

Managing Challenges in handling of Investment & Finance for Entrepreneurship using Analytics, Artificial Intelligence and Technology

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Abstract

This paper presents the outpost growth of start-up companies and their challenges in getting funding the source of financing issues and how they can manage investment challenges investment and Finance handling for their entrepreneurship using analytics, artificial intelligence, big data and Technology. There are various stages for the start-ups and entrepreneurship journey and how different innovative Digital Technology Solutions can help them either to minimize cost or provide them a cost effective solution allowing them to build flexible solution. The goal of research paper is to investigate that is it easy for any common man to leave the job and move ahead for any new business venture and start their journey of being entrepreneur, what all the challenges they face for getting finances are and how they can handle these challenges with the help of innovative solutions

Key Words

- Start-Ups,
- New ventures,
- Big Data
- Analytics
- Artificial Intelligence
- Visualization Tools
- Investments
- Financing
- Entrepreneurship
- Business Start-up

Financial Challenge and Technology

History of Indian Startups In India

Before the recent mania, India was mostly known for IT Services outsourcing destination and Medical hub with tourism providing cheap and easy labor to the global companies for their operations. We have seen software services and global delivery, the dotcom bubble, the rise of product start-ups and start up ecosystem growth.

Types of Start – Up Companies

- Start-up companies are of 5 types based on Analysis on more than 650 web start-ups across the Silicon Valley USA, Marmer, Hermann and Berman (2011)
- Internet start-up companies can be divided into three basic types.
- Discovery: at ideation phase
- Validation: validating their business idea that if this idea can solve the problem of a common man
- The Automizer whose are interested customer focused, fast performer with increased subscriber growth, and networking.
- The Integrator high security, early profit, smaller market companies with high probability

- The Challenger high sales, complex customer dependent more capital, business-oriented companies

Entrepreneurs face many challenges while building up any new venture one of most common as per the survey of entrepreneur and potential entrepreneurs is getting enough capital and financial resources (King and Levine, 1993; Klonowski, 2014) and second most common challenge is Managing and utilization of crucial funds without hampering the business objective. Start-ups are backbone of a strong economy creating growth and economic development by providing employment opportunities and innovative solutions to common man at a low cost.

Research questions, research methodology and expected scientific contribution

Primary data collection for the research is conducted through two tools i.e. Research questionnaires that were sent by e-mail to newly started start-up companies and entrepreneurships and Face to face interview meetings with 50 entrepreneurs and 50 would be entrepreneurs having business vision in multiple different sectors.

major limitation of this research, is that there is no registered or published database is available for newly started companies or new ventures or no data base available for small scale entrepreneurs who started up their journey of entrepreneurship with in last 2 years. The primary limitation of analysis is focus on a small number of individual start-ups. Although this method has allowed detailed analysis, but we can't assure that it's a right sample across population so the findings may or may not be applicable across the whole start-up economy. These start-ups have used very different forms of finance, from different sources in different configurations so establishing a financing pattern for a wide range of start-ups for capitalization will not be possible. This research suggests that multiple factors influence the entrepreneur decisions on start-up funding and multiple sources are available for each size of start-up and a theirs is huge divergence in highly capitalized and under-capitalized start-ups. Starting from the collected and analyzed previous research data on a global level and a defined set of research problems, several research questions and hypotheses were formed:

1. What are the financing sources available for entrepreneurs in India?
2. What stages start-up companies currently working and what kind of financing sources they availed?
3. Which financial resourcing and funding options entrepreneurs preferred and why?
4. Are entrepreneurs facing any financial challenges while maintaining day to day business activities?
5. If major entrepreneurs feel enough fund non availability is a blocker in business expansion and growth?
6. Are they using modern high-tech solutions in their business?
7. How current available ease of doing business and Government policies for start-up helping them to move from employee zone to entrepreneur zone?
8. How digital innovative solutions like big data, visualization, Analytics, Artificial Intelligence and Technology helping them to save costs and helping in their growth within constraint funds availability?
9. 9 Is there is Imbalance between Business and family Life and Work Life Balance is a missing Link to worry about?
10. How effective are these Digital technology Tools and there usage pattern in your Business?

The hypotheses are as follows:

Null Hypothesis:

H0. It's easy for entrepreneurs to get funding for their start up and innovative digital solutions are not much helpful in cost saving for business operations and managing funds smartly

Alternative Hypothesis:

H1. Though it's Digital Economy in India with ease of doing business policy but major challenge for entrepreneurs is getting funds from their choice of financing model for their business. Hi-Tec innovative solutions like AI, visualization, Analytics and Big Data helping in managing costs smarting for marketing and managing other business operations smartly and save on cost and maintain work life balance.

The data was gathered using a questionnaire containing questions on financing, development and business activity, current business operations and digital tools and technology usage in start-ups. The PDF questionnaire is sent along with a cover letter to the selected start-ups and Entrepreneurs in India. Maximum Variation sampling and Snowball Sampling is used to collect information and Applied Research, field research, Observation, personal interview, Content analysis, descriptive quantitative analysis, statistical analysis compilation and manipulations, Sensitivity Analysis and Chi-square tests were used to collect and analyse the gathered data.

These methods helped in processing gathered data and establish the basic knowledge and characteristics of the sample. Data analysis was performed using Microsoft Office Excel and R.

The expected scientific contribution helps to define development stages of start-up companies as well as the source of their financing at each stage. The research goal was to show challenges in financing entrepreneurial ventures in India and how these ventures moving to technological solutions for smart operations and saving costs.

There are many new sources of funding and financing are a most in past few years (Bruton et al. 2015) especially the technology and the Fintec financing from different sources like Crown funding's (Schwienbacher, Belleflamme, & Lambert, 2013). Initially the entrepreneurs tried to get find from traditional that sources like back financing (Robb and Robinson 2014)) but if they failed, the globalisation allowed entrepreneurs to receive funds from investors across the globe (Mäkelä and Maula 2005) microfinance (Khavul, 2010) and other financial innovations (Moenninghoff & Wieandt, 2012)

Start-up Funding and innovative Tools usage Pattern among Entrepreneurs

Government Initiatives like Start-Up India, MUDRA Yojna, SETU (Self-Employment and Talent Utilization) Fund, E-Biz Portal to support entrepreneurs in India. Effective start-up funding and ease of doing business is achieved when all all entrepreneurial companies are able to receive Finance at every required stage of development maybe at ideation, seed funding or crowd funding maybe Angel investment or venture capital as per their emerging business growth and expansion model. There should be a smooth transition between available financial models at every stage switch overs.

Latest trend in the year 2019 we are seeing the great support from the investor community where large funding from the investor is been received for the Indian Artificial intelligence and data analytics companies we all have seen that 2018 ended up with huge funding raised by fractal Analytics.

Ensuring the right funds are available for usage at right time is difference between success and failure for a new business. A start-up should have enough money in the bank to provide the necessary stability and to make sure that business processes will not be disrupted. So, funding can function as a safety valve in unexpected and problematic events.

Other Additional challenges faced by start-up (as empirical research results):

- Survival challenge in adverse market
- Difficult to stay focused and spend wisely and rationally
- Tough to get investors and potential users for start-up which are in no profit yield zone
- Core focus should be on the problem statement which start up is trying to solve by providing Solution or service rather than investors or particular industry
- Product marketing, brand building and gaining market share;
- Difficult to find a right mentor and guide
- Tough to find early adopters product or service trials;
- Define quality business plan;
- realize that the solution offered by start-up is not the one and only solution in the world. There are competitors available in the market
- Improper revenue and expense projections
- Not being good at cash flow management

- Unorganised book keeping habits
- Not choosing the right funding option
- Paying bills late on regular basis
- Too many sales promotions, coupons and markdowns just to stay afloat
- Receiving late payments from clients on a regular basis
- Not being ready to face sales slump due to unavoidable reasons
- Sales are good but profits are low
- Poor Credit History
- Lack of sufficient working capital
- The Fear Of Being In Debt
- Discrimination Based On Age
- Lack Of Networking
- Lack Or Low Personal Capital
- Having a small budget to hire an expert.
- Having a small budget to hire an expert.
- Financial reports are hard to understand and do not provide meaning for day to day operation of the business. And no one or tool is there to make it meaningful to them.
- Fewer team members.
- Keeping track of various types of financial transactions
- Lack of financial planning.
- Proper analyzing of financial accounts of the business.
- Proper maintenance of income & expense accounts.
- Business Profitability
- Understanding business from financial data
- Fail to Plan
- Creating a scalable business model
- An entrepreneur must go through significantly fewer steps to test out and adopt newer technologies. Because they are nimble and have less administrivia to contend with, they can jump on the innovation bandwagon rapidly and develop new solutions from scratch. In fact, that's exactly why the likes of Google and Facebook tend to acquire smaller startups- to gain access to their tech and the brains behind it, before this "new kid" overthrows them.
- Legacy companies also have higher coordination costs and require more time to implement new tech

Here are some major & most common financial challenges faced by startups:

Less knowledge on business finance & accounting:

Lack of fund More sale & less profit Longer credit cycle Improper budgeting & forecasting:

With the help of technology they are able to manage top they are able to take maximum benefit using technology in following 10 fields: Salary and MIS Management Systems , Accounting System, Telephone System , Remote Locations working and its management,

Skype /IPad /Tablet/Laptops to manage employee maintain record and Book, Keeping,Video Conferencing and cloud Meetings, LinkedIn and other official platforms for promotions and Employee hiring , Virtual Reality and Artificial Intelligence, YouTube/ Twitter/ Facebook/ and other digital marketing campaigns for low cost effective marketing, Inventory management software, Project management software

Digital tools and innovations usage for managing funds

1. Biggest benefits Artificial Intelligence, Big data and Analytics is hottest trend and most popular amongst investor community.

2. Big data and Analytics help them to focus on trend, watching, analysing, forecasting and predictive Analytics. With the help of these tools they can focus on just and time deliveries by maintaining lowest possible inventory and save the cost

3. Visualization and analytics dashboard help them to manage their resources effectively and do consumer behaviour analysis for their new product and validate the responses.

4. These hi tech innovative solutions help them to do market research using secondary data and market analytics help them to validate their business ideas.

5. Artificial intelligence with Natural Language Processing Bots help them to save the cost on the customer support and queries resolutions

Natural language processing helping stratus to move away from language barriers and expand their business breaking cultural barrier zones.

6. Dashboard help them to maintain their human resource and Projects in a more efficient and effective way

Big data helping start up to find out the buzz words in data lake of social media and available on the internet and identify the key problem areas which a common man want to solve or find a solution for so that they can build a product solving the concern issue at the right cost with the right timings before the problem buzz off.

With the help of data Analytics they can create better market research, better competitor analysis and validate their products using virtual reality and augmented realty to test case for trial world.

Start-up taking befit of bots and IVR for minimal human resource requirement for customer support and make their systems self-sufficient and user friendly to create better user journey and better user experience

7. Start-ups are taking maximum benefit of SMAC (Social Media, Analytics and Cloud Computing).

Social media marketing like YouTube Twitter Facebook and Instagram help them to create digital marketing campaigns and build their brand presence amongst consumers

With the help of Cloud Computing zone they are able to sustain without investing much of amount at the initialisation and ideation phase for managing and maintaining Infrastructures. Entrepreneurs use the cloud computing facilities which provides them pay per use facility and provide them robust elastic, scalable, 24*7 available infra and save on the infrastructure buying maintaining and managing costs.

Data is the fuel powering AI, and large data sets feeds machine learning applications to rapidly learn rapid independently.

AI enables them to take maximum benefits for available massive structured or unstructured data sets and create new insights from data that was earlier hidden emails, presentations, videos, and images.

Businesses generate large volumes of both structured and unstructured data daily. Earlier, most of this data become waste as there was had no option to analyse. With the invention of Big Data analytics, start-ups are able to process and analyse large data sets to create meaningful patterns, trends, and take business decisions on the basis of defined patterns and case studies

EMPIRICAL RESEARCH RESULTS

results of the research and answers to the research questions and hypotheses. Research results indicate that most of the founders of start-up firms are male (96%), the majority are between 25-34 years old (65% of respondents), and have been present in the world of entrepreneurship for more than 6 years (69%).

Startup India proposes for conducive environment for startups by setting up incubation centres, relaxed norms, tax exemptions for three years, and most importantly, an Rs 10,000 crore corpus fund managed by Small Industries Development Bank Of India (SIDBI). The government has received a lot of flak for poor execution of the program, but nevertheless, there is some traction for this programme, and the ecosystem as a whole seems to have benefitted from it.

Capital is critical, but more important is knowing when and how to deploy it efficiently to get the best returns.

Conclusion

It is well known fact that start up life is small and if any business which can survive for 999 days have the potential to survive ups and downs in business industry. Small number of start-up companies succeeds and be profitable after the market launch of products and services. In this introductory article, we have developed a framework to analyse new financial alternatives to use by different entrepreneurs and their technology usage patterns. We have utilized this framework to develop an agenda for future research. In conclusion, start-up companies prefer traditional and informal financial sources like friends and family. Only after they pass the first stage of development, founders got courage to look for other funding sources. The contribution is reflected in the fact and conducted research can contribute to design and better understanding of the financing strategy for new budding entrepreneurial ventures and help them in taking maximum benefits from innovative solutions

An entrepreneur feel low from pas issues and find better solutions to solve them best solution for funding own business, a combination of internal and external sources would probably be the best choice.

What frequently goes wrong, and leads to a company running out of cash, and unable to raise more, is that management failed to achieve the next milestone before cash ran out. Many times it is still possible to raise cash, but the valuation will be significantly lower. Be extremely careful when getting outside funding. The moment you take money from outsider u switch from founder to being someone who can be fired.

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