

Analysis of IT adoption in Indian SMEs -Case Study of Rajasthan

Sunil Kr. Pandey¹, Pooja.S.Kushwaha²

¹-Professor, Jaipuria Institute of Management ,Jaipur

²- Professor, Jaipuria Institute of Management ,Indore

Abstract-Small and Medium Enterprises (SMEs) are progressively mindful of the positive effect that Information Technology (IT) can have as these advances spread through their associations. Among the diverse devices for SME improvement and intensity, IT have gotten to be across the board in each movement division in the course of the most recent quite a few years. Behind this exceptionally broad acronym shrouds a huge number of advances for instance, Internet, Website & Portals, Enterprise Resource Planning (ERP)- that should enhance the execution of associations . The outside weight of huge organizations and customers has driven various SMEs to set up IT, particularly in mechanical areas. The landing of IT might assume a part in restoring aggressiveness, since these advances are additionally a component in unwinding the requirements particular to SMEs. IT makes various administrations conceivable in a huge scope of procedures and exchanges inside and between organizations. Inside, IT applications can enhance learning and data administration hones. They are similarly very powerful in enhancing outside business correspondences and administration quality for both new and existing customers. They likewise give off an impression of being a wellspring of upper hand for SMEs under specific conditions. The research paper analyses the IT adoption pattern and trends in SME of Rajasthan.

Keywords: IT, SME , Web Portals ,Enterprise Resource Planning(ERP).

INTRODUCTION

The utilization of Information innovation (IT) is extremely boundless among organizations of all sizes. Numerous Small and Medium Sized Enterprises (SMEs) are progressively embracing IT in both created and creating nations. The apparent advantages and firm and division particular methodologies appear to drive the appropriation and utilization of IT. The object of this study is to examine the drivers and difficulties of IT reception by SMEs in Rajasthan.

The writing demonstrates that the yearning for lower costs, enhanced efficiency, higher item quality, higher consumer loyalty, and capacity to concentrate on center territories are a percentage of the key drivers of IT appropriation. The writing further demonstrates that exploration in the reception of IT by SMEs is developing. The headway in IT impacts globalization, and fast unrests in data and information base. The worldwide multiplication of the utilization use of IT by associations is for cost cutting and enhancing effectiveness, as well as moreover to provide better client administrations. SMEs are additionally headed to embrace fitting IT with the end goal of enhancing their inside procedures, enhancing their item through quicker correspondence with their clients, and better advancing and

dispersing their merchandise and administrations through online vicinity. In addition, governments around the globe are receiving IT with the end goal of giving better administrations to their natives. Constantly, the appropriation of IT by associations requires a business situation empowering open rivalry, trust and security, interoperability and institutionalization and the accessibility of account for IT (Thakur, L. S. and Jain, V. K. 2008).

SMEs utilization of ICT ranges from fundamental innovation, for example, radio what's more, altered lines to additional propelled innovation, for example ,Internet ,email, e-business and data handling frameworks(ERP). Utilization of cutting edge data and IT to enhance business forms falls into the classification of e-business. In any case, not all SMEs need to utilize IT to the same degree of intricacy.

Numerous studies demonstrate that SMEs are the driving motor of development, employment creation, and aggressiveness in household and worldwide markets. The central and state government offers financing to SMEs for PC framework overhauls, preparing, innovation securing, consultancy expenses, and electronic trade exercises. In spite of these endeavours, in any case, SMEs in Rajasthan stay on the back side of a computerized isolate

India's SME has been one of the essential drivers of its economy. It's commitment to the nation's GDP is anticipated that would increment to 22% in 2020.SMEs represent 45% of India's complete assembling yield and utilize around 40% of its workforce .The most recent couple of years have seen SME's perceiving innovation as a key business driver, yet its appropriation is still low, as thought about to different nations with huge SME setups(Gunasekaran et. al.2006). This is because of a mix of the accompanying:

- Lack of comprehension of business advantages innovation can convey crosswise over end-to-end esteem chains.
- Lack of direction on the natural capacities of innovations what's more, how these can be incorporated and standardized in their organizations.
- Resistance to bringing about forthright venture related expenses to actualize innovation.
- Lack of workforce to oversee innovation setups.

IT IN SMEs: BACKGROUND LITERATURE

Successful adoption of IT through associations is required to be viably figured out how to be better plan for future IT applications adoption(Peansupap and Walker,2005) and issues for moderate reception are required to be studied .The issue can be ordered as specialized ,administrative

,social and socio/political because of contrasting view of task group members. The prerequisite is to coordinate mechanical development with perceived needs and readiness for change with respect to industry (Weippert 2004).

A few hindrances to IT adoption have been distinguished, including: absence of learning about the capability of IT, a deficiency of assets such as money related and aptitude, and absence of abilities [Cavalcanti, 2006; Ndubisi and Jantan, 2003].

Ndubisi and Jantan (2003), in assessing data framework use among little and medium-sized firms, find that processing aptitudes and specialized support are solid stays of the view of helpfulness furthermore wield direct impact on framework use. In another study directed by Ndubisi and Kahraman (2005), they find that the utilization of cutting edge frameworks is essentially identified with inventiveness, and recommend that imaginativeness is an imperative characteristic in deciding IC use among ladies business visionaries.

A few studies investigated a more extensive point of view of Internet adoption and found that ecological variables, for example, government intercession, open organization, and outer weight from contenders, suppliers, and purchasers assume the key part in the selection and execution of IT, particularly in e-business (Dasgupta, 2007; Scupola, 2009). In a later study, Seyal et al. (2010) find that administration bolster, government bolster, and saw advantages are critical indicators that affected SMEs to receive IT. Concerning appropriation, Lin (2012) distinguishes these determinants as having impact on reception: hierarchical size, CEOs' qualities, CEOs' view of relative point of preference, similarity, and unpredictability.

Truth be told, Wainwright et al. (2014) include that administrative IT abilities, IT learning, and IT practices are essential determinants of whether IT is embraced or rejected by the SMEs.

OBJECTIVE OF THE RESEARCH

The objectives of this study are

- To identify type of technology adopted by SMEs in Rajasthan
- To analyse the IT abilities and development attributes of SME proprietors in Rajasthan,
- To build up the relationship among technological components; in particular, their IT aptitudes, use, selection examples, and appropriation classes.

Notwithstanding this basic segment, this paper displays the study's hypothetical system, procedure, discoveries, conclusions and suggestions, and restriction and future scope.

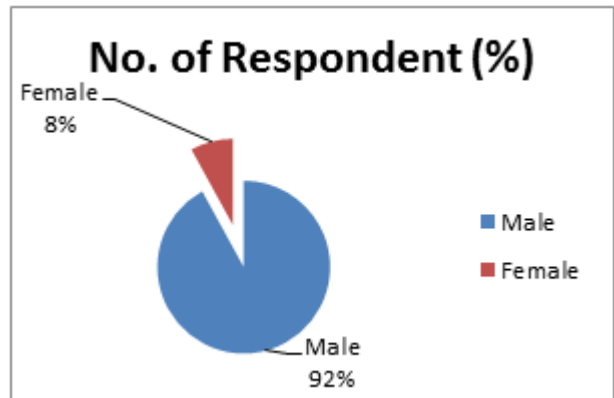
RESEARCH METHODOLOGY

There are many numbers of SMEs in Rajasthan. A sample from these SMEs selected randomly for this research work. Sample size for this research is 133. Data is collected based on questionnaire and general interaction with the SME's management representatives.

DATA ANALYSIS AND FINDINGS

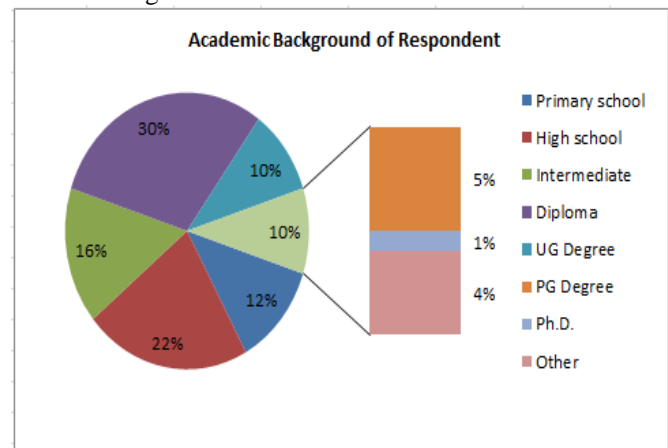
Respondent Background

Classification based on Gender: The survey observed lack of participation of the female in management of the SMEs.



(Fig 1: Gender classification of respondent)

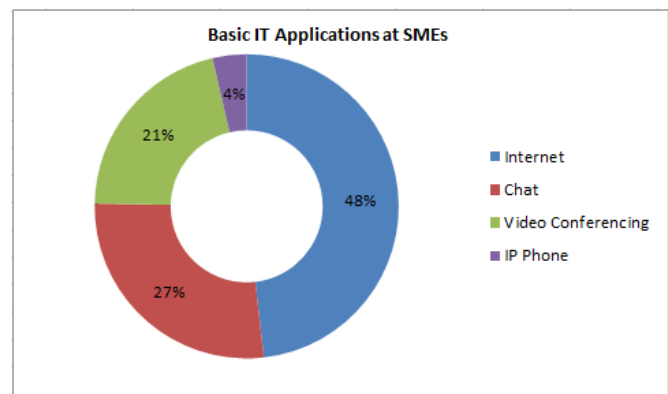
Classification based on Educational Background: SMEs management constitutes more diploma holders in their core areas. It is a good indicator for SME's future.



(Fig 2: Classification of respondent based on academic background)

Basic IT applications at SMEs

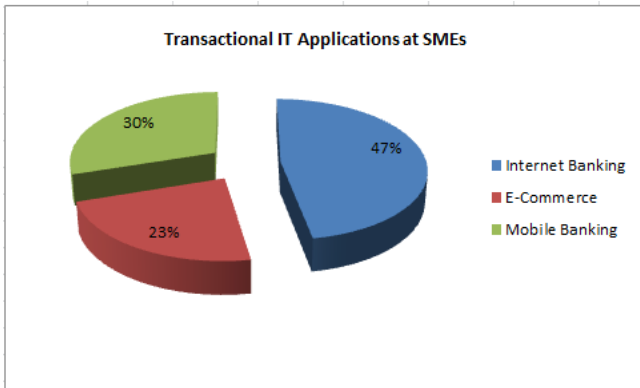
Result shows a significant uses of basic IT tools at SMEs. Use of IP phone is less but it is nascent stage so it's growth may be expected based on significance.



(Fig 3: Basic IT applications at SMEs)

Transactional IT Applications at SMEs

Uses of the Internet banking ,E-Commerce and Mobile banking is increasing but SMEs are lacking in proper infrastructure of the IT for transactional purpose.

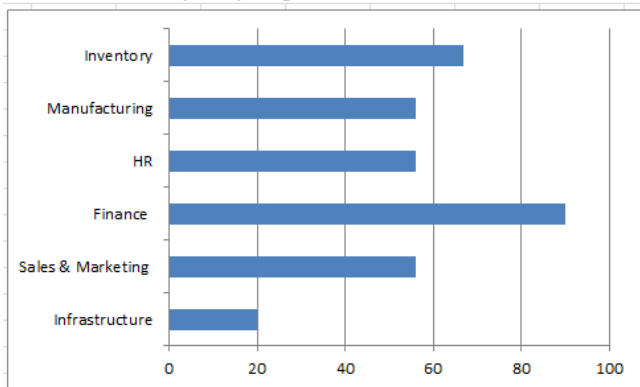


(Fig 4: Transactional IT applications at SMEs)

Uses of special IT packages in different functional areas at SMEs

SMEs are lacking applications of special IT packages in infrastructure management .Specialised tools and packages are available in finance management and inventory control.

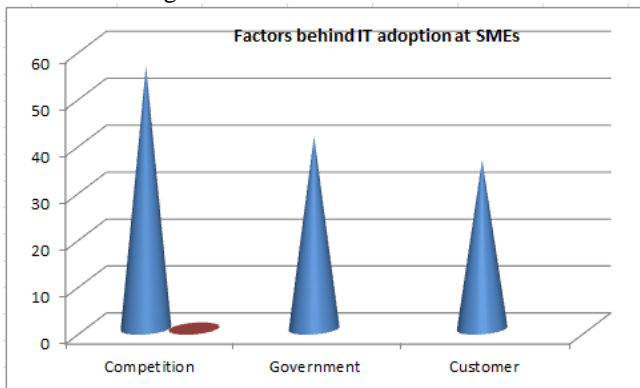
Uses of special packages in different functional areas



(Fig 5: Special IT packages at SMEs)

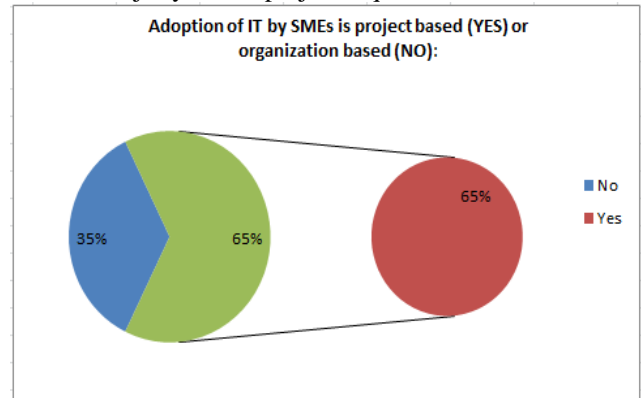
Key Factors behind IT Adoption at SMEs

Competition is the main factor behind the IT adoption at SMEs because it's not easy for the SMEs to sustain in the market avoiding IT.



(Fig 6: Factors behind IT adoption at SMEs)

Adoption of IT by SMEs is project based or organization based: Result shows that adoption of IT by SMEs is majorly due to project requirements.



(Fig 7: Project based IT adoption at SMEs)

Key Industry Drivers: IT adoption trends

S.N.	Key Industry Drivers	Mean
1	Expanded prerequisites of customers for more venture data bringing about expanded utilization of IT	4.21
2	Expanded prerequisite of appropriation of IT by bigger associations when SMEs execute ventures subcontracting offices of bigger associations	4.1
3	Boundless accessibility of IT devices and advancements in the state	3.97
4	Expanded inclusion of different organizations in ventures of SMEs	3.78
5	Dynamic Changes in data necessities amid venture execution at SMEs	3.62
6	Increased Competition in SMEs	3.59

(Table 1: Key Industry Drivers: IT adoption trends)

All the key industry drivers having mean ranking greater than 3.5 have considered as important parameters. Reasons behind unwillingness to adopt IT by SMEs in Rajasthan are to a great extent reliant on the ecological surroundings of the organizations. SMEs are contrarily influenced by the accompanying components:

- Low financial force in comparison to big organizations.
- Troublesomely accessing capital with a therefore constrained capacity to back improvement exercises.
- More terrible access to concentrated preparing and training contrasted with bigger organizations.
- Lower access to important data what's more, consultancy administrations.
- Unjustifiable rivalry from extensive organizations and dumping costs of imported items.
- Constrained offer of completed items in the local market and expanded expense of fare.
- Rivalry of retail associations overseen by monetarily solid organizations.
- Feeble position out in the open tenders.
- Inability to and delay in accepting instalments bringing about optional monetary bankruptcy.
- High legal constraints from government bodies and offices.

CONCLUSION

In India, SMEs represent a critical offer of creation and vocation and are along these lines straightforwardly associated with neediness easing. Particularly in developing nations, SMEs are tested by the globalization of creation and movement in the significance of the different determinants of intensity.

Through the fast spread of data and IT and ever diminishing costs for correspondence, markets in various parts of the world have gotten to be more coordinated. Whether the utilization of IT can offer them to adapt to the new difficulties some assistance with being hazy. This paper explored the adoption trends of IT in SMEs furthermore focuses on bland boundaries in reception of the same.

REFERENCES

- [1]. FUJITSU. (2010). *Green IT: The Global Benchmark: A Report on Sustainable IT in The USA, UK, Australia And India*. Retrieved from [2012-02-26]: https://www-s.fujitsu.com/au/whitepapers/greenit_global_benchmark.htm
- [2]. Irefin, I. A., Abdul-Azeez, I. A., and Tijani, A. A. (2012). An Investigative Study of the Factors Affecting the Adoption of Information and Communication Technology in Small and Medium Scale Enterprises in Nigeria, *Australian Journal of Business and Management Research*, Vol- 2, No-2, Pages 1-9.
- [3]. Osmonbekov, T. (2010). Reseller adoption of manufacturers' e-business tools: The impact of social enforcement, technology-relationship fit and the mediating role of reseller benefits, *Journal of Business Research*, Vol-63, No-3, Pages 217-223.
- [4]. Gala, L. & Jandos, J. (2011). IT technological architecture impact on technological IT infrastructure flexibility: Case of the Czech Republic. In *Creating Global Competitive Economies*(A 360 – degree Approach) (p. 846–857).
- [5]. Tan, K.S., Chong, S. C., and Eze, U. C. (2010). Internet-based ICT adoption among SMEs, Demographic versus benefits, barriers, and adoption intention, *Journal of Enterprise Information Management*, Vol-23, No-1, Pages. 27-55.
- [6]. Gunasekaran, A., Nagi, E. W. T., and McGaughey, R. E.(2006). "Information technology and systems justification: A review for research and applications", *European Journal of Operational Research*, Vol. 173, pp. 957-983.
- [7]. Dasgupta, S. 2007. Information technology adoption in the SMEs, *Journal of Global Information Technology Management* 7(4), 42-56.
- [8]. Thakur, L. S. and Jain, V. K. (2008). "Advance Manufacturing techniques and information technology adoption in India: A current perspective and some comparison", *International Journal of Manufacturing Technology*, Vol. 36, pp. 618-631.