

ORGANIZATIONAL PRACTICE AND PERCEPTION OF INFORMAL PROJECT MANAGEMENT

by

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SURVEY DATA REPORT
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Problem Studied

This survey explored the following research question: What are the characteristics of organizations that practice informal project management successfully and realize the value of implementing informal project management practices to reduce project cost and time?

The research explored what kind of organizations practice informal project management and realizes its value in the business world today. Informal project management practices can be practiced successfully and greatly reduces project costs if an organization has achieved a singular methodology, the third level of project management maturity within the PMMM. This level of maturity can only be achieved if the organization has an understanding of project management and if the project team culture is based on trust, cooperation, communication and teamwork. Eliminating the high cost of paperwork due to excessive policies and procedures will reduce project costs. Eliminating the need for excessive meetings and formal communication as the methodology for tracking project progress will further reduce project costs and time. Organizations lose sight of the unrealized costs and added layers of complexity associated with a formal project management culture.

This research was very important because the way an organization perceives informal project management can have a direct effect on its operating expenses. This study was also important because although a significant project management body of knowledge already exists, the extent to which specific concepts of project management are truly understood within organizations is not really known, therefore organizations

may implement processes based upon an incomplete understanding of all the variables that influence success in project management.

Research Goals and Methods

The purpose of this study was descriptive and correlational. The objective of this study was to determine the characteristics of organizations that practice informal project management successfully and realize the value of implementing informal project management practices to reduce project cost and time. The primary data for this research was collected by administering an online survey hosted by the Project Management Institute (PMI) Research Links website. SPSS was used for the statistical analysis of the data. The population consisted of professionals who are currently involved in project work within their organization. The survey intended to measure the relationships among the variables that influence informal project management. These variables were defined as project management maturity level, project team culture and corporate understanding of project management.

This research intended to describe the characteristics of organizations that practice informal project management successfully and realize its value with respect to their level of project management maturity, project team culture and corporate understanding of project management. It sought to define a linear regression model showing the correlation of project management maturity level, project team culture and corporate understanding of project management to the independent variable, informal project management, using standardized coefficients. It also intended to find a relationship between project team culture and corporate understanding of project management. It expected, but did not conclude that if in an organization is practicing informal project

management, but not achieving consistent results, any inconsistencies or failures can be attributed to at least one or more of the variables identified in the theoretical framework.

Hypotheses

The following hypotheses were tested in this research:

1. Organizations with a strong project team culture are more likely to have a higher level of project management maturity.
2. Organizations with less of a corporate understanding of project management will not have a high level of project management maturity.
3. There is a relationship between project team culture and corporate understanding of project management.
4. Organizations with a higher level of project management maturity are more likely to realize the benefits of informal project management practices.

Discoveries and Limitations

The original component that was introduced to the thesis was determining whether there is a significant relationship between the variables project team culture and corporate understanding of project management. Based upon the theoretical framework, the third hypothesis assumed that there is a relationship between these two variables. This relationship was not found to be defined or explored during the literature survey. The results showed that there is a statistically significant positive correlation between project team culture and corporate understanding of project management and that project team culture is a significant predictor of corporate understanding of project management.

The resources to accurately assess the project management maturity level of an organization were not available in this study; therefore this study was limited to the

participant's understanding of their organization. The results of this study were potentially subject to some level of bias from one's attitude toward their organization. This study did not quantify the savings achieved by organizations from informal project management practices. That type of information would be best gained by case studies since operating expenses are company specific.

Research Purpose

The purpose of this study was descriptive and correlational. It identified the extent of which the dependent variable, Informal Project Management, is practiced successfully and its value realized within organizations. It identified the significance of the relationships between the dependent and independent variable, Project Management Maturity Level as well as the significance of the relationships of the moderating variables, Corporate Understanding of Project Management and Project Team Culture, with the independent variable. It also attempted to define a relationship between the moderating variables themselves.

Research Environment

The study was conducted in a non-contrived setting by way of electronic survey. The extent of researcher interference was minimal since the administering of surveys did not disrupt the normal workflow of the organization. Participation in the survey was completely voluntary and did not need to be completed during work hours. This study was cross-sectional. Data was only collected once for this particular research.

Data Collection

The survey was reviewed and approved by NYU faculty and the Project Management Institute (PMI) before being hosted on the PMI Research Links website. The survey was hosted for a period of ninety days. Requests for survey participation were also made to various project management listservs hosted on Yahoo, Google and MSN. All subjects in the sample were gained through the mentioned channels. Only surveys completed by subjects who are currently involved in project work within their current organization were accepted into the sample.

Sample Population

The 109 responses from the survey consisted of professionals currently involved in project work within their organization. No geographic location was recorded from the participants, therefore responses could have been from anywhere in the world. The greatest commonality found in this sample was that the majority of the respondents, 78.6% or 81, have been a Project Manager on projects within their organization. Most of the participants have also played other roles in projects such as Project Sponsor, Stakeholder, Technical Lead, SME or Resource. Other project roles were identified that were not specific answer choices in this survey. These roles were Consultant, Strategist, Tester, Volunteer, Implementation Manager, Program Manager, Project Support, Project Coordinator and Risk Manager. 45 of the respondents in this sample were PMP certified. Other certifications held by participants were ESI Associate Project Manger, Certified Sybase Project Manager, 6 Sigma, PROPS, ISEB, PRINCE1, PRINCE2 and Primavera.

The majority of the participants, 60.2% or 62, had on the job training (no formal training) in project management. An equal number of respondents indicated self learning

through books and articles. The remaining sample included the above combined with required training, workshops and seminars and formal courses at an outside institution. Only 29.1% or 30 participants had required training provided by the organization. Other forms of training identified were PMP certification, PMI chapter, specific PM coaching, Master of Science degree and Computer Science degree.

The sample had a fairly equally distributed representation of level of experience working on projects within their current organization. The majority of participants had between 1-5 years of experience. The majority of respondents, 57.3% or 59, work for organizations with over 1000 employees. The sample had a fairly even distribution of capitalization with the annual revenue of their organizations ranging from below \$150 million to over \$5 billion. The Services and Technology sectors had the most representation in this sample with 17% and 33% respectively. Many other sectors and industries were represented, but not in significant proportions.

Statistical Analysis

Table 1 Variable Descriptors

CU	Corporate Understanding of Project Management
PTC	Project Team Culture
PMM	Project Management Maturity Level
IPM	Informal Project Management

The first two hypotheses were analyzed in a single regression model since both variables: project team culture and corporate understanding of project management are

moderating variables of project management maturity. The results of the analyses are show below.

H1 Organizations with a strong project team culture are more likely to have a higher level of project management maturity.

H2 Organizations with less of a corporate understanding of project management will not have a high level of project management maturity.

Table 2

Descriptive Statistics

	Mean	Std. Deviation	N
PMM	40.7386	12.49321	88
PTC	38.8864	8.91135	88
CU	10.0455	2.84831	88

Table 3

Correlations

		PMM	PTC	CU
Pearson Correlation	PMM	1.000	.591	.614
	PTC	.591	1.000	.574
	CU	.614	.574	1.000
Sig. (1-tailed)	PMM	.	.000	.000
	PTC	.000	.	.000
	CU	.000	.000	.
N	PMM	88	88	88
	PTC	88	88	88
	CU	88	88	88

The Pearson Correlation indicates that PTC has a correlation to PMM of .591. CU has a correlation to PMM of .614. Using a 1-tailed test, the p value of $.000 < .05$ in both cases, indicating that the relationship is significant with 95% confidence.

Table 4

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	CU, PTC ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: PMM

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.680 ^a	.462	.450	9.26772

a. Predictors: (Constant), CU, PTC

The model summary indicates that one model is being reported. The R value of .680 indicates that there is a .680 correlation between the observed and predicted values of CU and PTC. The R square value of .462 indicates that 46.2 % of the variance in PMM can be predicted from the variables CU and PTC. The adjusted R square value of .450 is adjusted for the population and considers the addition of predictors to the model. The standard error of the estimate is 9.26772.

Table 5

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6278.278	2	3139.139	36.548	.000 ^a
	Residual	7300.710	85	85.891		
	Total	13578.989	87			

a. Predictors: (Constant), CU, PTC

b. Dependent Variable: PMM

The F value of 36.548 with a p value of .000 < .05 indicates that the independent variables CU and PTC are significant predictors of the dependent variable PMM.

Table 6

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.269	4.617		.708	.481
	PTC	.499	.136	.356	3.663	.000
	CU	1.799	.426	.410	4.223	.000

a. Dependent Variable: PMM

The independent variable PTC has a standardized coefficient of .356 with a t-value of 3.663. The p-value of .000 < .05 indicates that PTC is a statistically significant predictor of PMM at the .05 alpha level. The independent variable CU has a standardized coefficient of .410 with a t-value of 4.223. The p-value of .000 < .05 indicates that CU is a statistically significant predictor of PMM at the .05 alpha level.

H3 There is a relationship between project team culture and corporate understanding of project management.

Table 7

Descriptive Statistics

	Mean	Std. Deviation	N
CU	10.0455	2.84831	88
PTC	38.8864	8.91135	88

Table 8

Correlations

		CU	PTC
Pearson Correlation	CU	1.000	.574
	PTC	.574	1.000
Sig. (1-tailed)	CU	.	.000
	PTC	.000	.
N	CU	88	88
	PTC	88	88

The Pearson Correlation indicates that PTC has a correlation to CU of .574. Using a 1-tailed test, the p value of .000 < .05 indicates that the relationship is significant with 95% confidence.

Table 9

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	PTC ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: CU

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.574 ^a	.329	.322	2.34595

a. Predictors: (Constant), PTC

The model summary indicates that one model is being reported. The R value of .574 indicates that there is a .574 correlation between the observed and predicted values of CU. The R square value of .329 indicates that 32.9 % of the variance in CU can be predicted from the variable PTC. The adjusted R square value of .322 is adjusted for the population and considers the addition of predictors to the model. The standard error of the estimate is 2.34595.

Table 10

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	232.519	1	232.519	42.249	.000 ^a
	Residual	473.299	86	5.503		
	Total	705.818	87			

a. Predictors: (Constant), PTC

b. Dependent Variable: CU

The F value of 42.249 with a p value of $.000 < .05$ indicates that the independent variable PTC is a significant predictor of the dependent variable CU.

Table 11

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.912	1.126		2.587	.011
	PTC	.183	.028	.574	6.500	.000

a. Dependent Variable: CU

The independent variable PTC has a standardized coefficient of .574 with a t-value of 6.5. The p-value of $.000 < .05$ indicates that PTC is a statistically significant predictor of CU at the .05 alpha level.

H4 Organizations with a higher level of project management maturity are more likely to realize the benefits of informal project management practices.

Table 12**Descriptive Statistics**

	Mean	Std. Deviation	N
IPM	12.7564	2.41309	78
PTC	39.6282	8.46246	78
CU	10.0769	2.89096	78
PMM	42.9615	10.68613	78

Table 13**Correlations**

		IPM	PTC	CU	PMM
Pearson Correlation	IPM	1.000	.248	.209	.247
	PTC	.248	1.000	.560	.611
	CU	.209	.560	1.000	.754
	PMM	.247	.611	.754	1.000
Sig. (1-tailed)	IPM	.	.014	.033	.014
	PTC	.014	.	.000	.000
	CU	.033	.000	.	.000
	PMM	.014	.000	.000	.
N	IPM	78	78	78	78
	PTC	78	78	78	78
	CU	78	78	78	78
	PMM	78	78	78	78

The Pearson correlation indicates that PTC has a correlation to IPM of .248. Using a 1-tailed test, the p-value of $.014 < .05$ indicates that the relationship is significant with 95% confidence. CU has a correlation to IPM of .209. Using a 1-tailed test, the p-value of $.033 < .05$ indicates that the relationship is significant with 95% confidence. PMM has a correlation to IPM of .247. Using a 1-tailed test, the p-value of $.014 < .05$ indicates that the relationship is significant with 95% confidence.

The results of this Pearson correlation matrix show that none of the variables: PTC, CU or PMM have a strong correlation to the dependent variable IPM. In fact, .248, .209 and .247 are considered weak correlations.

Table 14

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	PMM ^a , PTC, CU	.	Enter

a. All requested variables entered.

b. Dependent Variable: IPM

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.276 ^a	.076	.039	2.36574

a. Predictors: (Constant), PMM, PTC, CU

The model summary indicates that one model is being reported. The R value of .276 indicates that there is a .276 correlation between the observed and predicted values of PMM, PTC and CU. The R square value of .076 indicates that 7.6 % of the variance in IPM can be predicted from the variables PMM, PTC and CU. The adjusted R square value of .039 is adjusted for the population and considers the addition of predictors to the model. The standard error of the estimate is 2.36574.

Table 15**ANOVA^b**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.216	3	11.405	2.038	.116 ^a
	Residual	414.156	74	5.597		
	Total	448.372	77			

a. Predictors: (Constant), PMM, PTC, CU

b. Dependent Variable: IPM

The F value of 2.038 with a p value of .116 > .05 indicates that the independent variables PMM, PTC and CU are not significant predictors of the dependent variable IPM.

Table 16**Coefficients^a**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.522	1.350		7.051	.000
	PTC	.043	.041	.152	1.055	.295
	CU	.015	.145	.018	.103	.918
	PMM	.032	.041	.141	.779	.438

a. Dependent Variable: IPM

The independent variable PTC has a standardized coefficient of .152 with a t-value of 1.055. The p-value of .295 > .05 indicates that PTC is not a statistically significant predictor of IPM at the .05 alpha level. The independent variable CU has a standardized coefficient of .018 with a t-value of .103. The p-value of .918 > .05 indicates that CU is not a statistically significant predictor of IPM at the .05 alpha level. The independent variable PMM has a standardized coefficient of .141 with a t-value of .779. The p-value of .438 > .05 indicates that PMM is not a statistically significant predictor of IPM at the .05 alpha level.

Conclusion

In summary, both hypothesis 1 (H1) and hypothesis 2 (H2) were validated since project team culture (PTC) and corporate understanding of project management (CU) had significant positive correlations to project management maturity level (PMM).

Hypothesis 3 (H3) was also validated since project team culture (PTC) had a significant positive correlation to corporate understanding of project management (CU).

Unfortunately, the fourth hypothesis (H4) pertaining to the dependent variable of interest was not validated. Project management maturity level (PMM) was not a significant predictor of the dependent variable (IPM) according to this study. In addition, when considering all of the variables in the theoretical framework in a linear regression model, none of the variables had a significant correlation to informal project management (IPM).