Role of communication in CRM solution implementations

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Abstract

Communication plays a very critical role in business, and so does it in project management. Projects reportedly have failed due to poor or inadequate communication. The subject of CRM implementations are of importance in the current business environment primarily because of the significance it has. Implementing of CRM, especially the technology implementation often rests with and IT service provider. Therefore it is quite possible that gaps exist between the company implementing CRM and the IT service provider. The gap therefore needs to bridged by communicating. However the bigger challenge is that communication is never taken 'formally' or even 'seriously' in IT project management. The focus lies more on project management, and achieving the iron triangle of the project success. The purpose of this research article therefore is to understand how communication impacts CRM solution implementations, if there is a real impact and what are the factors that needs to be looked at while communicating during CRM solution implementations. This research has been conducted from the perspective of the IT project management team and the role that communication would play for them for effective project management and engagement.

Key Words: *CRM, Technology, Solutions, Communication.*

Introduction

"What gets measured, gets done" is identified as a prime mantra for successful projects and poor communication is the biggest impediment to successful projects. Thomas, Tucker, Kelly (1999)

Schultz, Slevin, and Pinto (1987) mentions key success factors for projects and focusses on the need for 'adequate communication' and is frequently cited critical success factor in project management. Communication in any project environment is critical, especially when two organisations are working towards a common goal. Communication is primarily done for internal information needs, external information needs and stakeholder information.

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Review of Literature

In CRM implementations the goals of the organisation implementing the CRM project and the IT service provider must 'communicate' to achieve this common goal. The findings of the researchers (Schultz, Slevin, and Pinto 1987) also point out that sufficient information must be available on the objectives of the project, status, changes happening in the project. Communication is also essential for organizational coordination and clients' needs. There is also a need to establish a formal channel of communication between the project team, clients, within the team and the remaining organization for its overall success. These findings summarize the need for communication in any project environment. Fedor et al. (2003) also underlined the importance of communication and suggested that leadership of an organisation can enable or limit the free flow of information and ideas. In a study done on CRM implementations, for example, communication between the departments has been determined as critical for the realization of the CRM organizational goals. The communication that happened between intra departments provided a comprehensive picture of the needs and habits of the customer. (Rahimi and Berman 2009; Parvatiyar and Sheth, 2001). The importance of communication has also been studied by Davidovic. He mentions that communication planning is one of the most neglected aspect in projects. Therefore to be effective in projects, effective and consistent formal and informal communication methodologies should be adopted. Communication is identified as an important skill for consultants by Kakabadse (2006). A consensus building is possible amongst stakeholders, project team members using effective communication. A consensus can also be reached on the shared vision of a project. Effective communication also helps a team to identify, assess and implement change.

Effective communication is essential between the team who works on a deployment and the users of the system, which is essential to understand the business needs of the users and ensure that the system is complete in all respect. The requirements of the users should be met, ensuring that the requirement changes are minimized at a later stage, a positive relationship between consulting team and end users is fostered. This helps in streamlining problems, and the cost of rework because of inadequate requirements are reduced as well as saves time.

In another study on CRM implementation studies mention that the technology was not the problem but a disciplinary approach to reporting, communication and feedbacks change the situation and help solve the problem. Adopting a clear approach to communication and communicating of expectations to the stakeholders are two critical project management success factors laid down. There must be a clarity in the definition of the project goal and the likely outcome of the project. Identifying the goals at the early stages reduces the risk of failures. It also helps from cost and time overruns. Similarly failure to set the expectations of the various stakeholders in a project is a common problem that is encountered, especially stakeholders who are directly not attached with the projects. Huber (1990) also supports the above view points and mentions that capabilities in communication 'mediate the effect of IT adoption' as employees can:

- Communicate more easily across time and geography
- Communicate faster with precision

The mention on the importance of communication is mentioned by Boomer

(2012). Continuous and unambiguous communication is critical in CRM implementation, because implementations involve changing behaviors of people and that is not easy. The role of communication is a pre-requisite for activating inter-functional activities. Issues relating to internal communication are relevant within the field of customer relationship management. The researcher concluded that both top down communication about the mission of the project, as well as communication across the various functions of the organisation are very important when implementing CRM. (Minami, C. 2009) . The mere lack of communication between the management and the employees could result into a confused and de-motivated employee. (Adamson, Jones, and Tapp, 2006) . In another study done by Fineberg (2012) of successful implementations on CRM, the client mentions the setting of a communication strategy in the CRM implementation plan.

Researchers also suggest that there must be a strong network of communications in between the project teams and the end users. It must be continuous and concise. The communication between the project teams and end users must be well documented and accepted. (Ling and Yen 2001)

Communication levels between business and IT executives, and connections between business and IT planning processes influence alignment between IT and business objectives. (Reich and Benbasat 2000). Accuracy in communications, the procedures to be followed, and the barriers in communication, understanding, timeliness and completeness are identified as critical categories of communication in any project scenarios. Targeted and effective communication, communicating amongst stakeholders and regularly updating of the project progress has been identified under communication as

critical success factors for ERP implementation projects (Nah and Delgado 2006).

Effective communication includes two different aspects. First, providing complete report of the progress, which is timely and frequent); Second, express issues effectively (using oral and written mechanisms). However the challenge lies in the complexity of interpretation. Communication effectiveness is therefore a sum of the intensity of communication (frequency and quality) and the ability to communicate (ability to put down issues)

An effective communication aims to reduce uncertainty. It provides a clear idea of the needs and the scheduling of the resources. Communication also helps in keeping a track of the customer priorities and align the requirements to the needs of the customer. It also helps the reduction of the gap between what is expected of the customer and the current status of the project.

Effective communications also helps in knowledge sharing, understanding of what is expected of one another in a timely manner.

This leads us to the objective, which is to understand if communication planning plays a critical role in the final outcome of the project. To do this, the framework laid down in the Project Management Body of Knowledge, is being used as a reference to test if communication plays a critical role in the successful implementations of CRM projects

The activities laid down in planning the communication in PMBOK are:

1. The communication requirements of various stakeholders

2. The information that needs to be communicated to the various stakeholders (Language, format, content and level of

details)

3. Reason for the distribution of the information, the time frame for communication and the frequency of distribution

4. People responsible for distributing information

5. People responsible for releasing sensitive information

6. Methods adopted to convey (memos, emails and press releases)

7. Time and budget allocation

8. Escalation frameworks in communication

9. Maintaining a glossary of terminologies used

10. Information flow in projects, authorizations, reports to be generated, and planning of meetings

11. Constraints to communication

12. Updating of the communication plan as the project progress

It will also be important to look at how does right communication practices for internal and external stakeholders lead to a successful completion of a CRM IT implementation. We will be looking at the following parameters (identification, distribution, managing expectations and reporting performance) for proper internal and external communication practices, identified by the PMBOK.

1. Identification of the stakeholders

· Have qualitative and quantitative information been collected to determine whose interests should be taken into account throughout the project?

· The potential impact that each stakeholder could generate

2. Distributing information

· Were relevant information provided to the stakeholder?

3. Manage stakeholder's expectations

· What were the tools and techniques adopted for managing the stakeholders expectations?

4. Report performance

· What methodology was adopted to communicate the performance of the project?

An effective communication can give the customer a great deal of confidence about the final outcome of the project and reassure them about their needs being met. This becomes very important in situations when the IT consultant is located at a place far away from the customer.

This leads us to the question, if:

• Planning of the communication strategy plays a critical role in successful completion of CRM projects

Project management communication is about identifying stakeholders to be communicated, planning the process, distributing the information, managing the expectations and reporting the performance. This can only be achieved with proper planning and great internal and external communication practices.

Objectives and Hypothesis

CRM solution implementation is not a standalone activity. It is supported by the company implementing CRM and the IT project team. Communication between the customer and the consultants as well as within the project teams are important, to have a shared understanding of the common goals for successful implementation. Unless the communication is timely, precise and well

understood, there are high chances of failure in CRM implementations. It is therefore important to look at how planning and executing of the communication needs of a project can impact the success of the implementation. This leads us to our hypothesis statement:

H1: Does internal communication play a significant role in the successful completion of CRM projects?

H2: Does external communication play a significant role in the successful completion of CRM projects?

The study undertaken:

- A pilot questionnaire was administered to a panel comprising of seven experts from the Information technology consultants to check its adaptability to Indian conditions.

- A pilot study was conducted initially to examine the reliability and validity of the questionnaire.

- A total of 105 samples (Around 23 samples from each company) was included from the big five IT consulting companies based on simple random sampling.

Results and Analysis

Demographic data of the respondents

The project management experience of the respondents have 50.5% of the respondents in the 5-10 years category, followed by 24.8% of the respondents in the 10+ year's category. 26 respondents had project management experience of less than 5 years, which constitutes 24.8% of the respondents. All the 105 respondents had an experience of CRM solution implementation. 14.3 percent of the respondents had more than 9 CRM

implementation experience while 28 had in between 4-6 implementation experience which constituted 26.7% of the respondents.

Analysis of the Responses

Part 1: To understand the first hypothesis, the opinion of project managers were collected on 3 strategic issues of internal communication were collected. (Analyzing internal stakeholders, communicating the customers project vision and reporting)

Part 2: A Cronbach's Alpha (to test the reliability) followed by a principal component analysis was conducted to find out the critical factors that were creating the maximum variance.

A Chi Square test was performed to validate the hypothesis

Part 1: To understand the first part, the opinion of project managers on 3 strategic issues of internal communication were collected. (Analyzing internal stakeholders, communicating the customers project vision and reporting)

Part 2: A Cronbach's Alpha (to test the reliability) followed by a principal component analysis was conducted to find out the critical factors that were creating the maximum variance.

The Cronbach's alpha reliability test is an internal consistency test, which measures the inter-correlation amongst items within a scale, representing homogeneity.[1] (Nunnally, 1978). Internal consistency is measured using a reliability coefficient of Cronbach's alpha[2] (Cronbach, 1951) The Cronbach's Alpha was

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[1]Nunnally, J. (1978). C.(1978). Psychometric theory.
[2]Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. psychometrika, 16(3), 297-334.

Do you analyze the internal stakeholders for communication for a CRM project?					
		Respondents	Percent	Valid Percent	Cumulative
Valid	Very unlikely	4	3.8	3.8	3.8
	unlikely	18	17.1	17.1	21.0
	Neither likely nor unlikely	16	15.2	15.2	36.2
	likely	42	40.0	40.0	76.2
	very likely	25	23.8	23.8	100.0
	Total	105	100.0	100.0	

Does 'communicating the customers project vision' help the internal team understand the requirement better?					
		Respondents	Percent	Valid Percent	Cumulative
Valid	Very unlikely	2	1.9	1.9	1.9
	unlikely	6	5.7	5.7	7.6
	Neither likely nor unlikely	14	13.3	13.3	21.0
	likely	45	42.9	42.9	63.8
	very likely	38	36.2	36.2	100.0
	Total	105	100.0	100.0	

Do you encourage your team members to 'report' to project managers on a regular basis?					
		Respondents	Percent	Valid Percent	Cumulative Percent
Valid	Very unlikely	5	4.8	4.8	4.8
	Neither likely nor unlikely	5	4.8	4.8	9.5
	likely	59	56.2	56.2	65.7
	very likely	36	34.3	34.3	100.0
	Total	105	100.0	100.0	

Reliability Test

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.715	.635	3

calculated for the factors returned a value of .715 which is higher than the required level of 0.7.[3] After confirming the reliability of the instrument for measurement instrument it is possible to proceed with the analysis.

Factor Analysis

Principal Component Analysis (PCA) has been used for the study essentially to check if smaller number of variables can be used to explain risks in CRM implementations.

However for any Principal Component Analysis (PCA), there are 3 minimum criteria that needs to be met. First, the sample size, second the inter item correlation and the third sampling adequacy.

The first is the sample size for the study. For this study 105 respondents have been used, which confirms to the studies done by Rattray and Jones (2007)[4], which suggested the minimum sample size to be 100.

The second prerequisite of doing a principal component analysis is to look at the correlation between the items and ideally should be in between the range of 0.3 and 0.8.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.680
Bartlett's Test of Sphericity	Approx. Chi-Square	49.866
	df	3
	Sig.	.000

Communalities		
	Initial	Extraction
Internal stakeholders communication	1.000	.353
Communicating the customers project vision	1.000	.676
Reporting	1.000	.727

Extraction Method: Principal Component Analysis

[3] *Forza, C. (2002). Survey research in operations management: a process-based perspective. International journal of operations & production management, 22(2), 152-194.*
[4] *Rattray, J., & Jones, M. C. (2007). Essential elements of questionnaire design and development. Journal of clinical nursing, 16(2), 234-243.*

Before the factor analysis has been conducted all items greater than 0.8 and below 0.3 were dropped from the analysis.[5]

The third requirement is the sampling adequacy which comes from the KMO, which is the Kaiser-Meyer-Olkin (KMO) measure. The value ranges from 0 to 1. Values closer to 1 are the most appropriate and values less than 0.5 are unacceptable[6]. The KMO value is (0.68).

Bartlett's Test of Sphericity has been suggested by Field (2009)[7] before a study to examine that the correlation matrix is an identity matrix among variables. The values should have a P value <0.05 is .000.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.756	58.530	58.530	1.756	58.530	58.530
2	.815	27.180	85.710			
3	.429	14.290	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]	
	Component
	1
Analyze internal stakeholders	.594
Communicating the customers	.822
Reporting	.853

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

The above table shows the extracted components, contributing to 58.5% of the total variations. One major factor was identified. Communicating the customer's project vision and reporting of the internal teams came up with the major loadings. Communicating the project vision of the customer, helps the consulting team understand and empathize with the requirements better. Proper reporting of the consultant team helps keep track of the progress and understand any deviations that may happen during the project.

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[5] Field, A. (2009). Discovering statistics using SPSS. Sage publications.
[6] Parsian, N., & Dunning, T. A. (2009). Developing and validating a questionnaire to measure spirituality: A psychometric process. Global journal of health science, 1(1), 2.
[7] Field, A. (2009). Discovering statistics using SPSS. Sage publications.

These two factors should be considered as critical for internal communication for effective CRM implementations.

Part 3: A Chi Square test was performed to validate the hypothesis

A chi-square test was performed, with P value of 0.000 at 5% level of significance which is less than 0.05. Therefore there is evidence to suggest that there is a significant impact internal communication have on CRM implementations.

To analyse the second hypothesis, the following methodology was adopted:

Part 1: To understand the first part, the opinion of project managers on 3 strategic issues of external communication were collected. (Analyzing external stakeholders, budgeting and communicating deviations)

Part 2: A Cronbach's Alpha (to test the reliability) followed by a principal component analysis was conducted to find out the critical factors that were creating the maximum variance.

Part 3: A Chi Square test was performed to validate the hypothesis

Part 2: A Cronbach's Alpha (to test the reliability) followed by a principal component

Test Statistics			
	Analyze internal stakeholders	**Communicating the customers project vision**	**Reporting**
Chi-Square	37.143a	71.429a	78.886b
df	4	4	3
Asymp. Sig.	.000	.000	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 21.0.
b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 26.3.

Do you analyze the external stakeholders for communication for a CRM project?					
		Respondents	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Very unlikely	12	11.4	11.4	11.4
	unlikely	28	26.7	26.7	38.1
	Neither likely nor unlikely	7	6.7	6.7	44.8
	likely	42	40.0	40.0	84.8
	very likely	16	15.2	15.2	100.0
	Total	105	100.0	100.0	

Reliability Test

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.815	.735	3

Do you budget for external communication needs?					
		Respondents	Percent	Valid Percent	Cumulative Percent
Valid	Very unlikely	25	23.8	23.8	23.8
	unlikely	23	21.9	21.9	45.7
	Neither likely nor unlikely	17	16.2	16.2	61.9
	likely	32	30.5	30.5	92.4
	very likely	8	7.6	7.6	100.0
	Total	105	100.0	100.0	

Do you communicate deviations from the project goal or scope with your customers?					
		Respondents	Percent	Valid Percent	Cumulative Percent
Valid	Very unlikely	3	2.9	2.9	2.9
	unlikely	18	17.1	17.1	20.0
	Neither likely nor unlikely	11	10.5	10.5	30.5
	likely	58	55.2	55.2	85.7
	very likely	15	14.3	14.3	100.0
	Total	105	100.0	100.0	

analysis was conducted to find out the critical factors that were creating the maximum variance.

The Cronbach's alpha reliability test is an internal consistency test, which measures the inter-correlation amongst items within a scale, representing homogeneity.[8] (Nunnally, 1978). Internal consistency is measured using a reliability coefficient of Cronbach's alpha[9] (Cronbach, 1951) The Cronbach's Alpha was

[8]Nunnally, J. (1978). C.(1978). Psychometric theory.
[9]Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. psychometrika, 16(3), 297-334.

calculated for the factors returned a value of .815 which is higher than the required level of 0.7[10]. After confirming the reliability of the instrument for measurement instrument it is possible to proceed with the analysis.

Factor Analysis

Principal Component Analysis (PCA) has been used for the study essentially to check if smaller number of variables can be used to explain risks in CRM implementations.

However for any Principal Component Analysis (PCA), there are 3 minimum criteria that needs to be met. First, the sample size, second the inter item correlation and the third sampling adequacy.

The first is the sample size for the study. For this study 105 respondents have been used, which confirms to the studies done by Rattray and Jones (2007),[11] which suggested the minimum sample size to be 100.

The second prerequisite of doing a principal component analysis is to look at the correlation between the items and ideally should be in between the range of 0.3 and 0.8. Before the factor analysis has been conducted all items greater than 0.8 and below 0.3 were dropped from the analysis[12].

The third requirement is the sampling adequacy which comes from the KMO, which is the Kaiser-Meyer-Olkin (KMO) measure. The value ranges from 0 to 1. Values closer to 1 are the most appropriate and values less than 0.5 are unacceptable[13]. The KMO value is (0.65).

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.659
Bartlett's Test of Sphericity	Approx. Chi-Square	111.681
	df	3
	Sig.	.000

Communalities		
	Initial	Extraction
Analyze ext stakeholders	1.000	.822
Budget	1.000	.702
Communicate deviations	1.000	.646

Extraction Method: Principal Component Analysis

[10] Forza, C. (2002). Survey research in operations management: a process-based perspective. International journal of operations & production management, 22(2), 152-194.

[11] Rattray, J., & Jones, M. C. (2007). Essential elements of questionnaire design and development. Journal of clinical nursing, 16(2), 234-243.

[12] Field, A. (2009). Discovering statistics using SPSS. Sage publications.

[13] Parsian, N., & Dunning, T. A. (2009). Developing and validating a questionnaire to measure spirituality: A psychometric process. Global journal of health science, 1(1), 2.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.171	72.363	72.363	2.171	72.363	72.363
2	.547	18.224	90.857			
3	.282	9.413	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix [a]	
	Component
	1
Analyze external stakeholders	.907
Budget	.838
Communicate deviations	.804

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Bartlett's Test of Sphericity has been suggested by Field (2009)[14] before a study to examine that the correlation matrix is an identity matrix among variables. The values should have a P value <0.05 is .000.

The above table shows the extracted components, contributing to 72.3% of the total variations. One major factor was identified. Analyzing external stakeholders and budgeting for external communication needs came up to have significant factor loadings. External stakeholder communication needs have to be analysed before or during the project. This is essential to keep the customer updated about the project and if it is on track and if it is meeting the project sponsors vision or the end user requirements. It is important to understand that insufficient communication to external stakeholders may impact the success of the project. The second aspect is to budget for external communication. External communication needs budget and time. It may require consultants travelling or meeting virtually. All these require time and cost and it is better that it is budgeted for under the project costs.

[14] Field, A. (2009). Discovering statistics using SPSS. Sage publications.

Test Statistics			
	Analyze external stakeholders	Budget	Communicate deviations
Chi-Square	37.714a	15.524a	87.524a
df	4	4	4
Asymp. Sig.	.000	.000	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 21.0.

Part 3: A Chi Square test was performed to validate the hypothesis

A chi-square test was performed, with P value of 0.000 at 5% level of significance which is less than 0.05. Therefore there is evidence to suggest that there is a significant impact external communication have on CRM implementations.

Suggestions, Conclusions and Scope for Further Studies

Project implementations, especially IT implementations never look at communication seriously. However this study found that communication had a significant impact on successful CRM project completion. Internal communication with the team responsible for implementing CRM is a critical factor for success. The most important factor in internal communication includes, reporting and communicating the customer's project vision as a critical success factor for internal communication. Similarly external communication also plays a significant role in the successful completion of the CRM project. Analyzing external stakeholder's communication needs and budgeting for external communication needs are the most important factor in external communication.

Communication should adopt a planned three step approach. The planning stage, execution stage and follow up stage. Internal communication is equally important as external communication for clear understanding of the overall CRM implementation project. The outcomes is significantly impacted with communication. While communicating internally within the project team, it is important to remind the team about the customer's vision for the project. This will help the team meet the customer expectations better. The internal consulting team is also expected to report any issues that may be arising or challenges that they foresee during the implementation so that corrective action may be taken proactively or timely.

While communicating externally, it is important that an ad hoc approach is not followed. Budgeting is a crucial element, as external communication may need proximity with the customers. Also facilities like video and audio conferencing are also critical for communicating which needs to be budgeted for. Planning of the external communication requirements are critical. The planning needs to be done efficiently and a matrix structure needs to be in place for people who are 'responsible' for the communication, people

who needs to be kept 'informed', people who are 'accountable' for such communications, and people who needs to be 'consulted' for communication. A clear matrix explaining the communication structure will make the flow of communication smoother in between the IT consultant and the customer.

Further studies in this area can be done on the following:

1. Communication is difficult to measure. Also finding data pertaining to communication is even more difficult. However it will be an interesting study to find an empirical study on communication.

2. Internal and external communication factors identified in this research needs to be studied in depth.

3. A case based approach on a CRM project success and failure should be studied to understand the factors that contributed or did not pertaining to CRM implementations.

4. Studies can also be done on errors and mistakes of financial significance made as a result of poor or inadequate communication in CRM projects.

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