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Achieving Top Management Support in Strategic Technology Initiatives

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The strategic exploitation of technology offers unmatched opportunity for growth and competitive advantage. Thus, researchers have studied the factors that promote technology success. Among the factors found to be most critical to technology success is the support of the firm's top management, which includes the commitment of necessary resources and political support to the project.

Although we know that getting support from top management is important, there is little guidance about the factors that influence whether support is granted. Such guidance matters from both the perspective of the project team seeking such support, and from the perspective of the top managers who want to provide support most effectively. The reality is that not all projects that warrant support get it. Sometimes organizational resources are allocated poorly (e.g., to failing projects) or opportunities are missed by not funding the right projects.

In the discussion that follows, we examine the determinants of top management support and offer guidance to both project leaders and top managers for obtaining/ granting and effectively managing such support.

Factors that Determine Top Management Support

Using a multi-disciplinary approach, our research builds on insights from upper echelon theory, expectancy theory, and escalation of commitment theory to explain the factors that influence top management support. Based on this research, we argue that top management's support of a particular technology project depends on a number of factors. Some key examples are as follows:

Project Characteristics: The nature of the project should affect whether top management supports a particular project. Those projects with the strongest potential – e.g., solid ROI estimates, high strategic importance – should get the most support. Projects that require more attention of top management – e.g., because of project complexity or timeline – are also likely to necessitate and therefore receive more support. Finally, top management is more likely to support projects that have salvage value – i.e., that are expected to yield positive outcomes even if they do not ultimately achieve the project objectives.

Stage of the Project: Top management support of a particular project has been shown to vary depending on the stage of the project. Projects that are initially supported do not always continue to get that support. Other more strategic projects may emerge that take away the attention of top management. The project itself might hit roadblocks that change top management's expectations for project success and outcomes.

The Nature of Project Team Members: Whether top management supports a specific project is also influenced by the characteristics of the project team members. Some of the project team attributes that influence top management support are past team performance, the team members' tenures on the team and in the organization, the team's relationship with top management, the team's experience with similar initiatives, and the team's level (rank) in the organization. In short, project team attributes indicate whether the team has the background and capabilities to successfully carry out the project. Project team attributes also indicate whether the team has the personal ties and political clout to garner top management support.

Organizational Factors: Top management support is influenced by organizational factors such as firm strategy, culture, innovativeness, and organizational slack resources. The firm's strategy will inform top management about which projects are most aligned with strategic objectives. A firm's level of organizational slack – those resources that are above-and-beyond what is required for normal business operations – also matters because it affects whether management has the necessary resources to provide adequate support.

Industry Factors: Top management support of technology projects is likely influenced by the nature of an organization's industry. Most important should be the extent to which competitors are implementing similar strategic technology. Research has shown that organizations have a tendency to adopt 'copycat' strategies for purposes of legitimacy. Furthermore, the degree of managerial discretion (latitude of decision-making power) also varies by industry and affects top management's ability to support strategic technology. Not all top management will have the discretion to provide necessary support to a project, especially when there are project overruns that require support beyond initial expectations.

Top Management Team Attributes: Because top management deals with so many issues, they are limited by how much they can engage in fully rational processes. As a result, they rely in part on their backgrounds and experiences when making decisions. For example, top management's per-

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sonal relationships with project team members, their ability to understand the technology, and their experience and tenure with the firm should influence whether they support a project. The job demands of top managers are also likely to affect support. Top managers that are stretched too thin across numerous projects will likely not have the time to dedicate to any one specific project.

Suggestions for Project Leaders

Our research suggests the following steps that project leaders can take to obtain critical top management support for their projects:

Emphasize expected payoff: As the strategic leaders of the organization, top management should provide the most support for projects that are closely aligned with larger organizational objectives. While the strategic importance of many projects is not always obvious, a strong project leader should make every effort to frame the expected project payoff in the context of the organization's strategy and goals, either directly or indirectly. The value of a project is not always obvious, and failure to articulate the expected payoff will severely reduce top management's interest in a project.

Keep top management informed of project status: Top management support of a project is largely influenced by a project team's ability to communicate project status. Given the intense demands placed on top management in terms of time and resources, it is not uncommon for a high potential project to "fly under the radar" and fail to receive the appropriate top management support. A strong project leader must effectively publicize project successes to both top management and to the larger organization.

Break the project into smaller phases: Long, multi-year projects that continue for an extended period without any tangible signs of success are unlikely to receive sustained top management support. Since top management can focus only on a finite number of projects at a given time, they are likely to support those projects that have the best chance of succeeding. Projects that demonstrate frequent and consistent progress are more likely to receive top management support than are projects that continue for years without visible success. Thus, it is in the project leader's interest to break a project into several smaller phases and claim early victories in hopes of generating momentum and increasing top management's confidence in the overall project.

Seek cross-functional support: Technology projects initiated solely by the technology department are unlikely to sustain the support of top management over the life of the project. The uncertainty associated with high-tech projects makes obstacles and setbacks inevitable and without buy-in across the firm, top management is more likely to abandon the project as soon as it runs into trouble. Project leaders should develop cross-functional relationships with all potential beneficiaries of the project and work to obtain broad support across the organization.

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Identify competitor projects and communicate threats: When top management is faced with high levels of uncertainty or ambiguity, they are oftentimes inclined to copy the actions of other organizations in an effort to achieve legitimacy. The uncertain nature of high-tech projects makes such projects especially susceptible to these mimetic pressures. A skilled project team leader should capitalize on these pressures by explaining the importance of their project as a response to similar actions made by competitors. Top management is likely to support projects that prevent the organization from trailing the competition.

Recruit senior members to the team: Project teams vary to the extent that individual team members have a relationship with top management. Teams composed of experienced, senior members are more likely to receive the attention and support of top management than are teams composed of inexperienced, lower-ranking members. Throughout the life of a project, the team leader should continually attempt to recruit members to the project that will increase the experience and profile of the team as a whole.

Suggestions for Top Managers

Firm resources generally are not unlimited, and top managers must support only those projects that offer the most potential. The following are suggested steps that top managers can take to avoid allocating resources to failing projects:

Avoid bias of past investment/commitment: Technology projects must be periodically reevaluated throughout the life of the project to determine whether continued top management support is warranted. This process of reevaluation should focus solely on the future expected payoff and should not be influenced by previous commitments and sunk costs. Techniques such as zero-based budgeting should be used to avoid such biases.

Separate responsibilities: The objective evaluation of project progress is critical to avoiding misallocation of resources. To this end, top managers responsible for making funding decisions must be detached from the project participants. A separation of these responsibilities ensures that personal commitment to a faltering project does not bias the allocation of valuable resources.

Minimize penalties of failure: An organization that punishes for past mistakes encourages project leaders to mask project failures and continue their commitments to projects that should otherwise be abandoned. To avoid such tendencies, top management should adapt reward/incentive structures that promote an environment that does not penalize for past errors, but rewards future success.

Not only should top management avoid investing in the wrong projects, they should focus on investing in the right projects. The following are suggestions for ways that top management can better identify and adequately support high potential projects:

Establish a process for evaluating expected payoff: As the key funding decision-makers of the organization, top management team members are tasked with assessing the expected payoff of various competing projects. To this end, top management must establish a formal process of evaluation that does not rely solely on financial models for evaluation, but also evaluates the strategic importance of a potential project.

Establish a process for tracking project status: Project teams vary to the extent that they can effectively communicate project

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status to upper management. Some project leaders are ardent promoters of their projects while others are more reticent. Given these differences, top management should not rely solely on a project team's ability to communicate when measuring and tracking project status. Instead, management should establish a consistent and formal process of evaluation that ensures all projects are assessed fairly and that high potential "under the radar" projects are not missed.

Participate in steering committees: Top management involvement in the review and evaluation of technology projects is critical to the identification of high potential opportunities. Top management should be active participants in steering committees and intimately involved in all key funding decisions.

Summary

For a strategic technology project to be successful, it must have the support of top management. Indeed, hundreds of studies have shown such a connection. What is surprising then is that we know so little about top management support and the reasons for why it is or is not given. The research presented in this article sheds light on this issue by identifying a number of factors related to the project, top management, organization, and industry that we expect to influence top management support. Based on our analysis of these top management support determinants, we offered a number of suggestions for project leaders who seek to get support from top management. We also offerred suggestions for top managers in how they can provide support effectively by investing in the projects with the most potential while avoiding investing in failing projects. ■

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References:

Bharadwaj, A. 2000. A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly*, 24(1): 169.

DiMaggio, P. J., & Powell, W. W. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2): 147-160.

Hambrick, D. C., & Mason, P. A. 1984. Upper Echelons: The Organization as a Reflection of Its Top Managers. *The Academy of Management Review*, 9(2): 193.

Neo, B. S. 1988. Factors Facilitating the Use of Information Technology for Competitive Advantage: An Exploratory Study. *Information & Management*, 15(4): 191.

Newman, M., & Sabherwal, R. 1996. Determinants of commitment to information systems development: A longitudinal investigation. *MIS Quarterly*, 20(1): 23.

Powell, T. C., & Dent-Micallef, A. 1997. Information technology as competitive advantage: The role of human, business, and technology resources. *Strategic Management Journal*, 18(5): 375-405.

Ross, J. W., Beath, C. M., & Goodhue, D. L. 1996. Develop Long-Term Competitiveness through IT Assets. *Sloan Management Review*, 38(1): 125-126.

Sethi, V., & King, W. R. 1994. Development of Measures to Assess the Extent to Which an Information Technology Application Provides Competitive Advantage. *Management Science*, 40(12): 1601.

Vroom, V. H. 1964, *Work and Motivation*. New York: Wiley.

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