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## Uncovering And Exploring The Mobilization And Launch Phase Of High And Low Performing Project Teams

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Working Paper 02 - 06





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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of Center research available to others interested in preliminary form to encourage discussion and suggestions.

#### **ABSTRACT**

As part of a larger study, this analysis, first, uncovers a previously alluded to, but heretofore un-explicated, phase of project team development (PTD) -- dubbed mobilization and launch -- and, then, explores the ways in which activities and outputs of this phase relate to project team effectiveness (PTE) by comparing them across three high and three low performing teams. The analysis shows that the former used this formative period: (1) to actuate a comprehensive mobilization strategy that was carried out relatively rapidly and resulted in well informed, as well as fully and competently staffed, teams and (2) to hold highly participatory launch meetings from which team members emerged in general agreement about what needed to be done and how and by whom it would be done. Low performing teams, in contrast, basically squandered this potentially valuable time and, thus, emerged from this phase totally unprepared to move to and effectively through subsequent phases of PTD.

Funding for this study was provided by the Center for Advanced Human Resource Studies (CAHRS) and the Benjamin Miller Scholarship Fund, both of which are affiliated with the School of Industrial and Labor Relations, Cornell University.

#### Uncovering and Exploring the Mobilization and Launch Phase Of High and Low Performing Project Teams

Project team (PT) theory and research can be divided into two streams: project team effectiveness (PTE) and project team development (PTD). These two streams have essentially moved along parallel tracks, sometimes informing one another but rarely explicitly intersecting. The PTD literature, for example, often suggests that effectiveness is affected by the way that teams develop. But, no one to our knowledge has followed successful and unsuccessful PTs across their entire life spans to determine to what extent and in what ways, if at all, they develop differently.

To explore PTE in terms of PTD, we conducted a larger study that compared the taskwork activities of three high and three low performing PTs across their entire life spans (see Ericksen, 2001). The results suggested that PTs pass through four distinct phases punctuated by two inflection points. Within this broadly shared pattern, however, there were clearly some significant variations across high and low performing teams with respect to the duration of the phases and thus the timing of the inflection points and, especially, the nature of the activities pursued and outputs produced during the three phases. In particular, what really differentiated high from low performing teams was their ability to use the first phase of PTD, the time between their initiations and initial meetings – dubbed mobilization and launch -- to get off to high quality starts.

High performing teams hit the ground running during the mobilization and launch phase of PTD. They mobilized relatively quickly. They employed a comprehensive mobilization strategy that incorporated a number of colleagues into the processes of clarifying the scopes and nature of their projects and of identifying and selecting competent team participants. They held highly participatory launch meetings that were deliberately designed to engage all PT members in discussions of the PTs' purposes, challenges, and future activities. As a result, these teams produced high quality outputs during the mobilization and launch phase —

appropriately staffed teams and complete performance strategies – that propelled them forward into the next phase of PTD and eventually to successful conclusions to their projects.

Low performing teams, in contrast, never really got started during the mobilization and launch phase of PTD. They mobilized relatively slowly. Their team leaders (TLs) utilized limited mobilization strategies that were primarily one-person shows concentrating on timetables and work plans, rather than on the content of their projects, and used political rather than competency criteria to staff their teams. They extended their leader-centered focus into the launch meetings hoping to spend the time communicating their agendas and focusing on implementation plans. Instead, the meetings denigrated into confusion and futile attempts to clarify project goals and technical content. As a result, all three of the low performing teams were inadequately staffed and two of the three emerged from their launch meetings with very little common understanding of the problems at hand or agreement on how to move forward. Not surprisingly, then, these teams continued to struggle with subsequent phases of PTD and failed to produce satisfactory results.

The study contributes to PT theory and research in three ways. First, it demonstrates the feasibility and desirability of merging the heretofore largely separate streams of PTD and PTE research. Second, it uncovers what appears to be a significant, yet little studied, phase of PTD: mobilization and launch. Third, it identifies several ways in which high and low performing PTs differ with respect to the activities they pursue and the nature and quality of the outputs they produce during this apparently key phase of PTD.

#### LITERATURE REVIEW

The PT literature is extensive. In the interest of parsimony, the focus here is on the themes and references that specifically inspired, guided, and informed the present analysis, with occasional passing reference to items that influenced the design of the broader study of which this analysis is a part.

#### **A Performance Focus**

PTE is commonly conceptualized in terms of team performance and assessed using such outcomes measures as adherence to budgets, adherence to schedules, and quality of products and solutions; additionally or alternatively, a few researchers consider individual-level variables such as team member satisfaction (Cohen & Bailey, 1997). The choice simply reflects the researchers' primary interests. In the present study, successful and unsuccessful teams were delineated in terms of three measures of team performance, reflecting a broader interest in understanding the ways in which spontaneously formed PTs contribute to organizational agility (Dyer & Shafer, 1998).

#### A Time-based Analysis

The PTE literature is primarily feature-based. That is, most studies are cross-sectional examinations of relationships between one or more team features (e.g., participant demographics, processes such as planning and communication, and states such as cohesion and degree of collaboration) and one or more measures of team performance or team member affect (for a recent review, see Cohen & Bailey, 1997). Theorists, in turn, periodically convert the results of such studies into complex, but nonetheless still feature-based, models of PTE (Brown & Eisenhardt, 1995; Kessler & Chakrabarti, 1996; Sheremata, 2000; Verona, 1999). This work has been criticized for basically ignoring the effects of time and team progress (or lack of progress) through various stages, phases, or episodes on PT performance. Years ago, for example, McGrath (1986) chided researchers of the day for studying team "statics" while professing to be interested in team dynamics. Present day critics sound much the same basic theme (Marks, Mathieu & Zaccaro, 2001).

Meantime, students of PTD have produced a plethora of studies and models examining the ways in which teams shape and alter their features over time (Gersick, 1988, 1989; McGrath, 1991; Tuckman, 1965 and Tuckman & Jensen, 1977; Wheelan, 1994). Only fairly recently, however, has this line of inquiry begun to directly address the issue of PTE (see, for example, studies by Jehn & Mannix, 2001; Smith & Comer, 1994; and Waller, 1999, as well as Marks, et al's [2001] "temporally based framework"). So far, though, this emerging literature lacks a longitudinal documentation of PTD that takes the further step of relating observed differences in developmental patterns to team performance. This is the gap that the present study was designed to fill. While the study is exploratory, it is loosely based on Gersick's (1988, 1989) punctuated equilibrium model (PEM), a time-based schema consisting of modal phases and key transition points that, while path-breaking, has curiously failed to produce much followon research (Cohen & Bailey, 1997; Chang, Bordia & Duck, in press).

#### The Full Picture

Studies of PTD, Gersick's (1988, 1989) included, tend to assume that a team's work starts with its inaugural or launch meeting. This tendency is perhaps influenced, or even necessitated, by the fact that much of the PTD research is conducted in laboratories rather than real organizations. The veracity of the basic assumption, however, has been called into question, sometimes by the researchers themselves. Gersick (1988:33), for example, speculated on the importance of events preceding a team's initial meeting: "The sheer speed with which recurring patterns appear [during that meeting] suggests that they are influenced by material established before a group convenes. Such material includes members' expectations about the task, each other, and the context and their repertoires of behavioral routines and performance strategies".

We located three studies that provide some support for the idea of studying PT activities that occur prior to the teams' initial meetings. Ancona (1990) found that strategies prepared by TLs prior to launch meetings influenced subsequent team activity and performance. Brown and Eisenhardt's (1997) comparison of PT activities in high and low performing organizations found

that in the former much more than in the latter PT initiations were carefully choreographed by staggering start dates, defining project scopes prior to recruiting team members, and matching team members' (TMs') skills and abilities to project needs.

Collectively, these preliminary findings support Cohen and Bailey's (1997: 284) hypothesis of a "... lasting effect of early events or decisions [on a group's] actions for a long period afterwards" and their call for "Future field studies [to] examine the conditions that promote effective decisions in the group's initial stages". Accordingly, in the present study, a PT's initiation rather than its launch meeting served as the starting point for data collection. The (often extended) period between these two events – referred to as a team's mobilization and launch phase – proved to be a rich source of insights typically missed or only hinted at in earlier studies.

#### **An Emphasis on Activities and Outputs**

Students of PTD and PTE face a formidable proliferation of features for potential inclusion in their research and models. Yet, even in exploratory studies (such as this one), where there is no explicit a priori delineation of anticipated features, parsimony demands decisions about emphasis during design, data collection, and analysis. With respect to activities, the most fundamental distinction is between taskwork (i.e., actions taken to manage the work process, such as planning, monitoring, and time management) and teamwork (i.e., actions taken to facilitate participant interaction such as communication, coordination, and conflict management). The choice between these primarily depends on the stream of research in which a study is embedded. In the present instance, consistent with Gersick (1988, 1989; see also Chang, et. al., in press), the emphasis was on taskwork rather than teamwork and, thus, much of the focus is on differences in work related activities between high and low performing PTs during the mobilization and launch phase of PTD.

The analysis goes one step further, however, by adapting the classic input-processoutcome (I-P-O) framework (e.g., Gladstein, 1984; Hackman, 1987; McGrath, 1984) that dominates much of the PTE literature by applying it to each phase of PTD. As a result, it is possible not only to highlight differences in taskwork, but also to show how these differences resulted in variations in the nature and quality of the outputs produced during the mobilization and launch phase. (In the larger study, these outputs are treated as inputs into the next phase of PTD, and so on through three phases of PTD; the analysis focuses on the ways in which these inputs/outputs are differentially transformed by high and low performing PTs across time).

#### Summary

To date, the PTD and PTE literatures have developed along parallel, but seldom intersecting, paths. The present analysis not only integrates the two, but also extends each. PTD research tends to begin data collection with a team's inaugural or launch meeting, despite occasional references to the potential importance of activities that precede that meeting. This study explores this previously murky domain by beginning data collection at a team's initiation rather than its first meeting and, thus, identifying a new phase of PTD – mobilization and launch. Further, the study provides some guidance for subsequent research into this new domain by identifying several ways in which high and low performing teams differ with respect to the activities they pursue and the nature and quality of the outputs they produce during this phase of PTD.

#### **METHODS**

Since theory and research linking PTD and PTE is too sparse and inconclusive to yield specific hypotheses, we chose to employ a field-based, multiple case study methodology (Eisenhardt, 1989a, Yin, 1994). This methodology is specifically designed to provide meaningful and powerful explanatory propositions for future research (Langley, 1999: 704), where limited prior theory or empirical evidence exists.

We studied six teams operating in five large, well-known multinational firms. (The two from the same corporation operated independently and had no known contact with one another.) These are referred to, euphemistically, as Paper, Wood, Glass, Image, Chair, and School. Multiple types of real-time and retrospective data -- mid-case interviews (MI), observation (O), secondary sources, post-case interviews (PI), and surveys -- were collected

from multiple sources representing different team perspectives -- project champions (PCs) and team leaders (TLs), team members (TMs), and, when possible, internal or external customers (C) (see Table 1). When reporting direct quotes, we identify the team, the participant, and the data type. For example, [C PC MI] indicates a quote from the Chair team's project champion occurring during the mid-case interview while [P TM1 PI] pertains to the Paper team and indicates a quote from a team member occurring during a post-case interview.

TABLE 1 **Description of Data Collected** 

Mid-case interviews			Observation		Secondary sources	Post-case interviews		iews	Surveys	
Team	PC/ TL <sup>a</sup>	TM <sup>b</sup>	$C_c$	Events	Hours		PC/TL	TM	С	
Paper	0	0	0	0	0	1	4	8	0	7
Wood	3	2	1	4	15	3	2	8	1	8
Glass	3	1	0	8	15	5	4	6	1	8
Image	2	1	0	6	12	6	1	5	0	6
Chair	4	2	0	5	35	5	1	7	0	6
School	4	0	0	3	10	2	2	2	0	3
Totals	16	6	1	26	87	22	14	36	2	38

a Interview with project champion or the team leader
 b Interview with team member

#### **Organizational and Team Characteristics**

Recent reviewers (e.g., Cohen & Bailey, 1997) have taken researchers to task for failing to thoroughly capture and/or report the seemingly most significant of PT variations thus complicating not only the interpretation of single study results, but also the integration of findings over time. The following, subject to limitations imposed by assurances of anonymity and confidentiality, is our attempt to be responsive to this critique.

As Table 2 shows, while all five of the companies from which the PTs were drawn have multiple product lines, broadly the industries represented include photographic equipment. scientific and control instruments, telecommunications equipment, furniture, and computers. At the time of the study, the companies' annual revenues ranged from just under \$2 billion to about \$87.5 billion, putting all but one of them in the Fortune 500 (and the fifth in the Fortune 1000).

<sup>&</sup>lt;sup>c</sup> Interview with internal or external customer

All six PTs represented spontaneous organizational responses to emerging opportunities, either within the company (the School team) or in the broader marketplace (the remaining five teams). Still, they had a broad range of goals or purposes: (1) analyze and recommend for or against an acquisition opportunity (Paper), (2) design and implement an ecommerce Web site (Wood), (3) create an e-commerce business strategy and supportive operating plans for two pilot projects (Glass), (4) develop and implement a new business model for a critical product line (Image), (5) design a service offering that would consolidate and integrate currently dispersed and diverse services (Chair), and (6) develop a strategy for delivering distance learning corporate-wide (School). As can be seen, four of the projects (Paper, Glass, Chair, and School) were about designing and/or recommending a product or solution, while the remaining two (Wood and Image) also involved implementation activities. Participants characterized the various projects as novel and innovative in the sense that the issues involved were new to their companies and/or unfamiliar to the people involved. In interviews they used phrases such as: "never been through it before" [P TM2 PI], "not sure what we're building ... don't know how to do it, but we know it needs to be done" [W TM1 MI], "a new platform" [G TM1 PI], "a fundamental reinvention of customer relationships" [C TL MI], and "a new area for us" [W TL MI].

TABLE 2 **Organizational and Team Characteristics** 

Team	Firm industry	Firm size	Team task	Task familiarity	Member familiarity <sup>b</sup>	Location	Proposed life span <sup>c</sup>
Paper <sup>a</sup>	Photographic Equipment	\$14.1 BB	Analyze and recommend for or against an acquisition opportunity.	"We knew nothing about [the target company or its market] as a team." [P PL PI] "All we knew was that they [the acquisition target] were looking for money." [P TM1 PI]	10%	Distributed 2-Sites	49
Wood	Scientific and Control Instruments	\$15.6 BB	Design and implement company's first business-to-consumer web-site.	"We're not sure what we are building, we've never done it before, and we don't know how to do it, but we know it needs to be done.  That's the spirit of this project." [W TM1 MI]  "This is a new area for us. All we know is that its called [X] and we have an unreasonable deadline." [W TL MI]	21%	Co-located	97
Glass	Telecom- munications Equipment	\$4.8 BB	Create business, technical, and funding plans for company's first two e-commerce pilots.	"The challenge was we were embryonic at [Glass] regarding e-commerce." [G TL PI] "It's a new platform [for us] it was tough because this platform reached into everything." [G TM1 PI]	17%	Distributed 2-Sites	101
Image <sup>a</sup>	Photographic Equipment	\$14.1 BB	Identify, design and implement new "business models" that drive additional sales of the key product.	"There was an underlying opportunity [after acquiring a competitor] we now had a very strong product portfolio. We were leaders in the market where before we had been struggling. What can we do to leapfrog that advantage further?" [I TM1 PI]	13%	Distributed 2-Sites	259
Chair	Office Furniture	\$1.8 BB	Design a new "global provisioning" service solution to take to market.	"[The team's efforts involve] a fundamental reinvention of customer relationships a new value proposition." [C PC MI]  "It's [a customer] saying, "We need 16 workstations in a war zone in Colombo, Sri Lanka. We don't know the area or the suppliers even if you don't have the furniturewe trust you to find it and install it and we'll pay you to do it." [C TM1 MI]	11%	Co-located	102
School	Computers	\$87.5 BB	Develop a strategy for delivering distance learning corporate-wide.	"We're changing our learning services model from classroom-centered to distributed." [S TL MI] "How do people get their questions or problems resolved ["virtually"]? In a classroom we just raise our hands. Over a computer it's impossible." [S PC O]	22%	Co-located	39

<sup>&</sup>lt;sup>a</sup> Cases from the same organization. <sup>b</sup> Represents the percentage of team members who were working together when the team was formed. <sup>c</sup> Represents the number of days between a team's initiation and its original deadline.

Newness and unfamiliarity also extended to the team participants; collectively only 16% of them were working together when the teams were formed. In half the cases (Wood, Chair, and School), team members were housed at the same site, while in the other half (Paper, Glass, and Image) they were drawn from two or more sites. Finally, all six project teams were temporary; deadlines for project completion (which as we shall see, were not always adhered to) ranged from a relatively short 39 days (School) to a rather lengthy 259 days (Image).

#### **Data Collection**

Because it is difficult to know a priori when a PT will be initiated, we relied on personal contacts (Wood, Glass, and Chair) and people associated with Cornell University's Center for Advanced Human Resource Studies (CAHRS) (Paper, Image, and School) to identify potential cases as they emerged. Once a case was identified, we asked the contact to speak with the PC, describe the nature of the study, ask if he or she would be willing to participate. Of the nine cases initially identified, six were selected: three were rejected because either they represented a preexisting PT given a new problem or task or they expected to stay together indefinitely. All of the six PCs who were approached agreed to participate in the study. Case selection occurred, and thus data collection began, at varying points in the teams' life spans. Two cases (Chair and School), were selected prior to their launch meetings (25 and 28 percent of the way through their projects, respectively) whereas another (Paper) was not selected until after it had nearly completed its work. The remaining three cases (Wood, Glass, and Image), were selected somewhere between these extremes (49, 59, and 74 percent of the way through respectively).

Once a case was selected, two types of mid-case interviews (except in the case of Paper) were conducted using a semi-structured format. First, mid-case interviews with PCs were conducted to gather detailed information about the nature of events that led to the initiation of the team, the project-specific objectives and performance indicators, the composition of the team, and the deadlines that would characterize team efforts. At the end of these interviews,

we asked the PCs to provide the names of the TLs as well as a few additional team participants with detailed knowledge of their teams' actions to date. Additional mid-case interviews were conducted with these individuals to track early team actions and decisions and to support post-case interview data. In total, 23 mid-case interviews were conducted. The number of mid-case interviews per team ranged from zero (Paper) to six (Wood and Chair). Most of the mid-case interviews were conducted over the phone and thus were not taped. In either case, extensive notes were taken. If we were unsure of whether or not we had taken down a quote verbatim, we repeated what I had written and asked if the quote was accurate. Other times, we asked the informant to repeat what he or she had just said so that an accurate quote could be obtained. Mid-case interviews typically lasted one hour, although they ranged in length from 30 minutes to over three hours.

During the team's efforts, qualitative data were collected via observation and secondary sources. Observations provided real-time data and allowed us to track the actions of the team as they unfolded. We attended team meetings and presentations and listened in on conference calls. When observing, we took notes, kept a record of impressions, and recorded informal observations. In total, we spent approximately 87 hours observing 26 different team events. The number of observed events per team ranged from zero (Paper) to 8 (Glass). We also, opportunistically, collected and examined secondary source information for every team in the study. These included documents describing initial work objectives, work plans, final presentations, and post-hoc team evaluations.

Once a team had completed its work, team participants were interviewed using a semistructured format. The post-case interviews consisted of open-ended questions divided into three parts. In the first part, we asked participants to describe their previous (and often ongoing) roles within the company, their areas of expertise, their roles on the teams, and the processes by which they came to be a part of the teams. In the second part, we asked participants to describe the teams' project and objectives, the impetus or trigger for the teams' initiation, and the degree to which the company has tackled similar problems in the past. In the final part, which represented the majority of interview time, we tracked the teams' efforts from beginning to end by asking participants to provide a detailed description of events that took place. To facilitate the process of grounding team actions to specific dates, we asked each participant to refer to a calendar or to dated outputs. We asked questions that concentrated on facts and events using an "interrogation style" (e.g., What happened next? How did you decide to do that?, etc.). In total, 52 post-case interviews, ranging from one to over two hours were conducted. The number of post-case interviews per team ranged from four (School) to 12 (Paper). At the completion of the post-case interviews, we obtained quantitative data from questionnaires that focused on variables from prior research on PTs as well as items measuring mobilization speed and team performance.

#### **Data Analyses**

Consistent with a multiple case study design, we began by building individual case stories (Eisenhardt, 1989a). First, we entered all of the data into a chronologically ordered case story with dates assigned to each team action. Each began with a brief background describing the events that led to the organization's decision to initiate a PT and went on to document the team's mobilization effort, initial and ongoing meetings and action, as well as all other critical events that were mentioned during mid- and post-case interviews. Typically, there was high agreement among the various data sources around the critical issues of when the team was initiated, when it held its first meeting, and when significant breakthroughs or changes in content or process occurred. Conflicting accounts or actions mentioned by only one team member, although rare, were also placed into the case story. Observation notes and secondary source materials were analyzed and placed into the case at the times in which they occurred. While similarities and differences among the cases were noted as the case stories were being written, no formal case analyses were conducted until all of the six case stories were complete.

Next, we content analyzed the case stories for critical variables; Each line of the case was coded and quotes and actions were organized around emerging themes (Glaser & Strauss, 1967). If the data suggested more than one content category, the quote or action was placed in both. For example, the comment that "This is a new area for us. All we know is that its called [X] and we have an unreasonable deadline" [W TL MI] was coded as both project novelty and time pressure. This process, which yielded 58 within-case variables, ensured that potentially critical factors would be allowed to emerge.

Once the individual case stories were content analyzed, we used tactics suggested by Eisenhardt (1989a), and Miles and Huberman (1994) to compare across cases. We had no a priori hypotheses. As a starting point, each team's case story was condensed in two successive steps. The first step involved compressing multiple accounts of a single team action into one brief description. We then condensed these statements further into a one page case overview, concise enough to allow an overall perspective of the team's progress throughout the event, yet detailed enough to allow us to trace general observations back to the detailed case story dates. Both of the simplified case write-ups were used to compare the cases and identify common dilemmas and transition points as well as to refine the unique aspects of each individual case. Further, by attaching dates to the single page stories, we were able to compare the timing of actions across teams. To reduce the possibility of premature or even false conclusions (Eisenhardt, 1989a), the data were analyzed in divergent ways. Initially, pairs of cases were selected and similarities and differences between the cases were noted. As this analysis progressed, groups of cases were analyzed in a similar way using matrices, process-maps, and other tools to allow for the comparison of multiple factors (Miles and Huberman, 1994). Finally, the cases were divided and compared by data source. Data sources included both the level from which the data were collected (e.g., PCs vs. TLs vs. TMs) and the type of data collection process used (e.g., interview vs. survey). The cross-case analysis processes yielded 20 critical variables.

As the cross-case analyses were conducted, tentative propositions among the identified variables began to emerge. At this point, we examined the specific evidence from each case and compared it to the emerging proposition. Any differences between the cases and the emerging frame were used to extend and refine the proposition. After this, no new cases were added since fortunately, the analysis revealed that the six PTs divided equally into three that were high performers and three that were low performers and the findings were clearly converging around common themes (Eisenhardt, 1989a). The final number of cases studied is consistent with multiple case study theory-building (Eisenhardt, 1989a) and prior case study research on related phenomenon (Ancona, 1990).

After many iterations between the data and the emerging propositions, we returned to the extant literature to sharpen the insights that emerged from the inductive process against existing theory and evidence. The results suggested close relationships between mobilization and launch phase activities and outputs and systematic differences in these relationships between high and low performing PTs.

#### **RESULTS**

#### **Team Performance**

As noted, the data indicated that three of the PTs were high performers and three were low performers. Performance was assessed using 7-point scales on three dimensions: timeliness of product or solution, quality of product or solution, and degree of collective ownership of the product or solution. (A potential fourth dimension -- the degree to which the teams brought their final products or solutions in on budget – failed to materialize since none of the PTs in the study had an official budget.) Anecdotal evidence on these three points was also collected via interviews and observations. Table 3 summarizes the results.

Table 3
Team Performance

Team <sup>a</sup>	On time	Quality	Collective ownership	Examples
Paper	Yes 6.5	6.3	6.6	" it was a smashing success. [The CEO] said, 'We've got something here' The team was pumped up. They were really excited." [P PC PI]  "We did a great job." [P TM3 PI]  "It wasn't the best, easiest or most productive way to get there but we did it It was fun, an exciting thing to be a part of." [P TM4 PI]
Wood	Yes 6.2	5.0	6.0	"We just changed the way we do business We shook up the competition." [W C PI] "This was highly successful. It may open up anywhere between [X] and [Y] million [in additional revenues]." [W PC PI] "We were successful." [W TL PI] "No one knew anything about the databases in these environments. It was an incredible accomplishment that we set out and achieved. The technical solution is lousy but we met the business needs so it was a success." [W TM2 PI]
Glass	Yes 6.5	5.9	6.1	"I'm impressed. This is well put together I never thought we'd get this far this year The old [Glass] would not have gotten this done. Or, it would have been uselessly slow."  [G C O]  "When people look back, they'll say that this is one of the most strategically important things we've ever done, but it takes a grass roots effort to get there." [G PC PI]  "It was effective. We got a lot of bang for the buck." [G TL PI]  "At the end of the day, we had a damn good presentation." [G TM2 PI]
Image	No 3.5	4.5	4.0	"We were as effective as we could have been given the support we received from managers The only one [of the five initiatives] that we completed was [X]." [I TL PI] "We contributed [to meeting the goal of selling more product]. I don't think we inhibitedI personally get frustrated when things don't move at a steady pace. Why haven't we accomplished more?" [I TM1 PI] "I overheard [TM3] say that it was horrible, but I don't know." [I TM2 PI]
Chair	No 2.8	4.5	4.3	"I'd rate [the performance] down At [my prior firm] I could have pulled people together and slammed it out." [C TL PI] "Were we successful? Yeah, we were successful. Could we have done it faster? You bet At the end of the day, I still don't know if we've got something saleable." [C TM2 PI] "We were unable to reach consensus. We went through the process and we got input but it was a stalemate." [C TM1 PI]

<sup>&</sup>lt;sup>a</sup> The School team disbanded approximately half way through its project.

Across the three high performing teams (Paper, Wood, and Glass), the ratings were as follows: on-time performance – 6.2 to 6.5, quality of product or solution – 5.0 to 6.3, and collective ownership of product or solution – 6.0 to 6.6. Representative comments from PCs, TLs, and TMs included "smashing success" [P PC PI], "incredible accomplishment" [W TM2 PI], and "damn good presentation" [G TM2 PI]. Of the remaining three teams, one (School) disbanded about half way through its allotted time, while the other two (Image and Chair) accrued considerably lower scores on the three dimensions of performance: on-time performance – 2.8 and 3.5, quality of product or solution – 4.5 for both, and collective ownership of product or solution – 4.0 and 4.3. The frustrations and concerns of those involved with these two teams are reflected in comments such as: "the only one [of the five initiatives] that we completed was [X]" [I TL PI], "why haven't we accomplished more?" [I TM1 PI], "I'd rate [the performance] down" [C TL PI], "it was a stalemate" [C TM1 PI], and "Yeah we were successful... [but]... at the end of the day I still don't know if we've got something salable" [C TM2 PI].

#### **Overall Pattern of PT Development**

Broadly, the data suggested that, between initiation and completion, all six of these PTs passed through four distinct phases punctuated by two major inflection points. The first phase, mobilization and launch, represents the period between the times the projects were initiated and the points at which the teams actually started functioning.

The second phase, post-launch to midpoint transition, began with periods of inertia (Gersick, 1988) during which the teams more or less actively pursued the frameworks and/or performance strategies that had been established during the initial meetings. These activities continued the teams reached an inflection point approximately halfway between the launches and their designated deadlines. At this juncture, called the midpoint transition (Gersick, 1988), accumulated concerns and doubts about their frameworks, performance strategies, and/or progress reached a head, and the teams began to seriously reflect on their prospects. During

this initial inflection point, five of the six altered their projects and/or the way they were approaching their projects, while the sixth (School), it will be recalled, disbanded.

The five remaining PTs then entered the third phase, post-midpoint transition to showdown. Again, there was an initial period of inertia (Gersick, 1988) as the teams focused on the implementation of their transition outputs. As deadlines approached, mild to serious panic ensued as TMs became increasingly convinced that their PTs could not possibly produce quality products or solutions in the time remaining. At this second inflection point, the teams once again made significant shifts in the nature of and/or intensity of their activities.

Finally, post-showdown to completion, the teams entered yet another period of inertia, during which they basically followed through with the courses of action established at their showdowns until their projects were completed. Although the four-phase, two-inflection point pattern of team development was ubiquitous, there clearly were some significant variations across high and low performing teams with respect to the duration of the phases and thus the timing of the inflection points and, especially, the nature of the activities pursued and the outputs produced during these phases and inflection points. In particular, what really differentiated high from low performing teams was their ability to use the mobilization and launch phase to get off to high quality starts.

Attention now turns to an analysis of the extent to which the high and low performing teams differed with respect to (1) mobilization and launch speed, (2) mobilization activities and strategies, (3) launch meeting activities, and (4) mobilization and launch phase outputs.

#### **Mobilization and Launch Speed**

In all six cases the mobilization and launch phase lasted a relatively long time (see Table 4). Nonetheless, the three high performing teams tended to move through it more rapidly than did the three low performing teams. Mobilization speed was measured in three ways. First, for each project team we divided the total number of days spent mobilizing by the total number of days available to the team between the date of its initiation and its original deadline (see

Eisenhardt [1989b] for a similar treatment of strategic decision-making speed). Second, the questionnaire asked team participants to indicate on a 7-point scale the extent to which they believed their teams mobilized quickly. And third, in interviews respondents were asked to describe and characterize the mobilization process.

The three high performing teams spent about one-third of their available time mobilizing; specific figures were 38%, 33%, and 37%, respectively. Team participants viewed this as quite to moderately fast; their ratings across the three teams averaged 6.1, 5.8, and 5.4 respectively, and in interviews they used phrases such as "did a month of work in five days" [P TM1 PI], "dropped everything and started forming a team" [W TM3 MI], and "pretty fast all things considered" [G PC PI]. Two of the three low performing teams, in contrast, used about one-half of their available times to get started – 51% for Chair, and 49% for School – which, not surprisingly, was viewed as rather slow in the ratings – 2.5, and 4.3 respectively – and the comments: "There was a timing mishap; everything went sideways for a while" [C TL MI], and "It's the three week start-up time [on a 39 day project] that's the killer" [S TL MI]. The third ultimately less successful team, Image, provides a partial exception here. The team used 34% of its available time mobilizing. But, given its relatively long life span (259 days) this was viewed as fairly slow in the ratings (4.8) and the comments: "a team was formed in a month or two" [I TL MI].

TABLE 4
Mobilization Speed

	Mobilization Speed									
Team	Proportion of time <sup>a</sup>	Survey Examples								
Paper	38%	6.1	"Things really ramped up. We got the team together fast." [P TL PI]  "[We] did a months worth of work in five days." [P TM1 PI]  "They came on quickly, got up to speed, and made some great recommendations."  [P TM2 PI]							
Wood	33%	5.8	"We dropped everything and started forming a team." [W TM3 MI]  "The idea of being fast on our feet was important." [W TM1 MI]							
Glass	37%	5.4	"There's a ramp-up time it takes to get moving [The mobilization process] was pretty fast all things considered." [G PC PI] "There's a gestation, a rhythm to getting up to speed and we haven't had as much time as we need." [G TL MI]							
Image	34%	4.8	"A team was formed [in] a month or two." [I TL MI]							
Chair	51%	2.5	"There was a timing mishap. Everything went sideways for awhile." [C TL MI]  "It [was] hard to find a time when everyone could meet." [C TL MI]							
School	49%	4.3	"It's the three week start-up time [on a 39 day project] that's the killer." [S TL MI] "The idea was to get people together fast [But] it's not as if [potential TMs] sitting on the bench waiting for us to call them with a problem." [S TL O]							

<sup>&</sup>lt;sup>a</sup> Represents the total number of days spent mobilizing divided by the total number of days available to the team between the date of its initiation and its original deadline.

#### **Mobilization Activities and Strategies**

Systematic differences occurred across the high and low performing teams with respect to activities emphasized during the mobilization period and, more broadly, the teams' overall mobilization strategies.

Mobilization Activities. We uncovered eight differentiating activities during mobilization, which were subsequently grouped into four broad categories: (1) content clarification (activities directed toward defining project scopes, gathering supporting background information, and creating working documents), (2) process formation (activities aimed at developing performance strategies and work plans), (3) personnel matters (activities focused on creating roles and responsibilities of team members, establishing criteria for selecting team members, and acquiring team members), and (4) team member involvement (activities designed to bring people other than the PCs and TLs into the loop).

**Mobilization Strategies.** Cross-case comparisons of activity patterns across these four categories turned up two quite distinct mobilization strategies. (It is perhaps important to note here that these depictions are what Mintzberg [1978] calls realized strategies – that is, post hoc summations of observed activities. No respondent mentioned, let alone identified these or any other mobilization strategies during the interviews.)

The three high performing PTs (Paper, Wood, and Glass) followed what might be called a comprehensive mobilization strategy, while the three low performing PTs (Image, Chair, and School) used a much more limited approach (see the data shown in Table 5). In the former cases, considerable time and effort was put into content clarification activities, while little to no time and effort went into process formation activities; in the latter cases (with the partial exception of the Image team), the exact opposite pattern prevailed. Further, in the three high performing teams, between three and six people were involved in content clarification activities, while in the low performing teams, two of the three TLs elected to do the process formation activities themselves (while the third, Image, also involved the PC).

All six PTs recruited team members during the mobilization period, of course, although again this was done in quite different ways. In the three high performing teams, between three and six essential roles, with attendant responsibilities and competency requirements, were designated early on and webs of sources and contacts were then used to locate and recruit team members with the essential qualifications. All three of these teams accumulated TMs fairly rapidly and with very little difficulty. In the three low performing teams, in contrast, only one or two team roles and their associated responsibilities were specifically designated during the mobilization period; most TMs were chosen using a stakeholder, or political, approach (i.e., TLs tried to assure representation by all potentially affected organizational units). Leaders of these PTs, rather than casting broad nets, relied heavily on their own, necessarily more limited, personal knowledge and contacts to identify TMs and, in all cases, experienced significant delays and problems in locating and enlisting suitable participants.

Paper and School (high and low performing teams, respectively) illustrate the comprehensive and limited mobilization strategies. The Paper team, it will be recalled, was formed to investigate and make a recommendation on the potential acquisition of a foreign company it knew nothing about. Within a few days of initiation, the PC identified two key roles that were essential to carrying out the team's initial activities and enrolled two individuals – one a manager of technology and the other a manager of new business development – to participate. Once in place, these three quickly decided to focus their efforts on the valuation of the potential acquisition target. The manager of technology visited the company to collect data on its people, products, and operations, after which the two managers collaborated on the preparation of a so-called opportunity assessment document that became the focus of the team's launch meeting. Simultaneously, the three initial participants identified two additional roles to be filled, defined the competencies that would be needed, and with the help of colleagues identified potential candidates and brought four additional members on board (an additional team member with manufacturing expertise was added during the launch meeting, bringing the total team size to 7).

TABLE 5
Mobilization Activities and Strategies

		Process Formation				
Team	Defining project scope	Gathering background information			Developing performance strategies	Participants involved
Paper	Team decides to focus on the valuation of the target company.	Target company visited; data collected. Confidentiality agreement signed; propriety business case acquired.	"Opportunity assessment" document created.	3	-	-
Wood	Web-site design activities initiated. Negotiations for software begun.	Functionality requirements for the Web site outlined.	Initial functionality requirements working document generated.	5	-	-
Glass	The two pilots selected from list of five. E-commerce vendor chosen.	Previously gathered "deep dive" operating information accessed.	Pilot overview documents produced.	5	-	-
Image	-	Participants asked to bring project-relevant ideas to the launch meeting.	-	1	-	-
Chair	-	-	-	-	Work-plan created.	1
School	-	-	-	-	Work-plan with milestones created.	1

	Personnel Matters									
Team	Selection	Roles	Participants	Examples						
	criteria	created	involved							
Paper	Competency	3	5	"[The PC] went to the head of M&A who went to my boss. I was selected." [P TM3 PI] "We decided to [select the TL] [because] he was recommended." [P PC PI] "My boss came to me and told me that [TM1] needed marketing talent on the team." [P TM6 PI]						
Wood	Competency	5	5	"When this thing was starting, we said: 'what's the functionality?' and then we found people who could deliver that." [W TM1 MI] " one person was mentioned by a couple of team members the team decided not to select him because two people had had bad experiences with him." [W TL MI] "She self-selected. Once she heard about the project she with her boss and [TM5] to get on the team." [W TL MI]						
Glass	Competency	4	6	"I talked to [the E.V.P. of corporate marketing] and he made it [the acquisition of TM4] happen." [G TM1 PI] "[When TM3 became available] I grabbed her." [G PC MI]						
Image	Stakeholder	1	2	"[The PC] put the team together. He wanted broad participation people from all the regions." [I TL MI]						
Chair	Stakeholder	1	1	"I went through the [project relevant] practice areas and pulled them [the participants] in." [C TL MI]						
School	Stakeholder	2	1	"I called everyone in the world to find the resources to join the team I made 40 calls and got no resource or calls back." [S TL MI]						

The School team, as noted, was initiated by a group of business unit trainers ("Learning Integrators") to make recommendations on ways to best invest \$5-8 million to improve the company's distributed learning efforts. A TL was identified and she soon added one other person – a facilitator from the organization's internal consulting unit – to assist with the team's mobilization activities. Neither of these individuals engaged in any content-clarification activities prior to the team's official launch. Rather, what little time they devoted to the project was spent generating work plans (i.e., schedule of activities) intended to cumulatively add up to a recommendation just before the team's deadline. No effort was made to designate team roles other than the TL or to define the expertise or skills that would be needed to carry out the project. Rather, the team leader did her best to identify and recruit members who represented units with strong vested interests in the project's outcome.

#### **Launch Meeting Activities**

The launch meetings of the high and low performing PTs differed in two important respects: format and substance of the discussions.

As the preceding discussion suggests, the three high performing teams entered their launch meetings armed with carefully scoped projects, preliminary notions about what their final products or solutions should look like, supporting documents, TMs with a wealth of information about the critical issues involved, and fair amount of familiarity among the participants. The TLs planned highly participatory meeting formats that consisted of intensive working sessions that, for the most part, focused on substantive matters. Consider again the case of the Paper team. The three original members of the team collaborated to develop an agenda. The meeting was held during a larger meeting of the newly formed New Business Development Group, so that several knowledgeable non-participants could be brought into the discussions. The bulk of the discussions centered on the specifics of the acquisition target's business – the nature of its intellectual property, its ability to protect this intellectual property, its capacity to turn ideas into real products, and so forth.

In contrast, two of the low performing teams (Chair and School) entered their launch meetings with very little a priori information and with members who had little previous knowledge of or experience with one another. The TLs prepared leader-centered agendas designed primarily to communicate their views of the tasks at hand and their tentative action plans and meeting schedules, with the intent that discussions and decisions would focus on the implementation of these plans. In both cases, though, actual discussions were characterized by seemingly endless efforts to clarify the projects' goals and technical aspects and by a great deal of confusion from beginning to end. For example, the School team's launch meeting lasted four hours. At the beginning, the TL stated that one important goal was to "... define the width, the height, and the depth of the problem space" [S TL O]. During the meeting, the team generated 14 "problem statements", none of which was ever adequately clarified. Not surprisingly, sample comments made toward the end of the meeting reflected considerable bewilderment: "I'm confused; I'm trying to put my finger on what's wrong" [S TM1 O], "I think we're expanding the scope [of the project]" [S TL O], and "Do we have a problem here or not?" [S TM1 O].

The third ultimately less successful team, Image, provides a partial exception here. Before the launch meeting, the PC attempted to clarify for individuals who would be involved both the purpose and scope of the project and, in turn, asked them to come to the meeting armed with relevant background information and ideas for increasing the sales of the product in question. Further, although Image's TL eschewed detailed action planning or meeting scheduling during the mobilization period, he did design an essentially leader-centered agenda for the launch meeting. The meeting was a mixed bag. While there were periods of confusion and frustration (in part because those assembled lacked some knowledge that would have been helpful) and the meeting took longer than originally expected, the discussion, for the most part, remained focused on the task at hand.

#### **Mobilization and Launch Phase Outputs**

The high and low performing PTs differed with respect to two outputs of the mobilization and launch phase: team design and post-launch performance strategies.

**Team Design.** Despite wide differences in their mobilization activities and strategies, the six teams studied here did not vary widely on three commonly examined team design variables: team size, functional diversity, and gender diversity (see Table 6). Specifically, team size averaged 8 and 7, the proportion of functions represented to team size were 55% and 64%, and the proportion of women to team size were 32% and 38% for high and low performing teams respectively. (Treating team design as an output of the mobilization and launch phase is appropriate here since five of the six teams did not add or remove members post-launch and the remaining team [Image] added only one team member about 80 percent of the way through its project.)

#### TABLE 6 Team Design

				Participant Resource Alignment						
Team	Team	Functions	Gender	Full-	Part-	Over	_	Scarcity	Misalignment	
	size	represented	diversity	time	time	-time	Survey	Examples	Examples	
Paper	7	5	5M, 2F	2	2	3	6.1	-	-	
Wood	9	5	5M, 4F	4	3	2	4.8	-	-	
Glass	8	4	6M, 2F	1	2	5	5.0	-	-	
Image	8	4	5M, 3F	0	1	7	3.3	"We stumbled on the resources We could have moved a lot faster if we could have freed-up some resources." [I TL PI] "I would have put a person on this full-time The biggest problem is out inordinate workload and this was just another thing to do." [I TM2 PI] "I wish we could have got more finance people involved, really involved They really understand what's happening." [I TL PI]	-	
Chair	8	5	5M, 3F	0	2	6	3.5	"Some of the people who could have contributed weren't [selected]." [C TM2 PI] "[TMs from X] never showed-up Their help would have been critical." [C TM3 PI] "I wish [the PC and TL] would have just provided an allocation of time and resources and then let us go and develop it." [C TM4 PI]	"There were some inherent limitations in the group we pulled together." [C TL PI] "There were some people [on the project], I still don't know why they were [TMs]." [C TM1 PI] "Could it have been a smaller crowd? Yes! There were too many people [on the team]." [C TM2 PI]	
School	5	4	3M, 2F	0	2	3	4.0	"[One assigned TM] had checked in once but hasn't actively participated." [S TL PI] "[Another selected TM] couldn't make the first meeting. I tried for weeks to get a hold of him but we haven't got anything back." [S TL PI]	"What we went through wasn't unique. You need to address a problem and sometimes you don't have the expertise They weren't the right group." [S PC PI]	

One distinguishing team design variable -- participant resource alignment -- however, did emerge from the data (see Table 6). Clearly, the three teams that used the comprehensive mobilization strategy emerged from the mobilization process more adequately and appropriately staffed than did the three teams that used the limited mobilization strategy. On average, the members of the Paper, Wood, and Glass teams were about evenly distributed among those whose commitment to the team were full-time, part-time (i.e., they had released time from their regular work to dedicate to the projects), and over-time (i.e., they were expected to work on the projects in addition to performing their regular duties). Across the Image, Chair, and School teams, however, the corresponding figures were zero, one-fourth, and three-fourths. On the questionnaire, participants on the three teams that used the comprehensive mobilization strategy, on average, rated their "access to needed resources" between 4.8 and 6.1; the ratings of those on the three teams that used the limited mobilization strategy averaged between 3.3 and 4.0 (all of these ratings were on a seven-point scale). Further, interviews with participants of the teams that used the comprehensive mobilization strategy elicited no concerns about participant resource scarcity or misalignment, while interviews with corresponding respondents on the teams that used the limited mobilization strategy were laced with concerns about both. To wit: "... the problem was complex and no one had the resources to address it" [I TL PI], "I would have put a person on this full-time ... The biggest problem is our inordinate workload and this was just another thing to do" [I TM2 PI], "Some of the people that could have contributed weren't [selected]" [C TM2 PI], "There were some people [on the project], I still don't know why they were [TMs]" [C TM1 PI], "and "[one assigned team member] has checked in once, but hasn't actively participated" [S TL PI].

Post-launch performance strategies. The second output of the mobilization and launch phase pertains to the post-launch performance strategies that emerged from the launch meetings. The key activities fell into three categories: (1) problem clarification (i.e. the specification of the team's task and/or product or solution), (2) solution framework (i.e., an

agreed upon framework for moving forward), and (3) task designations (i.e., a set of post-launch assignments) (see Table 7). Four of the teams, the three high performers plus Image, produced complete post-launch performance strategies in the sense that they generated all three of these outputs during their launch meetings. The Paper team, for example, left the meeting with a clear idea of the task ahead, a detailed solution framework that identified key pieces of information that were still missing, and sub-teams assigned to track this information down. In the words of one team member, describing the end of the launch meeting, "... we've got tasks and duties coming out our ears ..." [P TM1 PI].

The two other low performing teams (Chair and School) emerged from their launch meetings with incomplete performance strategies since both failed to reach agreement with respect to problem clarification and to produce a solution framework. Both, however, did manage to produce task designations. The Chair team, after much debate, simply fell back on the work plan that the team leader had brought to the meeting. The School team, following the generally frustrating discussion noted above, scrapped the work plan the TL had generated and instead, literally during the last 5 minutes of its launch meeting, opted for what one team member called a "divide and conquer" approach. Two sub-teams, one from each of the key units represented (Learning Services and Human Resource Information Technology), were assigned to document current procedures and report back to the team with a "straw model" so that it would have, in the words of one participant, "... something to shoot at" [S TL O].

### TABLE 7 Performance Strategies

Team	Problem clarification	Solution framework	Task designation
Paper	Yes The team agrees on the "business objectives for entering the market."  "We refined it from a concept to here's what we want to do." [P PC PI]	Yes The team identifies key pieces of information still missing from potential valuation. "We [decided what we] needed to know." [P TL PI]	Yes The team assigns individuals and sub-teams to collect the missing information.  "[After the launch meeting]we've got tasks and duties coming out our ears." [P TL PI]
Wood	Yes The team agrees on the task at hand. "A lot of synergy built very quickly. We came together and started making it happen fast." [W TM4 PI]	Yes The team develops a list of Web-site functionality requirements and work plan documents. "The documents look good, but we'll see how they shake out in the end. The proof is in the pudding." [W TL MI]	Yes The team creates three sub-teams to begin working on different aspects of the site. Two engaged with outside vendors to produce essential software and Web site designs, the third addressed a critical internal political issue.
Glass	Yes The team quickly gets up to speed regarding the nature of the project.  "[The IC] came like Moses from the mountain. He gave us the vision." [G TM3 MI]	Yes The team creates a document listing the projects' desired outcomes.  "[After the inauguration meeting] we showed [the IC] our charter and asked him: is this what success looks like to you?" [G TM1 PI]	Yes The team assigns sub-teams to make technology-related decisions and develop business cases for the two pilots.
Image	Yes The team agrees on the basic nature of the task. "By the time we left [the launch meeting] we knew what this thing was we could not have moved ahead without it." [I TL MI]	Yes The team agrees to focus its efforts on five key initiatives. "When we got together [at the launch meeting] we narrowed down to five products." [I TL MI]	Yes The team creates sub-teams to further develop each of the five chosen initiatives. "We walked away with a list of priorities and todos." [I TM3 PI]
Chair	No Team members disagree on the basic goal of the project.  "It was difficult to know if we were developing a solution for [a potential customer] or whether we were creating an integrated solution. It was frustrating." [C TM5 MI]	No The team is unsure of how to define the project. "We talked about what [the project] could be [but]there were a lot of different definitions in the room." [C TM3 PI]	Yes The team continues to use the work plan generated by the project leader prior to the launch meeting.
School	No The team struggles to understand the nature of the project. "The reason you don't understand the problem is the problem If you knew the problem, we wouldn't have a problem." [S TL MI]	No The team is unable to devise a solution framework. "We didn't do a very good job bringing [the TMs] on board. They were confused. What's going on here?" [S TL MI]	Yes The team decides to "divide and conquer" the problem. Two team members assigned to document current procedures and report back to the team with a "straw model" so that it would have "something to shoot at"

#### **Summary of Results**

What emerge here are clear pictures of two quite different types of PTs. One type -consisting of the three that ultimately were high performers -- hit the road running during the
mobilization and launch phase of PTD. They mobilized relatively quickly. They employed a
comprehensive mobilization strategy that incorporated a number of colleagues into the
processes of clarifying the scope and nature of their projects and of identifying and selecting
competent PT members. They held highly participatory launch meetings that were deliberately
designed to engage all PT members in discussions of the PTs' purposes, challenges, and future
activities. As a result these three PTs produced high quality outputs during the mobilization and
launch phase -- appropriately staffed teams and complete performance strategies -- that
propelled them forward toward the next phase of PTD and eventually to successful conclusions
of their projects.

Conversely, the other type of PT -- the ultimately low performers -- never really got started at all during the mobilization and launch phase of PTD. They mobilized relatively slowly. Their TLs utilized very limited mobilization strategies that were primarily one-person shows concentrating on timetables and work plans, rather than on the content of their projects, and used political rather than competency criteria to staff their teams. They extended their leader-centered focus into the launch meetings hoping to spend the time communicating their agendas and focusing on implementation plans. Instead, in all cases, the meetings denigrated into confusion and futile attempts to clarify project goals and technical content. Not surprisingly, this ineffectual activity produced low quality outputs. All three of the low performing teams were inadequately staffed and two of the three (Image was the exception) emerged from their launch meetings with very little common understanding of the problems at hand or agreement on how to move forward. Little wonder, then, that these teams continued to struggle with subsequent phases of PTD and failed to produce satisfactory results.

#### DISCUSSION

The exploratory nature of this analysis, as well as the limited size and specific nature of the PTs examined here forbid the drawing of firm conclusions at this time. Nonetheless, because of the study's unique design and intriguing findings, it is possible to draw some tentative conclusions that suggest potential propositions for future research.

Clearly, the study demonstrates the feasibility and desirability of merging the heretofore largely separate streams of PTD and PTE research. There is undeniable merit in examining the progress of PTs from initiation to completion, identifying the sequence of phases, stages, or episodes these teams traverse, and systematically comparing the activities undertaken and outputs produced during these periods across sub-samples of high and low performing teams. The findings of the present analysis, in particular, reinforce the potential importance of replicating at least three aspects of this approach. First, by uncovering what appears to be a significant, yet little studied phase of PTD – mobilization and launch – the findings suggest that future researchers might do well to begin data collection at the time PTs are initiated, rather than when they hold their first formal meetings. Second, the results suggest that there is much to gain both theoretically and practically from examining both the activities (or processes) that occur during and the outputs that emanate from various stages, phases, or episodes of PTD, and then systematically relating the two (Marks, et. al., 2001). Third, the findings further indicate that the richness and meaningfulness of these relationships become considerably clearer when it is possible to compare those characterizing high performing PTs against those occurring in less successful ones. Following, are some preliminary propositions that, once explored in greater depth, should help move these observations beyond the suggestion stage to facilitate the drawing of more specific conclusions about linkages between PTD and PTE.

Focusing first on the phase of particular interest in the present analysis:

Proposition 1: PTs would be wise to pick up the pace with respect to the mobilization and launch phase. PTs that use more time to mobilize

are no more likely to emerge from the mobilization and launch phase of PTD with high quality outputs (adequately staffed teams and complete performance strategies) than are teams that mobilize relatively rapidly.

Proposition 2: PTs that adopt comprehensive mobilization strategies and participatory launch meetings are more likely to emerge from the mobilization and launch phase of PTD with high quality outputs than are PTs that adopt more limited mobilization strategies and leader-centered launch meetings.

More specifically in this context, PTs are more likely to emerge from the mobilization and launch phase of PTD with high rather than low quality outputs to the extent that they:

Proposition 2A: Use this time to focus on clarifying the content of their projects rather than on the process that will be used to carry out these projects.

Proposition 2B: Select TMs utilizing a competency-driven rather than a stakeholder-driven (or political) approach. (A corollary of this is that the alignment of PT member competencies with project task requirements is a critical component of PT design.)

Proposition 2C: Involve more than just PCs and TLs in both content clarification activities and the selection of PT members.

Proposition 2D: Use launch meetings to generate open discussions and drive to an agreed-upon definition of the purposes and scopes of the teams' projects.

Although the present analysis does not follow the progress of the teams studied through subsequent phases of PTD and, eventually, to project completion it can nonetheless be suggested that:

Proposition 3: PTs that emerge from the mobilization and launch phase of PTD with high quality outputs will be higher performers than those that emerge from this phase with low quality outputs.

Proposition 4: PTs that fail to emerge from the mobilization and launch phase of PTD with high quality outputs will increase the likelihood of being high performers if they back up and generate such outputs rather than pushing ahead to the next phase of PTD.

The present study included only six teams; notwithstanding the practical difficulties involved, future researchers would do well to include more. The teams came from five different organizations and were working on vastly different projects with quite different life spans, suggesting that the preceding propositions may generalize. But, at the same time, all six teams consisted mostly of members who had little previous experience working with one another and all six were working on projects involving fairly novel content and specific deadlines; previous research suggests that member familiarity (Goodman & Leydon, 1991), task novelty (Keller, 1994), and the presence of deadlines (Waller, Conte, Gibson, & Carpenter, 2001) may all affect the nature of PTs' taskwork activities. So future studies should extend to PTs with different memberships, tasks, and working conditions.

Further, the present analysis focused on activities related to taskwork. Future studies might examine activities designed to promote teamwork, or perhaps even psychosocial variables, or what Marks et. al. (2001) call emergent states, such as psychological safety (Edmunson, 1999), team potency (Guzzo, Yost, Campbell, & Shea, 1993; Lester, Meglino, & Korsgaard, in press), and swift trust (Meyerson, Weick, & Kramer, 1996). Following Gersick

(1988, 1989), this study characterized the progress of PTD in terms of phases, whereas future researchers may wish to focus instead on stages (Tuckman, 1965 and Tuckman & Jensen, 1977; Wheelan, 1994) or even episodes (Marks, et. al., 2001).

Finally, for the time being the preferred methodology for integrating PTD and PTE research would appear to be qualitative, longitudinal studies conducted in field settings. The immediate task, it seems, is to clarify and better understand the sequence of phases, stages, or episodes characterizing PTD as well the specifics of the taskwork or teamwork activities and outcomes (perhaps including psychosocial variables or emergent states) associated with each of these. With this information in hand, it should be possible to design laboratory studies to firmly nail down the preferred I-P-O combinations both within phases, stages, or episodes across these to PTE.

#### REFERENCES

- Ancona, D.G. 1990. Outward bound: Strategies for team survival in an organization. <u>Academy of Management Journal</u>, 33: 334-365.
- Brown, S.L. & Eisenhardt, K.M. 1995. Product development: Past research, present findings, and future directions. Academy of Management Review, 20:343-378.
- Brown, S.L., & Eisenhardt, K.M. 1997. The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. <u>Administrative Science</u> Quarterly, 42: 1-34.
- Chang, A., Bordia, P., & Duck, J. In press. Punctuated equilibrium and linear progression:

  Toward a new understanding of group development. Academy of Management Journal.
- Cohen, S.G., & Bailey, D.E. 1997. What makes teams work: Group effectiveness research from the shop floor to the executive suite. <u>Journal of Management</u>, 23: 239 –290.
- Dyer, L., & Shafer, R. A. 1998. From Human Resource Strategy to Organizational Effectiveness: Lessons from Research on Organizational Agility. CAHRS Working Paper 98-12.
- Edmunson, A. 1999. Psychological safety and learning behavior in work teams. <u>Administrative Science Quarterly</u>, 44: 350-383.
- Eisenhardt, K.M. 1989a. Building theories from case-study research. <u>Academy of Management Review</u>, 14: 532-550.
- Eisenhardt, K.M. 1989b. Making fast strategic decisions in high velocity environments. <u>Academy of Management Journal</u>, 31: 543-576.
- Ericksen, G.A. 2001. Toward a model of spontaneously formed team development and performance: Extending the punctuated equilibrium model. Thesis presented to Cornell University.
- Gersick, C.J. 1988. Time and transition in work teams: Toward a model of group development.

  <u>Academy of Management Journal</u>. 31: 9-41.
- Gersick, C.J. 1989. Marking time: Predictable transitions in task groups. <u>Academy of Management Journal</u>, 32: 274-309.
- Gladstein, D.L. 1984. Groups in context: A model of task group effectiveness. <u>Administrative Science Quarterly</u>, 29: 499-517.
- Glaser, B.G., & Strauss, A.L. 1967. <u>The Discovery of Grounded Theory: Strategies for Qualitative Research</u>. Chicago, IL: Aldine.
- Goodman, P.S., & Leydon, D.P. 1991. Familiarity and group productivity. <u>Journal of Applied</u> Psychology, 76: 578-586.
- Guzzo, R.A., Yost, P.R., Campbell, R.J., & Shea, G.P. 1993. Potency in groups: Articulating a construct. <u>British Journal of Social Psychology</u>, 32:87-106.
- Hackman, J.R. 1987. The design of work teams. In J. Lorsch (Ed.), <u>Handbook of Organizational</u> <u>Behavior</u>: 315-342. Englewood Cliffs, NJ: Prentice Hall.
- Jehn, K.A., & Mannix, E.A. 2001. The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. <u>Academy of Management Journal</u>, 44: 238-251.
- Keller, R.T. 1994. Technology-information processing fit and the performance of R&D project groups: A test of contingency theory. Academy of Management Journal, 37: 167-179.
- Kessler, E.H., & Chakrabarti, A.K. 1996. Innovation speed: A conceptual model of context, antecedents, and outcomes. Academy of Management Review, 21: 1143-1191.
- Langley, A. 1999. Strategies for theorizing from process data. <u>Academy of Management</u> Review. 24: 691-710.
- Lester, S.W., Meglino, B.M., & Korsgaard, M.A. In press. The antecedents and consequences of group potency: A longitudinal investigation of newly formed work groups. <u>Academy of Management Journal.</u>

- Marks, M.A., Mathieu, J.E., & Zaccaro, S.J. 2001. A temporally based framework and taxonomy of team processes. Academy of Management Review, 26: 343-360.
- McGrath, J.E. 1984. <u>Group interaction and performance</u>. Englewood Cliffs, NJ: Prentice-Hall.
- McGrath, J.E. 1986. Studying groups at work: Ten critical needs for theory and practice. In P.S. Goodman (ed.) <u>Designing effective work groups</u>: 362-392. San Francisco: Jossey-Bass.
- McGrath, J.E. 1991. Time, interaction, and performance (TIP): A theory of groups. <u>Small Group</u> Research, 22(2): 147-174.
- Meyerson, D., Weick, K.E., & Kramer, R.M. 1996. Swift trust in temporary teams. In R.M. Kramer & T.R. Tyler (Eds.), <u>Trust in organizations: Frontiers of theory and research.</u> Thousand Oaks, CA: Sage.
- Miles, M.B., & Huberman, A.M. 1994. <u>Qualitative Data Analysis</u>, Second Edition. Thousand Oaks, CA: Sage.
- Mintzberg, H. 1978. Patterns in strategy formulation. Management Science, 24(9): 934-948.
- Sheremata, W.A. 2000. Centrifugal and centripetal forces in radical new product development under time pressure. Academy of Management Review, 25: 389-408.
- Smith, C., & Comer, D. 1994. Self-organization in small groups: A study of group effectiveness within non-equilibrium conditions. Human Relations, 47: 553-582.
- Tuckman, B.W. 1965. Developmental sequences in small-groups. <u>Psychological Bulletin</u>, 63(6): 384-399.
- Tuckman, B.W., & Jensen M. 1977. Stages of small-group development. <u>Group and</u> Organizational Studies, 2: 419-427.
- Verona, G. 1999. A resource-based view of product development. <u>Academy of Management Review</u>, 24: 132-142.
- Waller, M.J. 1999. The timing of adaptive group responses to non-routine events. <u>Academy of Management Journal</u>, 42: 127-137.
- Waller, M.J., Conte, J.M., Gibson, C.B., & Carpenter, M.A. 2001. The effect of individual perceptions of deadlines on team performance. <u>Academy of Management Review</u>, 26: 586-600.
- Wheelan, S.A. 1994. <u>Group processes: A developmental perspective.</u> Sydney: Allyn and Bacon. Yin, R.K. 1994. <u>Case Study Research: Design and Methods</u> (Applied Social Research Methods, Vol.5). Thousand Oaks, CA: Sage.