

DEFINING SUCCESS IN CRM IMPLEMENTATION PROJECTS: AN EMPIRICAL STUDY FROM THE IT CONSULTANTS PERSPECTIVE

Hory Sankar Mukerjee

Principal-Education Training and Assessment, Infosys Limited,
Hory_Mukerjee@infosys.com

U Devi Prasad

Associate Professor, Hyderabad Business School,
GITAM University udeviprasad@gitam.in

S.S Prasada Rao

Faculty of Management, Director, Academic Affairs, GITAM University Gandhinagar
Campus, profsspr@gmail.com

DOI: 10.23862/kiit-parikalpana/2017/v13/i1/151283

Article available at: <http://ksom.ac.in/faculty-and-research/research/parikalpana-the-research-journal/>

ABSTRACT

One of the key stakeholders in CRM implementations is the IT consultant, whose job is not only restricted to selecting the right package, but also ensure that the organisation implementing CRM is able to benefit from the same. For the IT consultant, CRM implementation is a technology project which enables resources for implementation. However 'success' per se has different meanings for various stakeholders and this article tries to analyse the definition of project success from a CRM project management perspective of an IT consultant. The article tries to look at the various factors that define success for CRM projects.

Introduction:

The relationship between a customer and the enterprise is strengthening and has been the center of all discussion in business and management literature. The need to have the customers at the center of the business is well justified and universally accepted as they form the reason of 'being in business' for every corporation. Along with this, today's hypercompetitive

marketplace, with plethora of product and service choices available makes the offerings often indistinguishable to a customer.¹ This have in turn pulled down the margins, put pressure on the top and bottom lines with companies leaving no stone unturned to get their margins, profitability and cost mix right.

A key aspect of this relationship building is therefore implementation of the right

technology in the right spirit. Two questions that grip businesses looking in for an IT solution are: **First:** Which software solution will fit into my requirements in case we choose to buy a CRM solution from a vendor? **Two:** In case we procure the solution from a CRM vendor, can this be outsourced for implementation, maintenance and upkeep of the solution to a third party (IT consultant)?

Companies often are not willing to invest in information technology personnel for issues pertaining to infrastructure, upgrade and maintenance of the required facility or software and is also often an overhead to the organisation in the long run. The IT function may not be a core part of their business and therefore it does not make sense for them to invest on personnel for a longer time.

Implementation of a CRM solution is extremely complex, lengthy, time consuming, and costly. It requires specific expertise which most implementing organisations cannot provide. Therefore an ideal way to bridge this gap is to hire a team of information technology consultant who would help with the process and drive this. The consultants provide their advice in selecting the right CRM software. Unfortunately the failure rates of such implementations are very high.²

Research Gap and Research Problem:

An important aspect of a successful CRM implementation comes from the

successful deployment of the IT solution. However the definition of ‘project success’ in management research are different. There is a lack of research on the definition of ‘successes’ in CRM package implementations from the IT project managers view. It is therefore critical to look at what ‘success’ would mean to a project manager who has finished implementing a packaged CRM solution.

Objectives of the Study:

There are over 900 registered CRM vendors. An organization trying to implement a CRM solution has a plethora of choices with him. Not being able to identify the right implementation objective or having a weak vision of CRM may mean a wrong choice. CRM products essentially are of two types: On-demand (SaaS) or an on premise solution. While an on-demand solution means a light weight, low maintenance and low cost product, it may sacrifice the data security. An on premise solution however is costly, but more secure and scalable. Also integration with other systems like the ERP is also easier with an on premise solution. So weighing the choices before implementation can be a tough choice.

The specific objectives that we intend to meet is to understand the factors that constitute ‘project successes for a CRM IT solution implementation.

Blount, J. (2013). People Love You. People Love You, 1-8.

² <http://www.what-is-crm.com/crm-failures.php>; Accessed on 5th January 2016

Literature Review:

Researchers also noted that for a project manager, a project is considered closed when they are handed over to the customer, which means a CRM implementation is done. However one of the important thing that is missed out in this understanding is the 'effect' it will have on end users of the system.³

Projects essentially have a start and end date which is a must, however the importance of the dates are very important. So for the project manager the cost and the time matters the most.

The impact a project could have on businesses have also been studied. For example, customer satisfaction has been studied as an important dimension in project success. The time, budget and the scope for the project (referred as the 'iron triangle') is also critical. Ignoring the bigger picture of the project, lack of understanding the environment under which the client operates cannot be

avoided. Just getting the job done or the implementation done is no measure of success.⁴

Another researcher, Cooke-Davies, mentions that there is a difference in the term 'project success' and 'project management success'. The former is about the outcome of the project and if that meets the vision of the organization investing in it. The later however according to the researcher meant a traditional way of looking at success, especially when the project is complete and based primarily on cost, functionality and time objectives.⁵⁶ The overall project success therefore means a lot in terms of implementation.

Researchers have cited many examples where the projects are near perfect, done on time, well planned, executed, achieve the goals originally set, but fail on account of providing benefits to the customer. The customer often does not realize any value from the project implementation.⁷ The reverse of this has also been noted by

³ Munns, A. K., & Bjeirmi, B. F. (1996). The role of project management in achieving project success. *International journal of project management*, 14(2), 81-87.

⁴ Shrnhur, A. J., Levy, O., & Dvir, D. (1997). Mapping the dimensions of project success. *Project management journal*, 28(2), 5-13.

⁵ Cooke-Davies, T. (2002). The "real" success factors on projects. *International journal of project management*, 20(3), 185-190.

⁶ Atkinson, R. (1999). Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International journal of project management*, 17(6), 337-342.

⁷ Dvir, D., Raz, T., & Shenhar, A. J. (2003). An empirical analysis of the relationship between project planning and project success. *International Journal of Project Management*, 21(2), 89-95.

⁸ Thomas, M., Jacques, P. H., Adams, J. R., & Kihneman-Wooten, J. (2008). Developing an effective project: Planning and team building combined. *Project Management Journal*, 39(4), 105-113.

researchers. Projects in which the original objectives have not been met, but the client was happy with the final outcome.⁸

For this study, we will be looking at seven important parameters for defining project success, as identified across various literature. They are:⁹¹⁰¹¹¹²

1. **Meeting the costs:** Was the project profitable?
2. **Time:** Was the project successful in meeting the timelines?
3. **Budgets:** Was the project successful in meeting the project budgets?
4. **The scope of the project:** Was the project successful in meeting the scope and changes?
5. **Bigger picture (organizational goals as to why to implement CRM):** Was the final objective met or how was the overall success of the project?
6. **The client assessment impact:** Was the client satisfied with the final outcome of the project?
7. **End user satisfaction:** Were the end users satisfied with the final outcome?

Researchers also agree that project completions on time and budget are often incorrect measures for success, but are important and cannot be ignored. Quality for example is linked with the technical performance of the system, the specifications and achieving the end objectives and can be subject to different set of interpretations by different stakeholders.

There is very little empirical evidence for IT CRM implementation projects on the factors that contribute to the project success. Is it merely the 'iron triangle' of costs, time and scope, or is it something more than that? This needs to be investigated.¹

Hypothesis for the study:

For the purpose of this study, the research hypothesis are:

H_a D1: There is significant difference project managers have on the definition of project success.

Research Methodology:

The research design employed for the

⁹ Dvir, D., Raz, T., & Shenhar, A. J. (2003). An empirical analysis of the relationship between project planning and project success. *International Journal of Project Management*, 21(2), 89-95.

¹⁰ Serrador, P., & Turner, R. (2015). The relationship between project success and project efficiency. *Project Management Journal*, 46(1), 30-39.

¹¹ Baccarini, D. (1999). The logical framework method for defining project success. *Project management journal*, 30(4), 25-32.

¹² Shrnhur, A. J., Levy, O., & Dvir, D. (1997). Mapping the dimensions of project success. *Project management journal*, 28(2), 5-13.

¹³ Schwalbe, K. (2015). *Information technology project management*. Cengage Learning, pp 6

present study is empirical in nature. A questionnaire was executed for this purpose. The respondents be project managers, consultants and senior consultants who have worked on the technology implementation of CRM. The research cut across both on-demand and on-premise solutions.

- The 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 was included from the big five IT consulting companies based on simple random sampling.

Methodology

Part 1: The opinion of the project managers were collected on a 5 point Likert Scale. (1= Disagree and 5= Agree). This data was collected on 10 parameters of project success.

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

Part 3: A Pearson's Chi Square test was done, within on demand and on premise projects for successful and unsuccessful implementations to find if there is difference in the project manager's opinion of project success factors.

Analysis and Results

The study would provide essential insights to project managers and researchers on what constitutes success in CRM technology implementations. This would also provide a building block for other researchers to look at the phenomenon of technology implementations in CRM, which is a missing link.

Part 1: The opinion of the project managers were collected on a 5 point Likert Scale. (1= Disagree and 5= Agree). This data was collected on 10 parameters of project success. The project managers were also asked to rank them from 1 to 10.

Opinion of project managers on a Likert Scale of 1-5 on project success parameters

	1	2	3	4	5	Total
Meeting the internal project margins	3	15	17	32	38	105
On time completion of a project	0	4	18	18	65	105
On budget completion	2	14	13	37	39	105
Meeting the scope of the project	0	1	5	28	71	105
Meeting the bigger picture for implementing CRM	1	5	25	26	48	105
Ratings of the project sponsor	5	2	27	34	37	105
Satisfaction of the project team members	12	4	28	29	32	105
Customer satisfaction	1	6	4	15	79	105
Satisfaction of end users	1	4	5	16	79	105
Future revenues from customer	0	2	5	35	63	105

<i>Ranks from 1 to 10 on components of project success</i>										
<i>Ranks 1 to 10: (1=Highest and 10=Lowest)</i>	1	2	3	4	5	6	7	8	9	10
<i>Meeting the internal project margins</i>	12	5	5	13	5	5	19	12	14	15
<i>On time completion of a project</i>	11	18	14	12	12	9	8	5	13	3
<i>On budget completion</i>	2	14	16	9	6	16	4	12	11	15
<i>Meeting the scope of the project</i>	19	19	6	21	13	9	8	4	3	3
<i>Meeting the bigger picture for implementing CRM</i>	8	5	16	13	5	12	7	15	15	9
<i>Ratings of the project sponsor</i>	5	2	6	8	29	19	6	9	17	4
<i>Satisfaction of the project team members</i>	5	0	2	9	6	8	9	15	9	42
<i>Customer satisfaction</i>	9	12	22	11	7	10	16	5	11	2
<i>Satisfaction of end users</i>	23	20	9	8	1	12	10	12	5	5
<i>Future revenues from customer</i>	11	10	9	1	21	5	18	16	7	7

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

Reliability Statistics	
Cronbach's Alpha	N of Items
.743	10

The results from the Cronbach's Alpha was found to be more than the required value of 0.7, which implies that the internal consistency reliability for Likert scales used for the study was high.

Factor Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.544
Bartlett's Test of Sphericity	Approx. Chi-Square	282.421
	df	45
	Sig.	.000

Communalities		
	Initial	Extraction
Meeting the internal project margins	1.000	.698
On time completion of a project	1.000	.772
On budget completion	1.000	.654
Meeting the scope of the project	1.000	.730
Meeting the bigger picture for implementing CRM	1.000	.695
Ratings of the project sponsor	1.000	.709
Satisfaction of the project team members	1.000	.760
Customer satisfaction	1.000	.774
Satisfaction of end users	1.000	.728
Future revenues from customer	1.000	.596
Extraction Method: Principal Component Analysis.		

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.605	26.046	26.046	2.605	26.046	26.046	2.293	22.930	22.930
2	1.948	19.480	45.526	1.948	19.480	45.526	1.780	17.797	40.727
3	1.354	13.540	59.065	1.354	13.540	59.065	1.672	16.718	57.445
4	1.210	12.105	71.170	1.210	12.105	71.170	1.372	13.725	71.170
5	.815	8.151	79.321						
6	.645	6.448	85.769						
7	.440	4.397	90.166						
8	.425	4.251	94.416						
9	.354	3.541	97.958						
10	.204	2.042	100.000						
Extraction Method: Principal Component Analysis.									

Initially, the factorability of the 10 project success items was examined under the study. Several well recognized criteria for the factorability of a correlation were used. Firstly, it was observed that 7 of the 10 items correlated at least .4 with at least one other item, suggesting reasonable factorability (see correlation table). Secondly, the Kaiser-Meyer-Olkin

measure of sampling adequacy was .54, above the commonly recommended value of .5, and Bartlett's test of sphericity was significant. The communalities were all above .5 (see Table on commonalities), further confirming that each item shared some common variance with other items. Given these overall indicators, factor analysis was deemed to be suitable with

all 10 items. Principal components analysis was used because the primary purpose was to identify and compute composite scores for the factors underlying the short version of the ACS. Initial Eigen values indicated that the first four factors explained 70% of the total variance.

For the final stage, a principal components factor analysis of the remaining 4 items, using Varimax rotations, was conducted. The table containing the rotated factor loadings (factor pattern matrix), which represent both how the variables are weighted for each factor but also the

correlation between the variables and the factor. In each of the four factors extracted, we identified the two top factors. The **component 1** are the traditional measures of success, **component 2** is the team for CRM implementation, **component 3** is the satisfaction matrix and **component 4** is the future outlook of the project.

Part 3: A Pearson's Chi Square test was done for successful and unsuccessful implementations to find if there is difference in the project manager's opinion of project success factors.

Cross tabulation analysis by Chi-Square test

			pro1		Total
			Successful	Unsuccessful	
pro1	On demand	Count	136	2	138
		% of Total	52.9%	0.8%	53.7%
	On premise	Count	111	8	119
		% of Total	43.2%	3.1%	46.3%
Total	Count		247	10	257
	% of Total		96.1%	3.9%	100.0%

Pearson Chi-Square = 4.752 (.029* SIGNIFICANT).

Therefore the alternate hypothesis is accepted.

Limitations:

The study was limited only to the top Indian information technology consultants and their choice. The sample size though 105, may still remain a small size of consultants compared to the large number of information technology consultant population available. The projects with CMMI level 5 process maturity were chosen. It may not be in lines with the

results for projects with lesser maturity. Consultants were chosen primarily from India, however consultants overseas may see the factors from a different perspective.

Managerial implications and conclusions:

Here are the managerial implications.

1. There is a significant difference that project managers have on project success. This also essentially means for organisations implementing CRM as well as the steering committee the guidelines given to project managers

and their KPI's should either be standardized or should be tailored for each project. Standardized KPI's for projects does not work.

2. Project managers significantly vary on the definition of the project success.
3. The components of success as found out in this research adds a fourth dimension of success and that is future outlook. For an IT consultant the 'icing' on the cake would be a situation when the client is happy with the work done and assigns the consultant the next phase of the CRM implementation. Even if the client agrees to serve as a reference for any other prospective customer of the consultant and is willing to vouch for him, must definitely be considered as a parameter for success in CRM projects.

Scope for future studies:

Further studies on the topic can be conducted for each of the dimensions of success. This will give a better view to the projects. Also managerial motivation and project success, especially in Indian scenarios can be studied. The impact project team members can have on the overall project success can also be studied. Another important aspect of project success that needs to be studied is the difference that may exist in different types of IT projects.

References:

Atkinson, R. (1999). Project management: cost, time and quality, two best guesses

and a phenomenon, its time to accept other success criteria. *International journal of project management*, 17(6), 337-342.

Baccarini, D. (1999). The logical framework method for defining project success. *Project management journal*, 30(4), 25-32.

Blount, J. (2013). People Love You. *People Love You*, 1-8.

Cooke-Davies, T. (2002). The "real" success factors on projects. *International journal of project management*, 20(3), 185-190.

DIDRAGA, O. (2013). The Role and the Effects of Risk Management in IT Projects Success. *Informatica Economica*, 17(1), 86-98.

Dvir, D., Raz, T., & Shenhar, A. J. (2003). An empirical analysis of the relationship between project planning and project success. *International Journal of Project Management*, 21(2), 89-95.

<http://www.what-is-crm.com/crm-failures.php> ; Accessed on 5th January 2016

Munns, A. K., & Bjeirmi, B. F. (1996). The role of project management in achieving project success. *International journal of project management*, 14(2), 81-87.

Schwalbe, K. (2015). *Information technology project management*. Cengage Learning, pp 6

Serrador, P., & Turner, R. (2015). The relationship between project success and

project efficiency. *Project Management Journal*, 46(1), 30-39.

Shrnhur, A. J., Levy, O., & Dvir, D. (1997). Mapping the dimensions of project success. *Project management journal*, 28(2), 5-13.

Thomas, M., Jacques, P. H., Adams, J. R., & Kihneman-Wooten, J. (2008). Developing an effective project: Planning and team building combined. *Project Management Journal*, 39(4), 105-113.

Turner, R., & Zolin, R. (2012). Forecasting success on large projects: developing reliable scales to predict multiple perspectives by multiple stakeholders over multiple time frames. *Project Management Journal*, 43(5), 87-99.

Zwikael, O., & Globerson, S. (2006). From Critical Success Factors to Critical Success Processes. *International Journal Of Production Research*, 44(17), 3433-3449

