

Challenges of rural start-ups in Karnataka, India

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rural start-ups

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Abstract

Purpose – The purpose of this paper is to provide the insights on the challenges influencing rural start-ups. It provides insights with regards to managerial, operational, marketing and finance-related challenges influencing the rural start-ups in the study. The study aims to expand the domain of start-ups by including a broader range of challenges and related aspects found in the start-up literature.

Design/methodology/approach – The paper opted for an exploratory study using the open-ended approach of grounded theory, including 61 rural start-ups operating in Karnataka, India. The data were analysed through non-parametric test to understand the comparison between different sectors of rural start-ups.

Findings – It suggests that marketing techniques and infrastructure challenges influences the rural start-ups. Therefore, success of start-ups is influenced by these related variables.

Research limitations/implications – Because of the chosen research approach, the research results may lack generalizability. Researchers are therefore encouraged to test the proposed propositions further in the area of challenges and growth in the domain of managerial, infrastructure, marketing, finance, human resource and logistics in rural start-ups. The study is restricted to rural start-ups located in districts of Karnataka, India.

Practical implications – The paper includes implications for managing the challenges for enhancing the growth of start-ups. The paper provides insights on the significant challenges witnessed by the start-ups and provides directions for the growth of start-ups.

Social implications – This paper fulfils an identified need of the start-ups in rural sector and contribute to the growth of start-ups in rural sector of India.

Originality/value – This paper fulfils an identified need to study how rural start-ups operate and create a niche in the growth of Indian economy.

Keywords Rural development, Start-ups, Managerial challenges

Paper type Research paper

1. Introduction

Rural start-ups are those who set up business activity in rural areas. Focus of start-ups is to provide a solution to the business problem through professional business model (Natalie, 2013). Government of India has taken measures to develop rural entrepreneurship (Baporikar, 2015). These measures have provided an opportunity for establishment of rural start-ups in India (Baporikar, 2015). Hence, rural start-ups provide an ecosystem with a recognized framework of rural business opportunity with an intension of improving the national economy (Baporikar, 2015). Opportunities in technology have also provided ample options for establishment of rural start-ups in India (Ravi, 2015). These, start-ups use local products, raw material and provide employment in rural India. (Kulkarni and Biradar, 2012; Meena *et al.*, 2019). These opportunities have also influenced rural India to a considerable extent with use of technology and telecommunication services, hence the challenges of business operations in rural India have changed in recent times (Nielsen, 2017). This is evident in agriculture and e-commerce, as these sectors have influenced in economic growth



of India (Negi and Kumar, 2020). Apart from technology influence rural start-ups provide employment opportunities to rural youth, which would certainly enhance human resource development through employment (Sheelam, 2020). The rural youth is talented and rural start-ups can take opportunity in providing employment to the youth (Sheelam, 2020). However, there are other factors associated with rural start-ups, which include human resource management (HRM), infrastructure, marketing management and financial management. Therefore, this draws attention to understand the challenges of rural start-ups in India. Hence, this study is undertaken to understand the challenges of rural start-ups from the perspective of HRM, infrastructure management, marketing strategies of rural start-ups and financial management of rural start-ups.

2. Theoretical concept and literature review on rural start-ups

In this section, the conceptual framework is presented. It includes definitions of start-ups and literature review related to the challenges of rural start-ups.

2.1 Definition of start-ups

2.1.1 *Start-ups*. These are institutions designed for creating new products and services under the situation of uncertainty (Ries, 2011). According to Blank (2005), start-ups are organizations which create high-tech innovative products without having any operational experience in the past.

2.2 Literature review on challenges of rural start-ups in India

As mentioned in the above section, literature review on challenges of rural start-ups is discussed in this section. The literature review provides challenges with regards to HRM, supply chain management, marketing, sales and financial-management of rural start-ups.

2.2.1 *Human resource management in rural start-ups*. The concept of HRM covers various domains which include recruitment, selection, performance management, training, etc. The studies with regards to rural start-ups are more confined towards managerial skill-sets and manpower management. Therefore, this study is confined towards these two areas that is managerial ability and manpower management. Management skill-sets are essential for managing the start-ups professionally. Studies on managerial skills of rural start-ups are understood in this section. Rural entrepreneurs have been facing problems related to fear of failure due to heavy competition from urban start-ups and enterprises. Managerial skills provide an opportunity to rural entrepreneurs to handle the challenges professionally through managerial skill-sets (Kumar, 2016). The key to the success of rural start-ups is through enhancing competencies of the rural entrepreneurs with regards to planning, organizing and controlling the activities of business (Negi and Kumar, 2017, 2020). The above studies have indicated that professional managerial skill-sets to rural start-ups would provide a huge opportunity for the growth of start-ups in India. Manpower management is a critical factor for the growth of an enterprise. Studies conducted by Ahuja *et al.* (2020) mention that rural start-ups provide employment opportunity for rural youth and also an opportunity to enhance their standard of living. The study results on manpower in rural India indicate that rural start-ups need to invest on training and employee development to match the work expectation. Further, the study also mentioned that awareness level amongst the rural start-ups with regards to training programmes conducted by Government agencies is low amongst these start-ups (Latha and Murthy, 2009).

2.2.2 *Supply-chain management in rural start-ups*. Channels of distribution and supply of raw material are critical for manufacturing and agriculture-based start-ups. The study conducted by Stathopoulou *et al.* (2004) mentioned that rural business enterprise experience

excessive cost of logistics in comparison with urban enterprises. Other factors associated with supply chain management include lack of infrastructure support to rural start-ups (Ozgen *et al.*, 2007). Further studies are needed to understand availability of raw material for production process of rural start-ups (Shirur *et al.*, 2017).

2.2.3 Marketing strategies for rural start-ups. The market strategies are essential requirement to understand trends in the growth of rural market and device measures to improve the sales of the organization. The challenge for rural market is with regards to awareness of brand and use of branded products (Parida and Sahney, 2018). Start-ups in FMCG sector mention that market in rural sector is dominated by middle-class individuals and families in India. Therefore, developing right marketing strategies are essential to tap the market in rural sector of India (Jha and Banerjee, 2013).

2.2.4 Finance for rural start-ups. Finance plays a key role for start-ups; hence finance is a vital component for start-ups in India (Cull *et al.*, 2006; Berger and Udell, 2006). The success of start-ups depends on the working capital available with rural start-ups (Marshall and Oliver, 2005). Government of India programme on start-up India provides many opportunities of receiving funding from government (Kochar, 2018). The above studies indicate that financing for rural start-ups in India would reboot development of banking sector and initiatives undertaken by Government of India.

3. Research methodology

In this part of the paper, formulation of hypotheses based on the literature review is presented. Further, details with regards to participants, instrument development and data collection methods is also been presented for the study.

3.1 Hypotheses development

Hypotheses for the study are developed based on the literature review on rural start-ups and challenges with regards to HRM, supply chain management, marketing-sales management and financial management.

3.1.1 Human resource management and rural start-ups. HRM policies and procedures have influence on the performance of start-ups. There are two important components of HRM which influence on the performance of employees; they are managerial skills and manpower management. Managerial skills play a key role for professional development of employees. Professional development is required in the area of agricultural start-ups, service start-ups and technological start-ups (Ruchika, 2019). Professional managerial skills also support the rural start-ups to provide directions to innovations and bring the innovation in main stream of business (Prabhu and Jain, 2015). Therefore, rural entrepreneurs still feel the need of managerial skills and professional training for the growth of start-ups in India (Sheelam, 2020). Manpower needs to be recruited and developed as per the requirement of rural start-ups, hence training programmes act as support to the start-up founders to recruit and develop start-ups professional. Traits such as leadership, problem-solving, self-motivation and interpersonal skills are important for recruitment in start-ups. Likewise, effective policies and procedures for retaining of employee is another important factor for effective HRM practices in rural start-ups (Karadakal *et al.*, 2015; Venkatachalam and Reddy, 2013).

H1. Managerial abilities are well developed in rural start-ups.

H2. Manpower management is effective in rural start-ups.

3.1.2 Supply chain management and rural start-ups. Establishment of strong supply chain management system for start-ups would help the rural start-ups. This is more essential for

agri-based start-ups to reach the customers in short duration (Kundu and Joshi, 2014). The above discussion show that effective logistic management and supply chain management are important for the growth of rural start-ups in India

H3. Infrastructure for rural start-ups is well developed.

H4. Logistics for rural start-ups needs development.

H5. There is an availability of raw material for production in rural start-ups.

3.1.3 *Marketing strategies for rural start-ups.* There is a growing demand for consumable products in rural area of India. Rural start-ups can understand the needs and demands of these consumers in rural area and meet the demands of these consumers. Identification of these needs and demands needs effective marketing and sales techniques to reach potential consumers in rural areas (Das, 2015). Therefore, studies on market potential show that rural start-ups have strong potential for the growth in future.

H6. Rural start-ups have market potential of growth in rural areas.

3.1.4 *Financial management in rural start-ups.* Finance is the backbone of a firm. Start-ups are supported by various avenue of funding from schemes of Government of India. Apart from banking sector play an important source of funding for start-ups. Banking sector in India has given source of funding through loans and other banking facilities to the start-ups in India (Burgess and Pande, 2005; Vyas and Nalwaya, 2018).

H7. Rural start-ups receive financial aid from financial institutions.

3.2 *Participants of the study and reliability analysis of study instrument*

The sample for the study was collected through registered start-ups with Startup Karnataka. There are 771 start-ups registered in Karnataka and 68 start-ups operate in rural part of North Karnataka. The data collected through 68 start-ups operating in rural region of North Karnataka showed that majority of the start-ups are in the areas of agriculture, followed by service sector and few in technology. Detailed information on the study population is provided in Table 1 and profile of the respondents is presented in Table 2.

3.3 *Instrument development and data collection*

The construct for the study was developed based on the literature review related to the study. The study is focussed towards understanding the challenges of rural start-ups in four areas that is HRM, supply chain management, marketing and financial management. The response from the respondents was collected based on 5-point Likert scale where in 5 rating indicated “Strongly Agree” and 1 rating indicated “Strongly Disagree”. The data were collected through email from the rural start-ups.

A pilot study on 20 rural start-ups was conducted and the results of reliability analysis were collected in the study, a reliability score of (0.65) is found acceptable for measurement (Henseler et al., 2009).

Table 1.
Detailed information
with regards to sample
study population

Sector	City of the study				Total
	Belagavi	Hubballi	Bagalakote	Vijayapura	
Agriculture	9	4	11	9	33
Technology	5	7	2	3	17
Services	3	6	4	5	18
Total	17	17	17	17	68

	N	%	N	%
<i>Gender</i>				
		<i>Male</i>		<i>Female</i>
	55	80	13	19
<i>Age</i>				
21–25 years	7	87	1	12
25–30 years	9	81	2	18
30–35 years	13	92	1	7
35–40 years	7	77	2	22
40–45 years	9	81	2	18
45–50 years	6	66	3	33
50 years and above	3	5	3	5
<i>Educational qualification</i>				
Engineering and diploma	2	66	1	33
Commerce	17	68	8	32
Science	5	71	2	28
Arts	19	67	9	32
Management	3	6	2	4

Table 2.
Profile of the respondents

The results on reliability analyses showed that managerial construct with 0.859, manpower with 0.884, infrastructure with 0.847, logistics with 0.840, raw-material with 0.836, marketing strategies with 0.857 and finance with 0.844. The overall reliability scored indicated 0.837 with 7 items which is acceptable for data collection for the study. The results of the reliability analysis are presented in Table 3.

The email was communicated to all the rural start-ups in four areas of study that is Belagavi, Hubballi, Bagalakote and Vijapura districts of Karnataka State, India. The total response was 72 and 68 responses were acceptable for the study.

3.4 Data analysis

Non-parametric test was applied for the study to understand the difference with regards to respondents that agricultural sector rural start-ups, technology sector rural start-ups and service sector rural start-ups. Mann–Whitney test was applied in the study to understand the difference between the respondents.

4. Results and analysis

The results of the study are presented in this section; the result analysis is presented based on the sector of rural start-ups. The statistical intervention of the results is presented based on

Constructs	Cronbach's alpha
Managerial	0.859
Manpower	0.884
Infrastructure	0.847
Logistics	0.840
Raw material	0.836
Marketing strategies	0.857
Finance	0.844

Table 3.
Results of reliability analysis of structured questionnaire

Cronbach's alpha	Reliability statistics	
	Cronbach's alpha based on standardized items	N of items
0.871	0.873	7

the sectors of operations of rural start-ups. These sectors include agriculture, technology and service sector of start-ups. Further, the results are also presented based on the challenges influences the start-ups in the study, these challenges include (1) Human resources management, (2) Supply chain management, (3) Market potential for rural start-ups and (4) Financial assistance for rural start-ups. Application of mean ranking is presented to understand the constructs under these challenges of rural start-ups. The overall results with the application of Mann–Whitney test have indicated the influence of results on the hypotheses of the study.

The mean score results with regards to the construct of HRM practices in rural start-ups is indicated in Table 4. The construct of managerial skill has a higher mean score of 26.91 with technological sector start-ups. Agriculture and services sector start-ups have a mean score of 24.77 and 17.56, respectively. The construct with regards to manpower management mean score of 25.56 is indicated with the agriculture sector, while technology and service sector start-ups have indicated 25.38 and 19.83 mean score, respectively.

The results with regards to supply chain management and rural start-ups are presented in Table 5. The constructs under supply chain management include (1) infrastructure, (2) logistics and (3) raw material. The mean scores with regards to infrastructure show that the agriculture sector has a mean score of 25.73, technology sector with 25.06 and services sector with 19.53. Mean score with regards the construct of logistics indicate that agriculture with a mean score of 27.62, technology start-ups with 21.38 and services sector start-ups with 16.89. The study results with regards to raw material availability with rural start-ups indicate that agriculture sector start-ups indicated a mean score of 26.14, technology sector start-ups with 24.26 and services sector start-ups with 18.64, respectively.

The study results with regards to the construct of marketing strategies and rural start-ups show that agriculture sector start-ups have shown higher mean value of 24.82, while technology and services sector start-ups have indicated a mean value of 26.82 and 17.28, respectively. The results of the study on marketing strategies and rural start-ups are indicated in Table 6.

Table 4.
Human resource
management and rural
start-ups

Parameter	Constructs	Sector	N	Mean score
Human resource management	Managerial	Agriculture	33	24.77
		Technology	17	26.91
		Services	18	17.56
	Manpower	Agriculture	33	25.56
		Technology	17	25.38
		Services	18	19.83

Table 5.
Supply chain
management and rural
start-ups

Area	Constructs	Sector	N	Mean score
Supply chain management	Infrastructure	Agriculture	33	25.73
		Technology	17	25.06
		Services	18	19.53
	Logistic	Agriculture	33	27.62
		Technology	17	21.38
		Services	18	16.89
	Raw material	Agriculture	33	26.14
		Technology	17	24.26
		Services	18	18.64

The analysis with regards to financial assistance received by rural start-ups is presented in Table 6. Technological rural start-ups indicated a mean score of 26.29, agriculture sector with 25.09 and services sector with 13.25, respectively.

The Mann–Whitney *U* non-parametric test results show that managerial skills indicated (*p*-value 0.03 < 0.05), which indicates that rejection of null hypotheses which means that managerial-skills are developed in rural start-ups. While the manpower management indicated (*p*-value 0.04 < 0.05) which shows that manpower management is effective in rural start-ups of the study (see Tables 7 and 8).

Results with regards to infrastructure indicated (*p*-value 0.07 > 0.05), which indicates that infrastructure development is needed for rural start-ups. Similarly, with regards to logistics management indicated (*p*-value 0.09 > 0.05) which indicates that logistics management needs improvement for rural start-ups. Results with regards to raw material availability for rural start-ups indicate (*p*-value 0.03 < 0.05) which indicates that there is an availability of raw material for rural start-ups.

Sector-wise results concerning marketing strategies implementation in rural start-ups show (*p*-value 0.06 > 0.05) which indicates that rural start-ups need to engage in effective marketing strategies to reach the potential market for the products produced by rural start-ups.

Finance is the backbone for the growth of start-ups. Non-parametric test results through Mann–Whitney *U* test show that (*p*-value 0.02 < 0.05) which indicates that rural start-ups have finance availability through commercial banks, rural banks and government funding agencies.

5. Discussion

The study results indicated that managerial abilities and manpower skills of rural start-ups are found satisfactory. However, rural start-ups need to enhance the same and keep themselves updated through training and development programmes constantly, this would bring in

Area	Construct	Sector	<i>N</i>	Mean score
Market potential for rural start-ups	Market strategies	Agriculture	33	24.82
		Technology	17	26.82
		Services	18	17.28

Table 6. Marketing strategies and rural start-ups

Area	Construct	Sector	<i>N</i>	Mean score
Financial assistance	Financial assistance	Agriculture	33	25.09
		Technology	17	26.29
		Services	18	13.25

Table 7. Financial assistance and rural start-ups

Sr. No.	Constructs	Mann-Whitney <i>U</i>	Wilcoxon <i>W</i>	<i>Z</i>	Asymp. Sig. (2-tailed)
1	Managerial	256.5	817.5	-0.509	0.03
2	Manpower	273	426	-0.161	0.04
3	Infrastructure	278.5	431.5	-0.043	0.07
4	Logistics	210.5	363.5	-1.507	0.09
5	Raw material	259.5	412.5	-0.454	0.03
6	Marketing strategies	258	819	-0.471	0.06
7	Finance	267	828	-0.282	0.02

Table 8. Non-parameters test – Mann–Whitney test

professional approach towards planning, organizing and decision-making in these start-ups (Lakshmi, 2016). Service sector rural start-ups need to understand the importance of managerial and manpower management. Measure and interventions of HRM need to be applied in this sector to improve managerial and manpower management of rural start-ups.

Another challenge reflected in the study is with regards to infrastructure facility to rural start-ups, these facilities include connectivity of roads, technology infrastructure and storage houses for agriculture produce (Stathopoulou *et al.*, 2004). These infrastructure factors influence on the growth of rural start-ups. Infrastructure facilities are also related for procurement of raw material, rural start-ups are procuring locally available raw material, these start-ups need better connectivity to reach other better available raw material, and this would reduce the cost and improve quality of products of rural start-ups. Logistic management for rural start-ups has been a challenge; this is witnessed more in agricultural start-ups who have to travel a large distance for selling of the produce. Hence developing effective agri-food supply chain network would enhance the productivity of these start-ups (Kundu and Joshi, 2014). Service sector rural start-ups need to device measures of logistic management to reach present and potential customers to provide better services to the customers.

Currently, rural marketing is becoming very diverse and vibrant. In this present era, all enterprises based in rural areas are competing with each other for endurance. Tapping rural markets in India would be considered as the most important marketing strategy for the future growth of rural start-ups. Social media, improvement in telecommunication and higher penetration of e-commerce companies in rural India have provided a strong platform for the start-ups for developing effective marketing strategies (Das, 2015). Rural start-ups in the services sectors need to device marketing strategies to communicate with regards their services available to the rural population, this would enhance the sales and improve the profitability of service sector rural start-ups.

The results indicate that start-ups in the study region are aware of the initiations undertaken by the Government of India. The Government of India has proposed reforms to boost entrepreneurial confidence in rural areas. The government has continued to simplify procedures, to ease the working of start-ups. The measures of providing seed funding, support from commercial banks and scheme from the Government of India for start-ups have support in the growth of start-ups in India (Ranjan and Chatteraj, 2013).

6. Practical implication

The challenges faced by rural Indian start-ups begin with essentials such as hiring and managing a team, dealing with customers and developing a marketing strategy. Rural start-ups need to enhance their managerial abilities by organizing training programmes on management concepts and theories, this would improve the performance of rural start-ups. Further, training programmes need to be focussed towards new trends of management concepts such as balanced scorecard, virtual organizations and influence of business environment on employee performance, these programmes would bring continually development of managerial abilities in these start-ups.

Rural start-ups need to understand challenges with regards to infrastructure support required for the growth of start-ups. Effective planning with regards to inventory management and supply chain management would improve and support the performance of rural start-ups.

Employment opportunity is ample in rural start-ups, employment awareness programmes by these start-ups would support in attracting rural talent and improve the employment of rural youth. Start-ups need to explore other avenues of marketing and sales apart from social media, this would improve the visibility of start-up products and services. Regional newspaper advertisement and publication of research in the regional newspaper would

enhance the communication with rural customers and improve the connectivity with potential customers of start-ups.

7. Conclusion

The study showed that managerial abilities need to be developed continually in rural start-ups. Infrastructure support and excellent connectivity would enhance the growth of the rural start-up. Rural start-ups need to get connected through regional channels of media such as newspaper, magazines and newsletters; this media would provide an opportunity to improve connectivity with potential customers for start-ups. Strategic supply chain management would improve the procurement of raw material for the production process of start-ups and improve production effectiveness. The results have shown that there is huge potential for creating employment opportunity through start-ups. The major challenges faced by these rural start-ups include infrastructure and logistics management and effective marketing strategies. Therefore, these start-ups need to device measures and techniques to improve marketing strategies to reach large customers base of rural population.

Further study can be undertaken in a different region of India and abroad to arrive an understanding with regards to rural start-ups as this study was confined only to four cities of Karnataka India. Therefore, future studies on challenges in other states of India would be worth understanding in providing directions to improve the efficiency of start-ups in India.

The future studies can also provide directions with regards to a particular sector like agriculture, which has been a supportive sector for Indian economy. Therefore, a study on agriculture start-ups and measures to improve the efficiency would provide directions for agricultural start-ups in India. The overall results of the study indicate that rural start-ups have a huge potential for growth in India for providing employment opportunity and contributing to the growth of Indian economy.

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