Basis of Power Effects on Method of Communication

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Abstract — This paper aims to propose correlations between the dominating basis power individuals perceive their supervisor to possess and the method of communication they utilize to interact with their superior(s). This paper serves three purposes. First, it evaluates members within an organization with a set chain of command, to gain an understanding of how individuals 
prefer to communicate ideas and information with their superior based on their superior’s perceived basis of power. Second, it evaluates a matrix organization consisting of ten automotive mechanical engineering students (cadets), as team members, and one engineering management student, as the project manager, to gain an understanding of how team members actually communicate ideas and information with the project manager based on his perceived basis of power. Third, it discusses the difficulties of communicating within a decentralized team and offer recommendations on effective methods of communication for organizations where members do not work in a central location.

I. INTRODUCTION

The study of project management is receiving increasing attention from the engineering community due to its essential role in today’s asymmetric projects. Project managers do more than plan and arrange tasks and deadlines; they coordinate various elements of a project and communicate with team members and external stakeholders to ensure everyone is on the same page and working towards the same goal. Organizations understand communication as being a critical element to success, but a common problem for project managers is how to communicate information within an organization to ensure everyone is working towards the same vision.

Planning and pre-coordinating support for a project is only the start of a project manager’s many responsibilities. The tough component of project management begins once the plan is put into action. If a good plan was sufficient to accomplish a project, then there would be little use for project managers. As an alternative, the project schedule could be posted and then a completed product would be picked up on the last day. With various elements of a project in different locations and sub-managed by a variety of people, project managers must know how to effectively communicate and efficiently manage the project’s resources.

Project managers are the leaders of project teams, thus a fundamental assumption exists that project managers have the ability to exercise a certain degree of influence on the behavior and actions of their subordinates. Project managers must balance the flow of information with internal and external communication. Internal communication is defined as an interchange of ideas between members within the same group or organization [1]. It serves to provide members with pertinent information in order to coordinate and direct a group of people or ideas toward a defined end state.

Contrary, external communication is defined as the exchange of ideas between the project manager and people who are not members of the organization [1]. It serves to provide general information for people outside the organization so they are aware of the project’s status in order to possibly provide funding and other types of support for the ongoing project. In the case of a project team, external communication includes interacting with key stakeholders, government authorities, and competing organizations.

Project managers utilize various communication techniques and methods to share information with team members and stakeholders. There are four basic reasons for social communication: to increase uniformity of information, increase uniformity of opinion, change one’s status in the group, and express emotions [2]. Communication is such a crucial part of project management because team members are often too focused on their individual subdivision of a project that they do not take the time to step away from their section to completely envision the project as a complete system. In order to save time and precious resources, project managers must have the ability to effectively communicate with various subsystems as a whole, to team members.

Project managers are often outsiders in terms of knowledge and technical experience, but they still function as the team’s leader and/or supervisor. Depending on their interaction and relationship with team members, project managers may have various types of power over team members which directly control the amount of influence they have over the actions of team members. This research focuses on five bases of power: coercive, legitimate, reward, expert, and referent power. Each base of power stems from the leader’s actions, qualities, or role within the organization. A leader may draw from one or more of these bases of power to influence subordinates to behave certain ways in order to gain favorable acts or avoid punishment.

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Coercive power is the ability of a leader to punish those who do not conform to their ideas or demands [3]. A leader’s ability to levy punishment or withhold rewards ensures obedience from subordinates. This type of power tends to be the least effective form of power as it builds resentment and resistance within the targets of Coercive Power [4].

In a speech to the United States Corps of Cadets, Major General John M. Schofield said, “The discipline which makes the soldiers of free country reliable in battle is not gained by harsh or tyrannical treatment. On the contrary, such treatment is far more likely to destroy than to make an Army [4].” If a leader relies on coercive power to gain subordinates’ compliance, it would more likely result in additional harm for the organization since subordinates will perform just enough to avoid getting into trouble.

Legitimate power stems from an individual’s position within an organization and their right to require and demand compliance from subordinates. Legitimate power is a formal authority delegated to the holder of the position [4]. This type of power exists in organizations with a strict chain of command, such as the military. Subordinate, at the very least, respect orders due to the legitimate power of their superiors.

For the most part, police officers demonstrate legitimate power over civilians in public arenas due to their delegated position as law enforcers. A coach’s ability to decide who plays in certain situations demonstrates their legitimate power over players [4].

Reward power is based on the perceived ability of a superior to grant positive or remove negative consequences to those who conform to ideas or demands [4]. It is the degree to which an individual can give others a reward of some sort such as benefits, valued rewards, promotions, or increase in pay or responsibility for their hard work.

Reward power is an effective method to achieve compliance when utilized correctly. A child who finishes their entire dinner to get dessert is a simple example of how parents utilize reward power on an everyday basis to positively influence their child’s behavior. On the contrary, reward power can harm a person’s performance if used incorrectly. If a person dislikes public praises, a leader should not publicly recognize the individual’s deeds because it will discourage them to repeat their exceptional performance out of fear of being publicly recognized [4].

Expert power is the power of knowledge. It is based on the perception of the leader’s ownership of distinct superior knowledge, expertise, ability, or skill. Expert power is usually highly specific and limited to the particular area in which the expert is trained and qualified [4]. This type of power exists in teacher-student or player-coach relationships, where students and players follow guidance from their mentors due to the relative knowledge base of the topic.

Since expert power is based on a person’s knowledge level relative to other members, it is not exclusively utilized by leaders. An experienced worker in a company may have expert power over a newly hired manager who recently graduated from college with little experience on tactical skills required for the workplace.

One method to battle the lack of the above mentioned powers is to build strong relationships with subordinates to generate referent power. Referent power is based on group members’ identification with, attraction to, or respect for, the leader [4]. It is a leader’s charisma and interpersonal skills which causes subordinates to gain a sense of intrinsic personal satisfaction from the identification of being an accepted follower [3]. Potential influence from referent power stems from the strength of relationships between a leader and their followers.

A study done by Penley and Hawkins’ revealed a connection between relational and content-oriented messages. It states managers must communicate with team members on a relational (personal) basis when communicating informational or content-oriented messages [9]. Managers can use personal appeal, when necessary, to influence subordinates in difficult situations once they have established referent power with subordinates.

Of these bases of powers, subordinates and leaders value referent power the most as subordinates are not simply following orders out of fear of punishment or potential for reward, but due to the fact they have enduring respect for their leader. Project managers frequently enter a project team with legitimate, coercive, reward, and possibly expert power in management. Through positive interaction with team members, project managers produce referent power over time. The problem arises when friction exists in the leader-subordinate relationship and certain powers are not achieved.

Certain powers may not apply to every situation since subordinates have varying opinions and degrees of interaction with leaders. Every leader in an organization begins with legitimate power over their subordinates due to the position and responsibility delegated to the power holder. Leaders may cause their perceived basis of power to tilt in different directions by their actions. If a leader leans heavily towards rewarding good behavior, they will advance their reward power. If a leader relies heavily on punishment to instill compliance, then they advance their coercive power. When leaders demonstrate expert knowledge in a specific subject, subordinates will perceive them to have expert power. Legitimate power is associated with the delegated position of being in an authority position. Referent power takes time and energy to build in a leader-subordinate relationship.

Depending on the subordinates’ perception of which basis of power superiors draw influence; subordinates will prefer to communicate problems and information to leaders through a particular method of communication. In a project environment, it is the project manager’s responsibility to ensure an opened line of communication between them and team members to ensure successful completion of the project on time, within budget, and to performance standards. Project managers should converse issues with team members to resolve problems early before they get out of control.
II. METHOD

The data for this research project was drawn from two surveys formulated by the author. The first survey sought to reveal how individuals within an organization with a set chain of command prefer to communicate their wants and expectations with their supervisor to ensure a clear understanding and success based on the perceived basis of power of their superior.

A total of 100 cadets at the United States Military Academy volunteered to take an online survey to answer five questions. Each question was prefaced by the definition of a specific basis of power (Reward, Coercive, Expert, Legitimate, or Referent). Then the question “If you perceived ____ power as your superior’s dominating basis of power, what form of communication would you most prefer to use?” Five options were provided, which represent the most common prompt methods of communication in today’s society: In Person, Telephone, E-mail, Through Another Person, or Avoid as Much as Possible.

The second survey sought to reveal how members of a matrix organization consisting of ten automotive mechanical engineering students, as team members, actually communicate their wants and expectations with the project manager to ensure project success based on the project manager’s perceived basis of power. Instead of expert knowledge in mechanical engineering, the project manager possesses relative expert knowledge in project management.

All ten members responded to an electronic survey via e-mail. The survey opened with a definition of the project manager’s role and asks each member to rate the project manager’s perceived basis of power from one to five – one being the highest and five being the lowest perceived basis of power. The five bases of powers included: Reward, Coercive, Expert, Legitimate, and Referent Power. Next, team members were asked to rate which mode of communication they actually used most frequently to interact with the project manager from a scale of one to five – one being the most utilized and five being the least utilized method. Their selection included: In Person, Telephone, E-mail, Through Another Person, or Avoid as Much as Possible. These methods of communication represent the five most common methods of communication to achieve a quick response in today’s society. Finally, team members were asked to explain why they utilized a mode of communication the least and why they utilized a mode of communication the most. All responses were consolidated and analyzed by the author.

III. RESULTS

Data from the survey given to cadets at the United States Military Academy which sought to show how individuals in an organization with a set chain of command prefer to communicate with their superior revealed that regardless of the superior’s dominating basis of power, face-to-face interaction was the preferred method of communication. If an individual perceived a leader to dominantly possess reward power (ability to give positive or remove negative consequences to those who conform to ideas or demands), eighty-three percent (83%) would utilize face-to-face interaction, ten percent (10%) would utilize E-mails, five percent (5%) would utilize a telephone, and two-percent (2%) would go through another person as the preferred method of communication. No one would avoid communicating with their superior if reward power was perceived present in the leader-subordinate relationship.

Refer to Fig 1. and Fig. 2 for breakdown of information.

<table>
<thead>
<tr>
<th>Method</th>
<th>In Person</th>
<th>Telephone</th>
<th>E-mail</th>
<th>Through Another Person</th>
<th>Avoid as Much as Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reward Power</td>
<td>83%</td>
<td>9%</td>
<td>9%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Coercive Power</td>
<td>49%</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Expert Power</td>
<td>91%</td>
<td>2%</td>
<td>6%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Legitimate Power</td>
<td>68%</td>
<td>3%</td>
<td>6%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Referent Power</td>
<td>61%</td>
<td>5%</td>
<td>5%</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Fig. 1. Results from data collected from Cadets at the United States Military Academy which shows that regardless of the perceived basis of power of a superior, face-to-face communication is preferred.

If an individual perceives a leader to dominantly possess coercive power (ability to punish those who do not conform to ideas or demands), only forty-nine percent (49%) would utilize face-to-face interaction, sixteen percent (16%) would utilize E-mails, two percent (2%) would utilize a telephone, and six percent (6%) would go through another person as the preferred method of communication. A shocking twenty-seven percent (27%) of individuals would avoid communicating with their superiors if coercive power was perceived as the dominating basis of power in the leader-subordinate relationship. Refer to Fig 1. and Fig. 2 for breakdown of information.

If an individual perceives a leader to dominantly possess expert power (power of knowledge), ninety-one percent (91%) would utilize face-to-face interaction, three percent (3%) would utilize E-mails, two percent (2%) would utilize a telephone, and three percent (3%) would go through another person as the preferred method of communication. One individual would avoid communicating with their superiors if expert power was perceived as the dominating basis of power in the leader-subordinate relationship. Refer to Fig 1. and Fig. 2 for breakdown of information.

If an individual perceives a leader to dominantly possess legitimate power (individual’s delegated power within an organization to require and demand compliance), sixty-eight percent (68%) would utilize face-to-face interaction, twenty percent (20%) would utilize E-mails, five percent (5%) would utilize a telephone, and six percent (6%) would go through another person as the preferred method of communication. One cadet surveyed would avoid communication with their superiors if coercive power was perceived as the dominating basis of power in the leader-subordinate relationship. Refer to Fig 1. and Fig. 2 for breakdown of information.

If an individual perceives a leader to dominantly possess referent power (group members’ identification with, attraction to, or respect for, the leader), only sixty-one percent (61%) would utilize face-to-face interaction, fourteen percent (14%) would utilize E-mails, four percent (4%) would utilize a telephone, and nine percent (9%) would go through
another person as the preferred method of communication. A surprising twelve percent (12%) of cadets surveyed would avoid communication with their superiors if referent power was perceived as the dominating basis of power in the leader-subordinate relationship. Refer to Fig. 1 and Fig. 2 for breakdown of information.

The second survey sought to reveal how members of a matrix organization consisting of ten automotive mechanical engineering students, as team members, actually communicated their wants and expectations with the project manager to ensure project success based on their perceived basis of power of the project manager.

Using a ranking system from one to five to rate the project manager’s basis of power over team members – one being the highest and five being the lowest perceived basis of power – fifty percent (50%) rated expert power as the most apparent basis of power the project manager has over team members. Every team member rated legitimate and expert powers as one of the project manager’s top-three basis of power. Refer to Fig. 3 for a breakdown of information.

Further analyzing each team member’s responses to reveal correlations between their perceived basis of power of the project manager and the method they actually utilize to communicate, some interesting results precipitated. Of the three individuals who perceived the project manager’s dominating basis of power to be legitimate power, two stated they communicated with the project manager utilizing E-mails, while the other utilized face-to-face interaction to communicate. Of the five individuals who perceived the project manager’s dominating basis of power to be expert power, three utilized E-mails and two utilized face-to-face interaction the when communicating with the project manager. Finally, of the two individuals who perceived the project manager’s dominating basis of power to be referent power, one utilized E-mails and one utilized face-to-face interaction when communicating with the project manager. Refer to Fig. 5 and Fig. 6 for more information.

It is hard to discern a correlation between the perceived basis of power and method of communication individuals utilize simply looking at data in Fig. 3 and Fig. 4, unless one closely analyzes data from each individual response. Since most members perceived the project manager to have little or no reward and coercive power, this research cannot draw any conclusion to how individuals prefer to communicate with superiors if these two powers are the dominating basis of power in a leader-subordinate relationship.

In response to which method of communication team members actually utilize to converse their ideas or issues to the project manager, sixty percent (60%) of team members actually utilized E-mails the most and forty percent (40%) utilized face-to-face interaction the most. Refer to Fig. 4 for a breakdown of information.
IV. DISCUSSION

The survey given to cadets at the United States Military Academy concludes that the majority of people would prefer to communicate with superiors in person, with various disparities depending on the perceived basis of power. All of the subjects for this research are cadets at the United States Military Academy who live under a relatively strict chain of command system, compared to other college students. There were no surprises in the collected data. For example, individuals were more reluctant to use face-to-face interaction and preferred to avoid superiors who they perceive to possess coercive power as the dominate basis of power. The basis of this discussion will then move on to examine the contradiction between the results from the two surveys which compares how people prefer to communicate and how they actually communicate with superiors.

There is an inconsistency between the information collected from the two surveys. Surveys of 100 cadets at the United States Military Academy revealed an overwhelming trend for subordinates to prefer to communicate with their superiors through face-to-face interaction. When put in action, the ten automotive mechanical engineering students functioning as a project team realized communication by means of face-to-face may be preferred, but is not practical since members are not always centrally located during the project’s life cycle. Therefore, communication through e-mail is more practical and efficient due to time and other resource constraints.

This variation between preferred and actual utilization of method of communication is not supported by the basis of power in this research. But a different phenomenon has precipitated from the collected data which may be attributed to today’s social trends in decentralized organizations and the collective mentality to get decisions made now, rather than later, in fear of losing to competition.

Face-to-face communication helps to create a brainstorming session where new ideas are inspired and shared, but is hard to arrange since team members have meetings and/or other obligations to attend to during the work day. To combat the social trend of time consuming face-to-face communication, technology must be utilized to increase efficiency in communication. E-mails are utilized due to convenience for both parties – person sending the information and person receiving it. It facilitates an ease to document and monitor information flow. With new technology and effortless access to E-mail (Blackberry), individuals can check E-mails instantly – often easier than responding to a phone call.

Technology such as E-mail, cell phones, and the Blackberry has offered organizations the capability to overcome constraints on time and distance – key barriers which have traditionally prevented organizations from expansion [10]. In today’s projects, team members are often not located “down the hall or even on the same continent,” so project managers must utilize their personal skills and available technology to become effective communicators [12]. Technology such as videoconferencing allow team members located in two different arenas to communicate “face-to-face” to share information and ideas at a personal level as if they were sitting across the table from each other.

Regardless of the method of communication, a study has shown that the frequency of communication among key players and the project’s centrality within the communication network are positively correlated with a project’s success [15]. Ebadi and Utterback’s study suggests that regardless of how you communicate, as long as there is a tight-knit communication network that encourages consistent communication, the organization or project will have a better chance of being successful.

Project managers often feel there are never enough hours in the day to communicate with everyone [7]. Project managers spend as much as seventy percent of their time in meetings [16]. This fact shows face-to-face communication is preferred because individuals have direct interaction to facilitate more information exchanged in a clear manner, thus reducing the potential for information flow error.

Tim Kloppenborg recommends a five-step algorithm in Project Leadership. Project teams must answer these questions concerning communication: who needs to know about the project; what do they need to know; when do they need to know it; what form of communication works best for the audience; and how can one know their audience understands what was told to them [7]. Successful project communication on the project manager’s component does not equate to sharing every detail concerning the project, but rather only share an adequate amount which would enable the project’s various stakeholders to make key decisions.

The issue with today’s heavy reliance on technological is that information arrives in large volumes. It takes a large amount of time and energy to sort through all the information in order to gather up relevant information to make important decisions. Project managers can expedite this process by sharing only pertinent information and ideas with stakeholders and decision makers. This will allow decision makers to better understand the key issues at hand and provide prompt feedback to the project manager.

Due to many political, environmental, and financial constraints, organizations are not always centrally located with every member working in one building. While people might prefer face-to-face communication, today’s organizational infrastructures do not always support this method of communication – as demonstrated through the second survey to the project team. Regardless of whether people realize it or not, the movement away from face-to-face communication is slowly transforming into communication using available technology to overcome distance and time barriers. For these reasons, society has become highly dependent on technology to share ideas and information with team members in order to get work done at an unimaginable rate.

V. RECOMMENDATION

These findings are important for future project managers to consider optimizing lines of communications by utilizing specific means of communications depending on the particular basis of power they draw from. The role of project
management requires a tremendous commitment to communicating information with team members and decision making stakeholders. Ineffective communication can lead to misunderstandings, incorrect strategies, and mutual feelings of frustration [13].

Due to the importance of communication and today’s decentralized organizations, project managers must rely on technology to effectively communicate with various members within the organization. The way one deals with technology in communication may set the nature of a relationship. Communicating through face-to-face interaction, videoconferencing, or E-mail may all result in the sharing of information within an organization, but each has second and third order effects.

With limited resources to conduct business, organizations must find ways to bring team members together in order to build unit cohesion and identity. Personal interaction will allow team members unite and function as a team, rather than a group of individuals who simply work with other individuals.

VI. FUTURE WORK

This discussion of basis of power offers a preliminary insight into the effective use of various methods of communications to synchronize a project depending on one’s basis of power and proposes several areas for future research. One possible area is the evolution of a project manager’s perceived basis of power through a project’s lifecycle and the corresponding evolution of preferred methods of communication throughout the project.

In 2001, WorldCom reported that 31% of employees work at a location separate from their manager or team [11]. Due to the high dependence of technology, research should be conducted to examine the variance in leader-subordinate relationships (in terms of perceived basis of power) between organizations which are dependent on technology to communicate and those which promote face-to-face interaction as the preferred method of communication.

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REFERENCES


