provides a particularly revelatory setting to examine the issues in tapping fluid and fleeting innovation opportunities in an organization where the identity and capability constraints make organizational innovations particularly challenging. However, the interpretative theorizations drawn from the study of the specific case of the implementation of an organizational innovation management in Crossrail should not be considered definitive without further research in other contexts to confirm and clarify the findings. At the same time, I should also add here that while I have used the empirical context of a temporary organization, the implications of the findings are even for other organizations. The problem of tapping fluid and emergent opportunities is a broader problem as routines in most large and established organizations usually lack flexibility and responsiveness. The use of activism to entrepreneurially transcend an organization’s cultural-cognitive and capability constraints will be relevant and applicable to most such organizations. As innovations are happening at increasing rate, organizations have to innovate both individually and collectively so as not to lose the red queen race (Van Valen, 1973). Any organization form or field that does not keep pace with the innovation race is likely to be at a disadvantage.

Stretching Identity for Organization Innovation

The concept of time in organizational identities is a significant constraint in harnessing a greater range of opportunities for organizational innovations. As policymakers, practitioners, and organizational leaders seek to mobilize and harness a broader range of opportunities for innovations, dealing with various bottlenecks including those related to organizational identities becomes inevitable. Identity processes and structures shape intra- and inter-organizational structure of behavior. Identity can provide a potent mobilizing force for disparate actors and can nudge them to a higher-level of cooperation and coordination.
The use of identity elements and how they are narratively configured can accentuate or dilute certain aspects of identities. These identity elements can be patterned in various ways and the salience of a specific element can be changed through the use of identity narratives. This flexibility in organizational identity can be used by organizational actors to stretch the organizational identity on the margin - thus providing scope and space for aspirational practices and entrepreneurial actions.

The findings also illustrate that a social need for the memorialization of organizational identity is an important motivational force even in the context of a temporary organization. This would suggest that the role of identity enhancement and impression management may be more than just resource mobilization or legitimacy seeking strategies. The fact that even a temporary organization with little need for resource mobilization actively seeks to memorialize itself in the social memory and discourse of the field suggests that the need for a positive memorialized organizational identity is a relevant driver for actions and practices in all organizations. The literature in social psychology which examines social identity and death could be a starting point to elaborate further how this need in an organization may be related to the needs of individuals in the top echelons of such organizations. There is also more ground here to examine how possibilities of an organizational death may play out in the scope and emphasis of an organization’s practice repertoire when those possibilities are narratively made more or less salient.

**Stretching Capability for Organizational Innovation**

When strategic activists and institutional entrepreneurs, motivated by their belief in a new vision or by their concerns of greater public goods, challenge an organization's cultural-cognitive conceptions, they also have to confront its capability constraints. Eventually, these activists need to come to face to face with organizational routines stretching to the seams in adopting practices that they advocate. The nitty gritty of making a new aspirational practice work in an organization may, therefore, require these activists to exert a distant agency on organizational routines to make them accommodate a new practice.

So far, empirical work on routines has focussed on the agency of actors involved in enacting the routines. However, a large set of actors in the organization will not have any direct involvement nor will they have any authority over the constraining routines. I find that routines can be stretched through the use of distant agency and compensatory routines.

The two strategies identified in this thesis as orchestration and brokerage to stretch and to compensate the capability constraint in the routines maps respectively to the cognitive and behavioral perspectives on organizational routines (Cohen et al., 1996). Cognitive aspect refers to cognitive representation that results from repeated pattern of actions whereas behavioral aspect refers to structural pattern of actions. Orchestration of routines by using narratives to change the social cognition of the actors embedded in the
routines provides opportunities for influence to the external activists over actors embedded in the routines. Strategic collegiality, interactive search, and active engagement that activists seek with the actors embedded inside the routines are important in tapping opportunity and mobilizing resources for innovations.

On the other hand, a brokerage between the entrenched action patterns in a focal routine with alternative routines can construct new capability. For example, the brokerage between established and entrepreneurial firms have emerged as a new way of expediting and harnessing innovations in an organization. In the context of project management routines, the finding suggests that the large project can tap more entrepreneurial firms in its context to offset the internal, control-based, risk averse routines to explore opportunity-based innovations.

**Tapping the Strength of a Weak Practice for Organizational Innovation**

As organizations are trying to be more entrepreneurial and innovative, a weak organizational innovation practice provides an opportunity to be so without incurring detrimental conflicts of a coercively adopted practice. At first sight, weak practices may seem risky. They may degenerate to ceremonially and be coopted by more institutionalized practices in an organization. However, weak practices can be a key competitive advantage for business as it drives innovation by enacting practices on the periphery. Weak practices can allow tapping emergent contingencies in the broader repertoire of practices available to actors.

The paper on legitimacy exchange highlights how a weak practice can open up new opportunities for enacting not only the focal practice but even other weak practices that it interacts with. Such a practice taps entrepreneurial reflexivity of a broad range of actors distributed across the organization, and may allow the organization to stretch the scope of its action despite its apparent constraints.

The notion of the weak practice also highlights the multiplicities of organizational boundaries. Santos and Eisenhardt (2005) identify four distinct understanding of organizational boundaries that relate to the issue of efficiency, power, competence, and identity. The empirical work on organizational boundaries has focussed on one of these four boundaries in a specific research. This is the first time that an empirical work has explored the relationship between different conceptions of organizational boundaries.

A weak practice essentially can draw upon a generous interpretation of one of the boundaries and leave it to the discretion of organizational members to engage with the practice. Off course, activists promoting the focal practice would actively seek out engagement and may enter into the legitimacy exchange with other weak practices. However, whether the focal practice gets adequate traction or not would emerge from the interactions and negotiations within and across the multiplicities of boundaries that these activists may target.
The interaction of weak practices and multiple boundaries can potentially present an explanatory and analytical framework that helps explain an entrepreneurial process that involves plural boundaries rather than a singular all-purpose boundary between practice and an organization. Boundaries and practices are thus interdependent (Zietsma and Lawrence, 2010). Organizational practices, particularly in their weak form, are available to organizational members when as they shift their logics of action from a dominant boundary to more expansive boundary. This enables two advances. First, it is non-deterministic, and therefore, weak practices, unlike dominant practices, do not have apriori primacy.

Installing agency for facilitating brokerage between the focal practice and other practices and their active orchestration provides an important intervention for enhancing the organizational capability. Organizations are already known to hire activists for political lobbying and influence to shape the field. The findings suggest that activists can also be used to shape the ecology of practices and routines inside an organization, and in turn, to shape the value creation and capture processes in organizations. The use of activist agency along with the weak practices provides an alternative opportunity to that of the development of routines. Tapping activists and entrepreneurial actors for stretching organizational boundaries to harness opportunities in their midst can help organizations can allow harnessing fluid and fast moving opportunities in contexts where standard routines may not be available or viable.

**Opportunities for Future Research**

*Organizational Identity Processes*

Collective actions require mobilization and coordination among actors. Identity-based intervention and activism provide an important leverage. Strategic activists can use a system of interactions and interpretations to stretch or open up the dominant identity boundary. They are likely to be more amenable in a context where actors have access to unique identity elements and some asymmetric power to claim and assert these elements.

One of the potential boundary conditions is that Crossrail acted as a hub to mobilize the innovation management practice. In the context of large projects - the empirical context for the thesis, there was indeed some asymmetry of power as in between the client and the contractors. As the activists were sponsored by the CEO, they did have some access to this asymmetric power structure. But for the active initiative and activism from Crossrail’s CEO, the mobilization might not have happened or would have taken very different form. The power structure in the network was skewed in favor of Crossrail as a very large client. Further research may consider examining mobilization from a different power position. Further research
should examine how the power structure and the broader discourse that activists had to operate in affect the strategies of the activists.

The context of project-based organizing or inter-organizational collaboration in networks had multiple temporal identities and sub-identities making an organizational innovation practice difficult. There could conceptually be different organizational contexts in terms of the variations of the number and the active interaction of constituent sub-identities. In some of the organizations, these sub-identities are reconciled to a more coherent organizational identity, whereas in other organizations sub-identities may not be coherent but actively managed by a core or a hub. There are other more fluid network forms where comparable sub-identities exist in complex and dynamically fluid relationships. It would be reasonable to expect that the activism around identities in these very different settings are likely to very different. A comparative study of mobilization using various contexts of different sub-identity structures and processes can provide important insights.

The neat traditional worlds of organizations and markets in which organizations were horizontally integrated where markets were vertically integrated are giving way to multi-identity organizational forms. A multi-identity organization may also have multiple temporal identity elements. The focus of this paper has been on examining a specific aspect of organizational temporary identity. However, Schein(2010) has identified multiple aspects of the concept of time in organizations including time orientation (present, past, and future), fluidity (polychromic vs. monochromic), structure (open vs. closed), depth (short term vs. long term), and pace (uniform vs. non-uniform). How these different aspects of time manifest in the temporal identity how strategies of dealing with them may vary provides opportunities for further research. Kauffman(1993) NK model of complexity would suggest that identity mobilization may have to contend with two types of complexity driven by the number of identities and their interactions. Such complexity in the range and interaction of constituent sub-identities can both be a resource and a burden for the activists who have to deal with them while advocating a new practice. Further research should examine this question in greater details.

Organizational legitimacy processes

The empirical case I have examined is about the adoption of the weak form of a practice. The new focal practice did not explicitly challenge the existing temporal assumptions but rather presented the practice as an aspirational space where such assumptions did not hold. This therefore also suggests that identity play would not be adequate if the practice were presented as a mandatory practice rather than an aspirational and optional practice. One important challenge comes from the interaction between entrenched interests and aspirational identities. Activism around organizational identity may not always be sufficient to get around the constraint of entrenched interests. This challenge didn’t arise in the empirical context of this study as the
practice remained weak and volition. Future research should examine the dynamics between interests and identity processes in the context of coerced adoption where this interaction may take the center stage.

The relationship between the adoption of weak practices and the legitimacy exchange that such adoptions may unleash can provide insights about the interaction among the multiplicities of organizational boundaries. An organizational boundary based on instrumental interests may be different from an organizational boundary based on aspirational identity. The adoption of weak practices may allow to entrepreneurically manage the conflictual expectations managing from these different boundaries in the organization. This provides various actors options that allowing them to situationally and inventively choose the boundaries.

The focus in the existing literature on boundary work refer to establishing, changing, and stabilizing a specific boundary (Zietsma and Lawrence, 2010). For example, the work on the boundary closure focusses on the demarcation of boundaries for autonomy and the control over resources. Further research can better explore the role that weak practices play in simultaneous existence of multiple boundaries and how activists can use these different boundaries to construct socio-political legitimacy for a new practice. Such research can offer insights about dynamically managing intra-organizational cross-boundaries differences and can supplement the research on managing inter-organizational cross-boundaries differences related with "boundary objects," "boundary-spanning actors," and "boundary organizations". The conception of weak practices and multiple boundaries can potentially be integrated into an explanatory and analytical framework for entrepreneurial legitimacy processes that benefits from and contributes to the variations and boundaries of practices in an organization.

**Organizational routine processes**

While in the third paper, my focus has been on the role that internal activists play in changing the performative temporality of organizational routines, the future research should examine the role that actors outside the organization can play in shaping the performance of the routines. One empirical setting where this can be examined is the relationship between established and entrepreneurial firms. Entrepreneurial vendors often have to deal with extensive procedures that big and bureaucratic firms often have. It will be insightful to find out whether and how these entrepreneurial firms work through these routines so as they do not become an impediment to harnessing the value that they otherwise can tap from this relationship.

For firms to create new value and realize their strategic aspirations, it is important that their routines accommodate the faster and more emergent temporality of these start-ups so that they do not fall through the cracks. It should be pointed out here that start-ups often complain about the hoops of extensive internal procedures that took “months” and “weeks” just to get through procurement and commercials of contract in
a large organization which they find difficult to deal with. This provides an opportunity to do further work in examining brokerage of planning-based and entrepreneurial routines. As more and more firms are promoting start-ups in their midst, how these start-ups can be accommodated within existing organizational routines provide an opportunity to examine further temporal conflicts between routines of big corporate and those that can accommodate the needs of these start-ups.

Another particularly interesting angle for further research will be examining the long-term effect of activist-based orchestration of a constraining routine in the organization. Organizational routines are intricately connected with the power structure and people's understanding of how organizations should work. Significant political and cognitive barriers act as the stabilizer for routines in the form of “truces”. Activists in an organization can stretch these truces to accommodate novelty. Thus, activists could get around these routines without destabilizing truces. On the other hand, avoiding these conflicts for accommodating a new practice within the semblance of a continuing "truce" may delay adjustment in routines, and may even be detrimental in the long term.
References


