



# Analysis of Critical Success Factors (CSF) for remote IT Infrastructure Management (RIM) Services in India

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## I. INTRODUCTION

IT Infrastructure services market is undergoing a distraction due to multiple factors. One important driver of this distraction is Remote Infrastructure Management (RIM) service. For time being, buyers are forcefully leverage offshore providers for these services. But in recent days, the prospect of buyers has enlarged and RIM providers are responding by investing across a variety of initiatives to develop this disruption to their benefit. Remote infrastructure management (RIM) refers to distantly running information technology (IT) infrastructure such as workstations (desktops, notebooks, etc.) servers, IT security devices, network devices, storage devices, etc. of an organization. It basically consists of monitoring and administration of the IT infrastructure workings of a company from a remote location and protecting and fixing problems across it on a regular interval basis. HCL wings have started the first RIM services in India in 2010 and presently it has eight amenities in India , moreover service delivery from the Poland, North, US, , Singapore, China, UK, Saudi Arabia, Ireland and Malaysia. The major Indian IT industries in this sector are Wipro, HCL, Sathyam, TCS and Satyam, while global IT industries include CSC, EDS, Accenture, IBM and HP, between others. Major sub-services included in RIM: Service desk or Help desk, Network devices and proactive monitoring of server, Workstation Management, Server Management, Storage management, Application support and IT security Management. Contribution of this paper includes critical success factors for RIM Business in India and exploring opportunities in RIM among Indian companies, also to suggest the strategies & tactics for effective implementation of RIM among Indian companies.

### Organization of Paper

Introduction section describes about the services included in the Remote Infrastructure Management (RIM) and also it describes about how it supports to the IT and ITES companies. Section 2 specifies the research methodologies which are used to meet the objectives of this paper and it is also used to find the various CSF for RIM in India. Section 3 specifies the data analysis which is used to obtain the sample data from the various Indian IT and ITES companies to find out the impact of CSF for RIM in India. Final section specifies the conclusion which tells about the summary and findings of this research work.



Fig.1. Structure of Remote Infrastructure Management



Satish Thiagarajan of Cognizant (2013) reported that Unprecedented and continuous changes in innovation, business and society oblige associations to change themselves so as to stay significant and drive development.

**Administration**

As indicated by Gartner Dataquest (2010) Remote Infrastructure Management (RIM) is a quickly developing business developing at a Compound Annual Growth Rate of 36%, and anticipated to enlarge from USD \$14.3B to \$50B by 2015. General RIM administration suppliers utilize their own Network Operations Centers to remotely screen and deal with clients' IT framework components, for example, systems, frameworks' equipment and working frameworks, and applications. The essential business esteem for RIM administrations is that it helps worldwide undertakings and SMBs to outsource the weight of dealing with their IT framework, hence, chopping down expenses for foundation administration and obtaining entrance to master aptitudes. The clients can concentrate then on their center business, moving the obligation regarding IT administration to RIM, while keeping up responsibility for resources.

**Related Research Process**

The present procedure for RIM client on boarding comprises of various meetings and connections with clients to "find" their IT surroundings, distinguish the assets to be overseen and aide the enablement of the earth for remote administration. This work escalated methodology (measured in weeks) ends up being unscalable when RIM is to be conveyed as Management-as-a-Service from an IT foundation administration cloud. Distributed computing is a developing standard whereby administrations and processing assets are conveyed to clients over the web (or intranet) from an administration supplier who claims and works the cloud. Cloud-based administrations naturally can scale up expeditiously to take care of developing demand.

**II. RESEARCH METHODOLOGIES**

The system that will be followed in exploration will be ex-posto facto research, assessment research, and meeting of organizations utilizing RIM.

**Ex-posto Facto Research:**

The information distributed in a few retail magazine, diaries, productions, sites and result of the few reviews directed by distinctive exploration offices will be utilized for the examination.

**Personal Interview or Meeting Technique**

Meeting method will be utilized to get data with respect to the achievability and their shopping knowledge of RIM; the degree to which they pay consideration on the substance and necessities to set up RIM that fulfill needs. This system will be utilized with a perspective to get more data than the auxiliary information. It will be organized meeting in light of arranged grouping of inquiry. The connection of the meeting will be prevailed in accordance with the protest of the exploration. The extent of the exploration would be covering little and huge IT organizations of India. The study will primarily concentrate on organizations that are utilizing or wanting to utilize RIM.

TABLE 1 CRITICAL SUCCESS FACTORS FOR RIM BUSINESS IN INDIA

Sr. No	Critical Success Factors	Relative importance for	
		Indian IT Companies	International IT companies
1	Less Manpower Cost		✓
2	INR is appreciating against foreign currencies	✓	✓
3	Automation Service	✓	✓
4	Quality of delivery	✓	✓
5	Enabling Infrastructure	✓	✓
6	Trust based Communications	✓	✓
7	Delivery on Time	✓	✓
8	Organization change Management	✓	✓
9	Innovation	✓	✓
10	End to End Services & Scalability	✓	✓

**III. CRITICAL SUCCESS FACTOR FOR OFFSHORE CUSTOMERS TO DO REMOTE INFRASTRUCTURE BUSINESS IN INDIA**

The customers from USA and Europe based countries are assigning projects to the SME's, Indian IT companies in order to achieve their completion of works as well as for their better turn over through Remote infrastructure Services. The critical success



factors behind this platform are discussed here. The above critical success factors are used to study about RIM services growth in India in-depth such as:

**a) Manpower Cost**

The foreign customers from US and UK depend on Indian IT companies to avoid the man power cost. Remote Infrastructure Management not only assists in reducing the manpower cost of managing the infrastructure, but also brings down the costs related to future infrastructure investments. In fact manpower cost is going further down in India than the foreign companies which will help them to have more savings in off shoring projects. So Indian man power cost is considered as one of the success factor.

**b) INR is appreciating against Foreign Currencies**

The Gross Domestic Product (GDP) has hit its lowest patch in the last 10 years. With fall of the GDP to 4.8%, it had significant effect on the falling rupee. The manufacturing, mining and IT sector has faltered and investors have become cautious of investing in India. The value of INR is quite less compared to the foreign currencies, so the INR is appreciating against the foreign currencies and then the foreign customer will have reverse impact on saving & will also offshore less.

**c) Automation Service**

The foreign customers want the Indian IT companies to complete their task in automation tool without any access of manpower which will reduce the manpower cost and also the services will be done without any delay with quality. So this is considered as critical success factor for the foreign customers.

**d) Quality of service**

The Indian IT firm provides better service compared to other countries IT firms, which will help the foreign companies to do offshore projects in India. This is identified based on the service offered by the Indians in recent years will be evaluated. So this is also considered as the key success factors for foreign customers.

**e) Experienced Employees**

Indian IT companies are good and well experienced in handling offshore projects, based on performance report studies, so the foreign clients will provide offshore projects to the Indian IT companies.

**f) Trust based Communications**

Trust matters. Every day, in every person and in everything, trust matters. From the workplace to the marketplace, trust matters in communication: between managers and employees, between customers and suppliers, between people in teams and team members, and one to one. Indian IT firm has very good relationship between the customers in order to take the offshore projects.

**g) Delivery on Time**

Delivering with delays or providing unsatisfactory services could also lead to a loss of goodwill from your customers and cost you future business opportunities. If you can deliver quality products and services on time and on budget, you will strengthen your reputation, professionalism and business credentials. The customer satisfaction will be obtained from delivering the expected service to the customers and also delivering the service in time will make the customer sustainability. Since Indian players provide on time delivery to the customers, this is also considered as critical success factor.

**h) Organization change Management**

Off shoring changes the way the parts of IT department are run in client organizations. This change has to be planned and executed well. Organization change management cannot be left to happen on its own. It is something that has to be planned in advance and not as an afterthought. Accordingly, the employees need to know what they need to do in the changed environment and this could call for re skilling of the personnel. It is better not to lead anything to assumptions. So this is considered as critical success factor for RIM.

**i) Innovation**

Indian IT companies have worked with various offshore projects, so these companies may have various ideas to bring new dimension to their projects. This factor will be helpful to solve the complexity. So this is also considered as critical success factors for RIM business.

**j) End to End service & scalability.**

The services involved between the customers and vendors should be secured and reachable. Since Indian IT companies have services like End to End service and scalability service customer may depend on them through RIM.

#### IV. DATA ANALYSIS

The entire set of data engineering information proposed to be collected from primary & secondary sources shall be analyzed using appropriate statistical tool. Besides, appropriate marketing models and computer aided programs will also be used for analyzing and interpreting the data. The table.1 represents that various critical success factors which will create impact on Indian IT & ITES companies through RIM. The data analysis for finding out the CSF for RIM can be done by conducting the personal interview among the various Indian leading IT and ITES organizations that has RIM services. The result is used to find out the impact of RIM business in India for the offshore projects.

TABLE-2. FACTORS WILL IMPROVE THE RIM BUSINESS IN INDIA

CSF for RIM	Respondent from Indian IT and ITES companies (5 employees from each companies) (Average values from Five employees out of 5)												TOTAL SAMPLES (60)
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	
F1:Less Manpower Cost	5	4	5	5	4	5	5	5	4	5	5	5	57
F2:Indian centers in Foreign countries	5	3	4	3	4	3	3	4	5	4	5	4	47
F3:Automation Service	4	4	4	4	5	4	5	4	5	4	5	4	52
F4:Quality of delivery	5	5	4	5	5	5	5	5	4	5	4	5	57
F5:Enabling Infrastructure	4	3	4	4	4	5	4	5	4	4	5	4	50
F6:Trust based Communications	5	5	5	5	4	3	4	5	4	4	4	5	53
F7:Delivery on Time	5	4	5	5	3	5	4	3	5	5	4	5	53
F8:Organization change Management	4	5	4	5	4	5	4	5	5	5	4	4	54
F9:Innovation	5	4	5	4	5	5	4	5	5	4	5	5	56
F10:End to End Services & Scalability	5	4	4	4	5	4	4	3	4	3	5	5	50

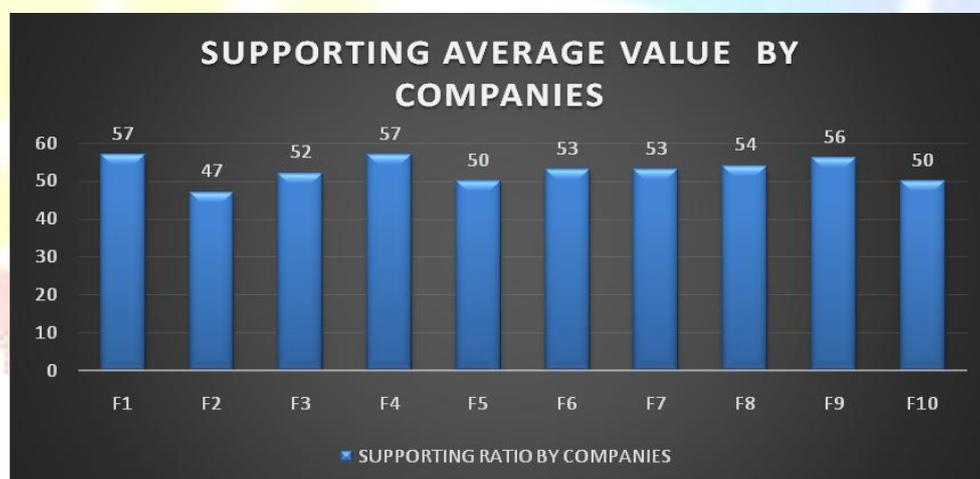


Figure: 1 Representation of CSF supporting Ratios by various Indian Companies

## V. LIMITATIONS OF STUDY

Following are the limitations for the research study work & the results may vary because of these limitations: This study is mainly for the Indian IT RIM Services companies & non-Indian IT services companies are not into the scope for the study. All RIM Service providers from other countries are kept out from this study. Many large multinational companies have established their captive centers in India to provide RIM services to entire enterprise, such companies are also kept outside of this study. All the Indian IT RIM providers with less than USD 20M revenue (from RIM Business) are kept outside of this study. Many of such IT companies are doing business and part of USD 4B market cap for RIM Services.

IT Service market is changing at very faster rate, it may affect the study since assumptions and pointers taken during the start of the study may get change during course of the study. The data collection would happen through online questioner and surveys & there is possibility of not getting accurate data & hence results may vary. There would be regular limitations for use of statistical errors while data processing and analysis, this comes as an part and parcel of statistical tools.

## VI. CONCLUSION

This study is used to find the various critical success factors for Remote Infrastructure Management business in India. This paper contributes the important aspects of the research on remote service systems in India. It is based on a self-assessment with the



help of self-interviewing among the various employees from various companies and allows for companies as well as for future research to put the success of a remote service business in India into perspective.

Companies that have successfully introduced remote service in their service have shown a high orientation toward customer needs and toward creating customer value in order to attain the RIM service in India. Finally the objective of this study have been achieved through our research methodologies.

## REFERENCES

1. Stephen Haag, Maeve Cummings, Amy Philips; "Management Information Systems: For the information age", Tata McGraw Hill, New Delhi, 2009.
2. Laudon, Kenneth C. and Laudon, Jane P, "Management Information Systems: Managing the Digital Firm", Pearson Education, New Delhi, 2011.
3. McLeod, Raymond and Schell, George P; "Management Information Systems", Pearson Education, New Delhi, 2010.
4. Dr. Sanjay P. Sood, "Predict Success or Failure of Remote Infrastructure Management", IJCSI; International Journal of Computer Science Issues, Vol. 8, Issue 1, January 2011.
5. Sailer, A.; Shaikh, H.; Viswanathan, M.; "Taking IT Management Services to a Cloud," Cloud Computing, 2009. CLOUD '09; IEEE International Conference on, vol., no., pp.175- 182, 21-25 Sept. 2009.
6. Raghu Kamath; "Remote Infrastructure Management in the Data Center: It Makes Dollars and Sense"; NetEnrich Company Blog, 9th January, 2013.
7. Meyer, Dean; "Beneath the Buzz: ITIL", CIO Magazine, March 31st, 2005
8. Bruton Consultancy; "Survey: The ITIL Experience – Has It Been Worth It"; Helpdesk Institute Europe, The Helpdesk and IT Support Show, and Hornbill Software, 2004.
9. APMG; "ITIL Service Management Practices: V3 Qualifications Scheme". 24th February 2009.
10. Van Bon, Jan, Verheijen, Tienneke; "Frameworks for IT Management"; Van Haren Publishing, 2006; ISBN 978-90-77212-90-5.
11. Cazemier, Jacques A.; Overbeek, Paul L.; Peters, Louk M.; "Security Management"; The Stationery Office, 2000; ISBN 0-11-330014-X.
12. <http://timesofindia.indiatimes.com/tech/itindustryin2011/Remote-Infrastructure-Management-Services-RIMS/itslideshow/7185394.cms>.
13. <http://timesofindia.indiatimes.com/home/education/news/Remote-infrastructure-management/articleshow/2626477.cms>.
14. <http://www.cognizant.com/infrastructure-services/remote-infrastructure-management>.
15. <http://www.cognizant.com/InsightsWhitepapers/Transformational-RIM-Services-Power-the-Agile-Enterprise.pdf>.
16. [http://www.igate.com/case-studies/ims-global\\_electrical\\_supplier.aspx](http://www.igate.com/case-studies/ims-global_electrical_supplier.aspx).
17. <http://www.wipro.com/services/infrastructure-services/>
18. <http://www.infosys.com/IT-services/infrastructure-management-services>.
19. [http://www.tcs.com/offerings/it\\_infrastructure/command/Pages/default.aspx](http://www.tcs.com/offerings/it_infrastructure/command/Pages/default.aspx).
20. Satinder Pal Ahuja; "Predict Success or Failure of Remote Infrastructure Management"; IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 1, January 2011.