Chapter 4

Data Analysis

This chapter details the data analysis process. Firstly, it explains the demographic quantitative data analysis of participant attributes, followed by Content analysis. During content analysis, description of each theme or dimension is identified in each cluster construct, listing of the observations in each theme followed by list the findings related to research questions is conducted. External support system pertaining to Government initiatives is analyzed from various published policies from Government of India and State Governments.

The startup entities background information relevant to the study is as follows:

Sample population’s background information

1. Type of legal entities of Startups under study:

   The Entrepreneurs/ Senior Management team members interviewed for the research study worked in the Information Technology services companies. The startup entities set up belonged to various legal entities categories as below:

   ![Type of Legal Entity in India](figure16)

   **Figure 16: Type of legal entity in current study**
There were 25 companies (83.3% of participants from startups) which were registered as “Private Limited” when compared to other legal entity registration categories.

2. **The year of establishment of the startup entity under study:**

The Entrepreneurs/ Senior Management team members interviewed for the research study worked in the Information Technology services companies. These entities were set up during the years 2000-2012. The distribution of year of establishment across the startups to which the participants interviewed for research study is given below. The number of companies started during 2012 were 7 companies, 5 companies were started during 2000, 5 ventures in 2006, which enabled to understand the startup phenomena of Information Technology services startups during growth phases (started prior to year 2012 – as year of establishment) including the journey through initial phases, making the study relevant for the sustained business success factors search considering that data collection for the study was undertaken during 2014-2015.

![Figure 17 - Year of establishment of sample population](image-url)
3. The number of branches of the startup under study:

The startup entities under study had the following number of branches during the period they were actively run as a business or during the periods of interviews for the study were conducted. 63.3% of entities had only 1 branch, 13.3% of entities had 2 branches, 6.67% had 6 branches.

![Figure 18 - Number of branches of the sample entities](image18)

4. The number of international branches of the startups under Study:

The following graph indicates the number of branches that the startups expanded outside of India. 33% of the sampling startups had one international branch outside of India.

![Figure 19 - Number of international Branches of sample entities](image19)
5. **Average number of employees in Startups under study:**

The number of employees working in the startup at the time of exit of the participant or when the interview was undertaken is given below. The data under study indicates that 15 of the entities (50% of the sampled representation) under study had an average number of employees between 0-50 employees.

![Total Number of Startups with the given employee range](image)

**Figure 20 - Number of Employee Range in sample entities**

6. **Average number of consultants/ temporary contractors working in the entity:**

The entities either had their own employees or used external consultants who needed specific skill sets and competencies to run their businesses. The following shows the number of consultants/temporary contractors who worked in the startup entities under study.
7. **Status of the company when the interviews for the study were carried out:**

The following data indicates variety of the statuses of the Information Technology services startups under study. Some points to make a note are: Eighteen entities of the total of thirty entities (60% of the sampling representation) that were studied are running successfully. Four Entities were merged or acquired by bigger successful entities (13.3 % of the sampling representation). Two entities are struggling to survive in the market (6.67 % of the sampling representation). Three have closed / shutdown Operations (10 % of the sampling representation).
The Data analysis was based on the data analysis process outlined in chapter 3.

Thus, the horizonalized, cluster grouped data is analyzed under 4 major sections or themes as depicted, designed as per the constructs of current research Study:

**Theme 1:** Founding Team Dynamics at Information Technology services Startups

**Theme 2:** Strategic Business Plan and Intellectual property at Information Technology services Startups

**Theme 3:** External / Environmental support system factors on Information Technology services Startups

**Theme 4:**
- **Sub Theme 1:** Internal Strategies taken to sustain and grow business at Information Technology services Startups
- **Sub Theme 2:** Leadership Style practiced at Information Technology services Startups

![Figure 23: Research Analysis Themes Constructs](image-url)
The excerpts of grouped meaning units were organized into a set of data bins organized by thematic topics emerged as 4 main dimensions or themes which are mapped to 5 constructs defined in chapter 2. The data bins led to creating thematic descriptions which had sub-themes, which in turn had the textual descriptions of the successful factors contributing to Information Technology services start-up phenomenon.

Theme 1: Founding Team Dynamics at Information Technology services Startups

Construct 1: Startup team’s dynamics

Cluster Dendrogram

Clustering of participants in this construct is based on answers given on sections/coded structure below:
Prior Startup | Prior Failed Startup | Education | Marital Status | Total Work Experience | Age | Gender
---|---|---|---|---|---|---

Silhouette plot of \( x = \text{cutree}(hc.c, 3), \text{dist} = \text{distance} \)

Figure 25: Silhouette plot - Clustering data based on Construct 1

Silhouette width is 0.39, while the number is > 0, its not a strong cluster pattern as the width is not nearing 1. However, reviewing the silhouette diagram, the 3 clusters are sufficient to study the groups in sampling entities.

- Si -> 1, very well clustered
- Si -> 0, in between clusters
- Si < 0, placed in wrong cluster

<p>| Cluster 1 | Rows – 26, 12, 30, 16, 1, 20, 19, 22, 10, 13, 27, |</p>
<table>
<thead>
<tr>
<th>Clusters</th>
<th>Observations</th>
</tr>
</thead>
</table>
| Cluster 1: Rows – 26, 12, 30, 16, 1, 20, 19, 22, 10, 13, 27, 17, 3, 5, 6, 21, 29, 2, 7, 15, 4, 11, 18, 25 represent Cluster 1 (Represents 80% of participants) | Observations:  
Observation 1: 11 participants out of 24 (45.8% of Cluster 1 participants) stayed Neutral in answering the question whether “prior Successful Startup Experience” helps in the current technology startup”, while 5 participants strongly agreed and 4 agreed.  
Observation 2: 15 participants out of 24 (62.5% of Cluster 1 participants) stayed Neutral in answering the question whether “prior failed Startup Experience” helps in the current technology startup”, while 4 participants strongly agreed and 3 agreed.  
Observation 3: 8 participants out of 24 “Strongly agree” (33.3% of Cluster 1 participants), 10 participants agree (41.67% of Cluster 1 participants), 5 (20.8% of Cluster 1 participants) stayed Neutral, 1 NULL Response indicating positive effect of “Education” of entrepreneurs/founding members in Technology Startups.  
Observation 4: 10 participants out of 24 participants (41.67% of Cluster 1 participants) “Strongly Disagree”, 9 Participants Disagree, 2 Strongly Agree. Majority of participants disagree |
that “Marital Status” of Entrepreneurs/ founding members play any significant role in the success of Information Technology services startups.

Observation 5: 16 participants out of 24 participants (66.67% of Cluster 1 participants) “Strongly Agree”, 4 participants “Agree”, 2 participants stayed Neutral on the role of “Work Experience” and Information Technology services success.

Observation 6: 6 participants out of 24 participants (25% of Cluster 1 participants) “strongly Disagree”, 9 participants “Disagree” (37.5% of Cluster 1 participants), 4 “Agree” (16.67% of Cluster 1 participants) on the role of “Gender” of entrepreneur/founding team member in Information Technology services success.

Observation 7: 6 participants out of 24 participants (25% of Cluster 1 participants) “Strongly Disagree”, 9 “ Disagree” (37.5% of Cluster 1 participants), 2 stayed Neutral, 1 “agree” to the role of “Age” of entrepreneur/founding team member in Information Technology services success.

Cluster 2: Rows – 28,24,14,23 – represent Cluster C2

Outliers. Partial or null response, hence not considering for interpretation.

Cluster 3: Rows – 8,9 – Represent Cluster 3

Outliers. Partial or null response, hence not considering for interpretation.

Table 5: Observations in Construct 1
Theme 1:: Construct 1: Observation 1:

![Figure 26: Team Dynamics - Prior Startup Experience](image)

<table>
<thead>
<tr>
<th>Startup team’s dynamics contributing to success of the startup</th>
<th>Prior Start Up Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 80% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 result</td>
</tr>
</tbody>
</table>

X-squared = 11.833, df = 4, p-value = 0.01863.

The P-Value is 0.018902. The result is significant at p < 0.05

<table>
<thead>
<tr>
<th>Total</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>11</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6: Cluster 1 on Construct 1 (Prior Startup Experience) : Pearson Chi Square Test

The result is significant at p < 0.05 i.e., “Prior Startup Experience” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.
Theme 1:: Construct 1: Observation 2:

Figure 27: Participants data on Prior Failed StartUp Experience

<table>
<thead>
<tr>
<th>Agree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>14</td>
<td>4</td>
</tr>
</tbody>
</table>

Cluster 1 on Construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 80% of participants)

Startup team’s dynamics contributing to success of the startup

Prior Failed Startup Experience

Pearson Chi Square Test for goodness of fit for cluster 1 results

X-squared = 35.958, df = 4, p-value = 2.951e-07

The P-Value is < 0.00001. The result is significant at p < 0.05.

Table 7: Cluster 1 on Construct 1 (Prior Failed Startup Experience): Pearson Chi Square Test

The result is significant at p < 0.05 i.e., ”Prior Failed Startup Experience” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.
Theme 1:: Construct 1: Observation 3:

Figure 28: Participants data on Education

![Cluster 1 on Construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 80% of participants)](image)

<table>
<thead>
<tr>
<th>Startup team’s dynamics contributing to success of the startup</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 80% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results (Agreed and Strongly agreed are clubbed) (Agreed and Strongly agreed are clubbed) X-squared = 19.75, df = 2, p-value = 5.144e-05. The P-Value is 5.1E-05. The result is significant at p &lt; 0.05.</td>
</tr>
</tbody>
</table>

Table 8: Cluster 1 on Construct 1 (Education) : Pearson Chi Square Test

The result is significant at p < 0.05 i.e., ”Education” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.
Theme 1:: Construct 1: Observation 4:

Startup team’s dynamics contributing to success of the startup

Cluster 1 on Construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 80% of participants)

Marital Status

Pearson Chi Square Test for goodness of fit for cluster 1 results

X-squared = 23, df = 5, p-value = 0.0003376.

The P-Value is 0.000338. The result is significant at p < 0.05.

The result is significant at p < 0.05 i.e., "Marital Status" of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.
Theme 1:: Construct 1: Observation 5:

Figure 30: Participants data on Marital Status

<table>
<thead>
<tr>
<th>Startup team's dynamics contributing to success of the startup</th>
<th>Total Work Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 80% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
<th>(blank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>2</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

The result is significant at $p < 0.05$. i.e., "Total Work Experience" of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.
Theme 1:: Construct 1: Observation 6:

![Bar graph showing participant data on Age](image)

**Figure 31: Participants data on Age**

<table>
<thead>
<tr>
<th>Startup team’s dynamics contributing to success of the startup</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 80% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
</tr>
</tbody>
</table>

**Table 11: Cluster 1 on Construct 1 (Age) : Pearson Chi Square Test**

The result is significant at p < 0.05 i.e., ”Age” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.
Theme 1:: Construct 1: Observation 7:

Figure 32: Participants data on gender

<table>
<thead>
<tr>
<th>Startup team's dynamics contributing to success of the startup</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 1 representing a major group and hence running the Pearson Chi Square Test for goodness of fit for data set for goodness of fit test cluster 1 results (Represents 80% of participants)</td>
<td>X-squared = 13.368, df = 4, p-value = 0.009609</td>
</tr>
</tbody>
</table>

The result is significant at p < 0.05. The P-Value is 0.009611. The result is significant at p < 0.05.

Table 12: Cluster 1 on Construct 1 (Gender) : Pearson Chi Square Test

The result is significant at p < 0.05 i.e., “Gender” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.
Theme 1:: Construct 1: Observation 8:

Word Cloud is developed to indicate the important perceptions and advice shared by the participants during interview on “Various Prior Background information of the entrepreneur/founding team member relating to Technology service startup success”.

The below word cloud built for Cluster 1 for construct 1, indicate that the prior background of “Team” is “Important”, and “Management”, “Skills”, “Commitment”, “Experienced” are coming out as more repeated words by the participants bringing out strong emphasis on the above mentioned areas related to prior background of entrepreneurs/founding team members in technology startups.

![Word Cloud Image]

Figure 33: Word Count: Cluster 1 on Construct 1 (Prior Background of startup team)

Theme 1:: Construct 1: Observation 9:

Motivational factors influencing participants in cluster 1 to take up Information Technology services entrepreneurship in India are as quoted below:

“A lot of IT companies were doing good in 2004. Why not us?”

“Do something Meaningful while creating value for others.”

“Excitement”
“Innovation”
“Innovation / Solve a problem”
“Innovation and Technology, Enterprise Application Development”
“Make Money; Build Society; Passion of building an Organization; Provide Jobs”
“Recognition; Innovation”
“Make Money; Build Society; Passion of building an Organization; Recognition; Innovation”
“Passion of building an Organization”
“Wealth Creation”
“Wanted to do something on my own beyond one’s life time.”

Theme 2 - Planning: Clarity in Business, Strategic, Tactical & Operational vision

Construct 3: Role of Business plan, Intellectual Property in startups

Cluster Dendrogram

![Cluster Dendrogram](image)

distance
hclust (", "average")

Figure 34: Construct 3 - Cluster Dendrogram

Clustering of participants in this construct is based on answers given on sections/coded structure below:

<table>
<thead>
<tr>
<th>Business Plan</th>
<th>Intellectual Property</th>
</tr>
</thead>
</table>


Silhouette width is 0.74, which represent a strong cluster pattern as the width is nearing 1. However, reviewing the silhouette diagram, the 3 clusters are sufficient to study the groups in sampling entities.

<table>
<thead>
<tr>
<th>Cluster 1</th>
<th>Rows 1,2,3,4,5,6,7,8,9,12,13,14,16,18,19,20,22,25,30 represent Cluster 1 (Represents 63.3% of participants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 2</td>
<td>Rows 10,11,17,21,23,24,26,27,28,29 represent Cluster 2 (Represents 33.3% of participants)</td>
</tr>
<tr>
<td>Cluster 3</td>
<td>Rows 15 represent Cluster 3 (Represents 3.3% of participants)</td>
</tr>
</tbody>
</table>

Table 13: Construct 3 - Clusters
Clusters | Observations
--- | ---
Cluster 1: Rows 1,2,3,4,5,6,7,8,9,12,13,14,16,18,19,20,22,25,30 (Represents 63.3% of participants) | **Observation 1**: 13 out of 19 participants (68.4% of Cluster 1 participants) ‘strongly agree’, 4 agree, 1 Neutral and 1 disagree on considering the use of business plan as a success factor in Information Technology services startups. **Observation 2**: 10 out of 19 participants (52.6% of Cluster 1 participants) in cluster 1 “strongly agree”, 3 agree and 6 “Neutral” on considering “Intellectual property” as a success factor in Information Technology services startups.
Cluster 2: Rows 10,11,17,21,23,24,26,27,28,29 | Outliers. Partial or null response, hence not considering for interpretation.
Cluster 3: Row 15 | Outliers. Partial or null response, hence not considering for interpretation.

Table 14: Theme 2: Construct 3: Observations

**Theme 2:: Construct 3: Observation 1:**

![Figure 36: Participants data on Business Plan](image)

95
Cluster 1 on Construct 3 representing a major group and hence running the data set for goodness of fit test (Represents 63.3% of participants)

Pearson Chi Square Test for goodness of fit for cluster 1 results:

\[ X^2 = 20.368, \text{ df} = 3, p\text{-value} = 0.0001424 \]

The result is significant at \( p < 0.05 \).

**Table 15: Cluster 1 on Construct 3 (BP): Pearson Chi Square Test**

The result is significant at \( p < 0.05 \) i.e., "Business Plan" of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.

**Theme 2:: Construct 3: Observation 2:**

![Figure 37: Participants data on Intellectual Property](image)

![Cluster](image)

![Count_CLST1](image)

What is your take on developing and protecting "Intellectual Property" and filing patents in Servi...
Cluster 1 on Construct 3 representing a major group and hence running the data set for goodness of fit test (Represents 63.3% of participants)  

<table>
<thead>
<tr>
<th>Pearson Chi Square Test for goodness of fit for cluster 1 results</th>
<th>X-squared = 3.8947, df = 2, p-value = 0.1426</th>
</tr>
</thead>
<tbody>
<tr>
<td>The P-Value is 0.142652. The result is not significant at p &lt; 0.05.</td>
<td></td>
</tr>
</tbody>
</table>

Table 16: Cluster 1 on Construct 3 (IP): Pearson Chi Square Test

The result is NOT significant at p < 0.05 i.e., ”Intellectual Property” of the founding member / senior management is NOT correlated to success of Information Technology services startups.

**Theme 2:: Construct 3: Observation 3:**

Word cloud built on perceptions about Business plan and intellectual property is shared during interview is as below. It clearly shows that its “important” to have “business plan” and it should be kept “flexible”.

![Word Cloud](image)

Figure 38: Word Count: Cluster 1 -Construct 3 – Business Plan
Theme 3 - Impact of environmental factors on Information Technology services Startups

Construct 4: External Startup Support System handled by Startups

Figure 39: Theme 3: Construct 4: Cluster Dendrogram

Clustering of participants in this construct is based on answers given on sections/coded structure below:

<table>
<thead>
<tr>
<th>Market</th>
<th>Availability of Skilled Resources</th>
<th>Government regulations/Support</th>
<th>Tax Policies</th>
</tr>
</thead>
</table>

Figure 40: Theme 3: Construct 4: Silhouette Plot
Average linked cluster dendrogram shows 3 clusters and silhouette plots show average width of 0.61.

<table>
<thead>
<tr>
<th>Clusters</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1: Rows - 1,2,3,4,5,6,7,8,9,10,12,13,14,15,16,18,19,22,23,25,26,27,28,29,30 (Represents 83.3% of participants)</td>
<td>Observation 1: 19 out of 25 participants “Strongly Agree” (76% of Cluster 1 participants), 4 agree (16% of Cluster 1 participants) and 2 Neutral (8% of Cluster 1 participants) for the role of “Market” and success of Information Technology services startups. Observation 2: not statistically significant to draw conclusion. Observation 3: not statistically significant to draw conclusion. Observation 4: 14 participants out of 25 participants stay “Neutral” (56% of Cluster 1 participants), 8 strongly agree (32% of Cluster 1 participants), 4 agree (16% of Cluster 1 participants) to the role of “Tax Policies” and success of Information Technology services startups</td>
</tr>
<tr>
<td>Cluster 2: Rows - 11,17,21,24</td>
<td>Outliers. Partial or null response, hence not considering for interpretation.</td>
</tr>
<tr>
<td>Cluster 3: Rows - 20</td>
<td>Outliers. Partial or null response, hence not considering for interpretation.</td>
</tr>
</tbody>
</table>

Table 17: Theme 3: Construct 4: Cluster data

Table 18: Theme 3: Construct 4: Observations
Theme 3:: Construct 4: Observation 1:

Figure 41: Participants data on Market

<table>
<thead>
<tr>
<th>External Startup Support System handled by Startups</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 4 representing a major group and hence running the data set for goodness of fit test (Represents 83.3% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
</tr>
</tbody>
</table>

Table 19: Cluster 1 on Construct 4 (Market) : Pearson Chi Square Test

The result is significant at p < 0.05 i.e., "Market" of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.
Theme 3:: Construct 4: Observation 2:

Figure 42: Participants data on Availability of skilled resources

<table>
<thead>
<tr>
<th>External Startup Support System handled by Startups</th>
<th>Availability of Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 4 representing a major group and hence running the data set for goodness of fit test (Represents 83.3% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
</tr>
</tbody>
</table>

Table 20: Cluster 1 on Construct 4 (Availability of Resources) : Pearson Chi Square Test

The result is NOT significant at p < 0.05 i.e., ”Availability of Resources” of the founding member / senior management is NOT correlated to success of Information Technology services startups.
Theme 3:: Construct 4: Observation 3:

Figure 43: Participants data on Government Policies

<table>
<thead>
<tr>
<th>External Startup Support System handled by Startups</th>
<th>Government Policies/Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 4 representing a major group and hence running the data set for goodness of fit test (Represents 83.3% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
</tr>
<tr>
<td></td>
<td>X-squared = 2.48, df = 2, p-value = 0.2894. The P-Value is 0.289384. The result is not significant at p &lt; 0.05.</td>
</tr>
</tbody>
</table>

Table 21: Cluster 1 on Construct 4 (Government Policies) : Pearson Chi Square Test

The result is NOT significant at p < 0.05 i.e., “Government Policies/Support” of the founding member / senior management is NOT correlated to success of Information Technology services startups. Twelve participants stayed “Neutral” on government policies and support while seven participants “Strongly Agree”d on the impact of government policies and support to Information Technology Services startups in India. This insignificant attribute can be relooked at in consideration of timing of the data collection period which is years 2014-2015.
Until this period, only early government policies or initiatives via NSTEDB studies via startups in government supported incubators were focused to support technology entrepreneurship. STP policy in 1991 and SEZ policy in 2005 were the major government of India initiatives in scope of current study. There were some perspectives shared on the detailed paperwork involved in utilizing STP policies and overhead that had to be maintained by startups to use the benefits under the STP Scheme. With the SEZ policy, major benefits were tax concessions/havens given for companies with services being delivered from these locations. However, startups had other challenges utilizing these benefits with tradeoffs for providing transport to their employees to the far off SEZ locations and had to deal with overhead expenses in order to benefit from these policies. So, a few participants took the benefits of these policies, while many found overheads or other concerns to be maintained more if registered under these government initiatives and didn’t utilize the available benefits. However, review of literature showed that from year 2016 onwards, Government of India has taken the “Startup India”, “Make in India” initiatives and a lot of support has been put in place for startups in India. Many supporting funding facilitating needs, incubator and accelerator facilities which trains, mentors the young entrepreneurs are being witnessed. This is again a beginning of these government initiatives and there are significant number of individuals are venturing out in India in many industrial sectors, future studies can review the impact of recent government initiatives and their benefits to Information Technology Services startups in India.

**Theme 3:: Construct 4: Observation 4:**

![Figure 44: Participants data on Tax Policies](image_url)
<table>
<thead>
<tr>
<th>External Startup Support System handled by Startups</th>
<th>Tax Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 4 representing a major group and hence running the data set for goodness of fit test (Represents 83.3% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
</tr>
<tr>
<td>X-squared = 7.28, df = 2, p-value = 0.02625 The P-Value is 0.026252. The result is significant at p &lt; 0.05.</td>
<td></td>
</tr>
</tbody>
</table>

Table 22: Cluster 1 on Construct 4 (Tax Policies): Pearson Chi Square Test

The result is significant at p < 0.05 i.e., ”Tax Policies” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.

Theme 3::Construct 4: Observation 5:

Word Cloud of perceptions and advice by the participants on external strategies is shared during interview by the participants under cluster 1. “Market, “Customer needs”, “Challenges” are coming out as strong and impacted words contributed to business success. The way to capture the market in Information Technology Services sector is via addressing customer needs and help customers solve their challenges.

Figure 45: Wordcount on Cluster 1 on Construct 4 - External Factors
Theme 4: Internal execution Strategies taken to sustain and grow business at Information Technology services Startups

1. Sub theme 1: Internal execution Strategies taken to sustain and grow business at Information Technology services Startups

There is a well-known anecdotal business statistic that 90% of organizations fail to execute on their strategies (Kaplan and Norton book: “The Execution Premium”\(^1\)). Whether the actual figure is 60% or 90% really does not matter, it is still very clear that the biggest inhibitor to business success is the inability to implement on planned strategy.

A huge effort is placed on the definition of strategic planning, while comparatively reduced or no effort is put into strategic plan execution, monitoring, tracking to ensure to stay on planned track.

Ideating about an IT Service or solution is the dream vision of each IT Service startup. Converting the planned solution into a business viable solution for customers which is scalable model for adding these IT services into the startup service offering with an out of the box implementation is challenging. Each customer points out a unique need of the services and as an IT Service provider, offering customized solution becomes a norm. In order to sustain the IT services which are mostly maintenance and support services would find it risky to build customized services for each customer. As part of internal strategy, various dimensions encompassing a 360 degree view of service portfolio lifecycle of each service being delivered makes an important and critical success factor for IT service startups.

\(^1\): The Execution Premium by Kaplan and Norton (2006) states: “We conducted a survey in 1996 about the state of strategy execution. We learned that most organizations did not have formal systems to help them execute their strategies. Only 40% of organizations linked their budgets to their strategies, and only 30% linked incentive compensation to strategy. In the great majority of surveyed companies, fewer than 10% of employees reported that they understood their company’s strategy. Clearly, employees who do not understand the strategy cannot link their daily activities to its successful execution”.

105
Construct 5: Internal Strategies at Startups

Sub construct 1: Customer acquisition, delivery, processes and systems

![Cluster Dendrogram]

Clustering of participants in this construct is based on answers given on sections/coded structure below:

<table>
<thead>
<tr>
<th>Customer Acquisition Strategy</th>
<th>Customer Delivery Strategy</th>
<th>Services/Solution Strategy</th>
<th>Growth Strategy</th>
</tr>
</thead>
</table>

Figure 46: Theme 4-Subtheme 1 - Construct 5 - Cluster Dendrogram
Cluster 1: Rows –1,2,3,4,5,6,7,8,12,13,14,15,16,18,19,20,21,22,25,26,27,28,29 represent Cluster 1 (Represents 76.6% of participants)

Cluster 2: Rows – 10,30 represent Cluster 2 (Represents 6.6% of participants)

Cluster 3: Rows – 9,11,17,23,24 – Represent Cluster 3 (Represents 16.6% of participants)

Table 23: Theme 4-Subtheme 1 - Construct 5 - Clusters

<table>
<thead>
<tr>
<th>Clusters</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster1: Rows 1,2,3,4,5,6,7,8,12,13,14,15,16,18,19,20,21,22,25,26,27,28,29 (Represents 76.6% of participants)</td>
<td><strong>Observation1</strong>: 18 participants out of 23 participants “strongly agree” (78.2% of Cluster 1 participants), 4 “agree” (17.3% of Cluster 1 participants) that one should have customer acquisition strategy for the success of the startup. <strong>Observation2</strong>: 16 participants out of 23 participants “strongly agree” (69.5% of Cluster 1 participants), 6 “agree”</td>
</tr>
</tbody>
</table>
(26.08% of Cluster 1 participants) that one should have customer delivery strategy for the success of the startup.

**Observation 3:** out of 23 participants, 9 participants Agree (39.1% of Cluster 1 participants), 6 strongly Agree (26.08% of Cluster 1 participants) and 8 participants are Neutral (34.78% of Cluster 1 participants) on "use of systems and processes".

**Observation 4:** Wordcount shows "plan", "process", "needed", "solutions" are used maximum times.

<table>
<thead>
<tr>
<th>Cluster 2: Rows 10,30</th>
<th>Outliers. Partial or null response, hence not considering for interpretation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 3: 9,11,17,23,24</td>
<td>Outliers. Partial or null response, hence not considering for interpretation.</td>
</tr>
</tbody>
</table>

**Table 24:** Theme 4 - Subtheme 1 - Construct 5: Observations

**Theme 4: Sub theme 1:: Construct 5: Sub construct 1: Cluster 1: Observation1:**

![Figure 48: Participants data on need of customer acquisition strategy](image)

**Internal Strategies at Startups - Sub Construct 1:**

---

Customer Acquisition Strategy
Table 25: Cluster 1 on Construct 5 – Subconstruct 1 (Customer Acquisition Strategy) : Pearson Chi Square Test

The result is significant at $p < 0.05$ i.e., ”Customer Acquisition Strategy” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.

Theme 4: Sub theme 1:: Construct 5: Sub construct 1: Cluster 1: Observation 2:

Figure 49: Participants data on need of customer delivery strategy
Internal Strategies at Startups - Sub Construct 1:

Cluster 1 on Construct 5 – Sub construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 76.6% of participants)

Pearson Chi Square Test for goodness of fit for cluster 1 results

X-squared = 15.217, df = 2, p-value = 0.0004961

The P-Value is 0.000496.

The result is significant at p < 0.05.

<table>
<thead>
<tr>
<th>Cluster 1 on Construct 5 – Subconstruct 1 (Customer Delivery Strategy)</th>
<th>Pearson Chi Square Test for goodness of fit for cluster 1 results</th>
<th>Customer Delivery Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 5 – Sub construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 76.6% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
<td>X-squared = 15.217, df = 2, p-value = 0.0004961</td>
</tr>
</tbody>
</table>

Table 26: Cluster 1 on Construct 5 – Subconstruct 1 (Customer Delivery Strategy) : Pearson Chi Square Test

The result is significant at p < 0.05 i.e., ”Customer Delivery Strategy” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.

Theme 4: Sub theme 1: Construct 5: Sub construct 1: Cluster 1: Observation 3:

![Bar Chart](image)

Figure 50: Participants data on need of Use of Systems and Processes
Internal Strategies at Startups - Sub Construct 1:

<table>
<thead>
<tr>
<th>Use of Systems and Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 5 – Sub construct 1 representing a major group and hence running the data set for goodness of fit test (Represents 76.6% of participants)</td>
</tr>
<tr>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
</tr>
<tr>
<td>X-squared = 0.6087, df = 2, p-value = 0.7376</td>
</tr>
<tr>
<td>The P-Value is 0.73760. The result is not significant at p &lt; 0.05.</td>
</tr>
</tbody>
</table>

Table 27: Cluster 1 on Construct 5 – Subconstruct 1 (Use of Systems and processes) : Pearson Chi Square Test

The result is NOT significant at p < 0.05 i.e.,” Use of Systems and Processes” of the founding member / senior management is NOT correlated to success of Information Technology services startups.

**Theme 4: Sub theme 1:: Construct 5: Sub construct 1: Cluster 1: Observation 4:**

Word count of perceptions shared on customer acquisition, customer delivery, processes and Systems.

Wordcount shows that "plan", "process", "needed" "solutions" get maximum usage of words from the interview data.
Plan is for various internal management areas of customer acquisition, delivery, growth needs of the startup. Processes to carry out the plans are to be present to deliver needed solutions. A point to be noted is the word “quality” being present in the wordcount indicating the essence of quality services and solutions to be delivered to customers.

**Theme 4: Sub theme 1:: Construct 5: Sub construct 2:**

*Sub construct 2: Work Environment (Organization Structure, Organization Culture, Management Style)*

![Cluster Dendrogram](image.png)

**Figure 52: Theme 4 - Subtheme 1- Construct 5-SubConstruct 2**

Clustering of participants in this construct is based on answers given on sections/coded structure below:

<table>
<thead>
<tr>
<th>Organization Structure during initial years</th>
<th>Work Culture during initial years</th>
<th>Organization Structure during growth years</th>
<th>Work Culture during growth years</th>
</tr>
</thead>
</table>
Figure 53: Theme 4-Subtheme 2 - Silhouette Plot

<table>
<thead>
<tr>
<th>Clusters</th>
<th>Observations</th>
</tr>
</thead>
</table>
| **Cluster 1** | **Observation 1**: 19 out of 26 participants (73.07% of Cluster 1 participants) conveyed that they vouch “team based org structure during initial years of Information Technology services startups”, 3 conveyed “functional org structure”.  
**Observation 2**: 12 out of 26 participants (46.15% of Cluster 1 participants) shared that they used “Adhocracy culture”, 12 witnessed for “Clan Culture” participants (46.15% of Cluster 1 participants) during initial years and 2 said they used market culture (7.69% of Cluster 1 participants). |
| Rows – 1,2,3,4,5,6,7,8,9,10,12,13,15,16,17,18,19,20,21,22,23,26,27,28,29,30 represent Cluster 1 (Represents 86.6% of participants) | Rows – 11,14,24,25 represent Cluster 2 (Represents 13.3% of participants) |
| **Cluster 2** | |
Observation 3: 13 out of 26 participants (50% of Cluster 1 participants) conveyed that they witnessed “Functional org structure during growth years of Information Technology services startups”, 6 participants (23.07% of Cluster 1 participants) conveyed “team based org structure” during growth years.

Observation 4: 11 out of 26 participants witnessed for “adhocracy culture” participants (42.3% of Cluster 1 participants), 6 participants (23.07% of Cluster 1 participants) shared that they use “clan” culture.

Observation 5: 12 participants out of 26 participants (46.15% of Cluster 1 participants) witnessed for “Coaching Style” as management style at Information Technology services startup.

Cluster 2: 11,14,24,25

Outliers. Partial or null response, hence not considering for interpretation.

Table 29: Theme 4: Subtheme 1: Observations

Theme 4: Sub theme 1:: Construct 5:Sub construct 2: Observation 1:

Figure 54: Participants data on Org Structure during Initial Years
<table>
<thead>
<tr>
<th align="right">Internal Strategies at Startups - Sub Construct 2:</th>
<th>Organization Structure during initial Years</th>
</tr>
</thead>
<tbody>
<tr>
<td align="right">Cluster 1 on Construct 5 – Sub construct 2 representing a major group and hence running the data set for goodness of fit test (Represents 86.6% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
</tr>
<tr>
<td align="right"></td>
<td>X-squared = 46.308, df = 4, p-value = 2.125e-09.</td>
</tr>
<tr>
<td align="right"></td>
<td>The P-Value is &lt; 0.00001. The result is significant at p &lt; 0.05</td>
</tr>
</tbody>
</table>

Table 30: Theme 4: Sub theme 1: Construct 5: Sub construct 2(Org Structure during initial years) Pearson Chi Square Test

The result is significant at p < 0.05 i.e., ”Org Structure during initial years” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.

**Theme 4: Sub theme 1::Construct 5:Sub construct 2: Observation 2:**

Figure 55: Participants data on work culture during Initial Years
Internal Strategies at Startups - Sub Construct 2: Cluster 1 on Construct 5 – Sub construct 2 representing a major group and hence running the data set for goodness of fit test (Represents 86.6% of participants).

Pearson Chi Square Test for goodness of fit for cluster 1 results: $X^2 = 7.6923$, df = 2, p-value = 0.02136.

The P-Value is 0.021386. The result is significant at $p < 0.05$.

Table 31: Theme 4: Sub theme 1: Construct 5: Sub construct 2 (Work Culture during initial years) Pearson Chi Square Test

The result is significant at $p < 0.05$ i.e., ” Work Culture during initial years” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.

**Theme 4: Sub theme 1:: Construct 5: Sub construct 2: Observation 3:**

![Figure 56: Participants data on Org Structure during Growth Years](image)
Cluster 1 on Construct 5 – Sub construct 2 representing a major group and hence running the data set for goodness of fit test (Represents 86.6% of participants)

<table>
<thead>
<tr>
<th>Internal Strategies at Startups - Sub Construct 2:</th>
<th>Organization Structure during Growth Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 on Construct 5 – Sub construct 2 representing a major group and hence running the data set for goodness of fit test (Represents 86.6% of participants)</td>
<td>Pearson Chi Square Test for goodness of fit for cluster 1 results</td>
</tr>
</tbody>
</table>

Table 32: Theme 4: Sub theme 1: Construct 5: Sub construct 2 (Org Structure during growth years) Pearson Chi Square Test

The result is significant at p < 0.05 i.e., ”Org Structure during growth years” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.

**Theme 4: Sub theme 1:: Construct 5: Sub construct 2: Observation 4:**

![Count of What Organization Work Culture you had in technology start-ups during GROWTH Phase (2 - 5 Ys)](image)

Figure 57: Participants data on Work Culture during Growth Years
### Table 33: Theme 4: Sub theme 1: Construct 5: Sub construct 2(Work Culture during growth years) Pearson Chi Square Test

<table>
<thead>
<tr>
<th>Cluster 1 on Construct 5 – Sub construct 2 representing a major group and hence running the data set for goodness of fit test (Represents 86.6% of participants)</th>
<th>Pearson Chi Square Test for goodness of fit for cluster 1 results</th>
<th>X-squared = 15.538, df = 5, p-value = 0.008293. The P-Value is 0.008295. The result is significant at p &lt; 0.05</th>
</tr>
</thead>
</table>

The result is significant at p < 0.05 i.e., “Work Culture during growth years” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.

### Theme 4: Sub theme 1:: Construct 5: Sub construct 2: Observation 5

WordCloud for Work Environment used in Information Technology Services startups is shown below. The center of the word cloud is taken by “People” indicating that in Information Technology Services sector, it is the knowledge workers of the startups which represents the core competency of the startups in service intense offerings which are delivered by skilled resources of the company. Hence, having a “flat” structure with “open” culture from the leadership is important for the employees of information technology services startups.

![Word Cloud on Work Environment](image-url)
Theme 4: Sub theme 1:: Construct 5:Sub construct 3: Observation 1:

Word Cloud on advice on "hiring strategy" to build their solution portfolio and deliver the best quality services to customers is by hiring “right”, “skills” and “resources”. Hiring through “reference” was found to be majorly used by participants since service oriented startups cannot afford to have wrong hires while trying to establishing their venture in the market.

Figure 59: Theme 4: Sub theme 1: Construct 5: Sub construct 3– Hiring Strategy word count

Some of the participants' quotes on their hiring strategy are shared below which explain different approaches taken by different participants to address their generic or niche skilled talents based on their generic or technically advanced capabilities in delivering services to their customers:

"More emphasis on business knowledge than the technical skills. When we come to know about the pain points, as an entrepreneur, one needs to know, understand and propose business solution, needn't be a technical solution."

"Initially, hired through references. Hiring engineers and developers is always a challenge for a startup. There is no time to hire interns and freshers and develop them. Attracting experienced team members is tough."

"We only look at analytical skills, programming skills than from where they graduated from or what degree they have in hand. Its all about the skills they have. Skills testing and
company culture adaptability. Understand the right attitude needed for the specific role and develop the hiring strategy."

"For hiring an engineer, we may not need face to face... Age doesn't matter for any hires. Its how they apply the learning and knowledge into the business."

"In service industry environment, hire local talent, close to place of service, train them and empower them with technology and systems."

"We concentrate on IT networking for Education sector, Government sector, which aren't very niche. We get resources easily as we are not into complex IT Service areas like Data center networking and management which needs expert talents which are niche and they come with high salary expectations."

"All were hired from personal relationships, built over professional work experience before founding the startup".

Theme 4: Sub theme 1:: Construct 5:Sub construct 4: Observation 1:

Word Cloud on growth strategy that startup adopted for growing/scaling the Information Technology services business. Keeping the service “portfolio” of the startup at the center and keep “updating” the portfolio to “newer” services added to serve existing customers and keep earning the revenues via expanded services being delivered to existing customers. As a second option, “partnerships” are observed to be most opted strategy for startup growths. Forming “partnerships” or alliances with companies with complementary services and solutions is found to be a good growth strategy.
Some of the participants' quotes on their growth strategy and advice to entrepreneurs who would like to build and grow new businesses in Information Technology services startups in India:

"Enter new geographies as our solution is horizontal."

"There is no fixed formula here. Partnerships makes sense when access to resources is limited and also the promoter wants to concentrate on his fundamental strengths. At the same time, aggressively looking out for external finances have also been sought to manage exclusive growth."

"Initially, interest was in embedded solutions, No business came. So, took up System integration work, enterprise application development work brought good revenue. Had no financial back up. So, growth has to come from revenues."

"We had entered all verticals and were customizing solution as per every customer and getting nowhere. So, we narrowed it down."

"Franchise model was used to grow to all tier 2 and tier 3 cities."
"Our solution is built to serve any assets in an organization. We keep enhancing solution with newer modules specific to industry vertical needs."

"Adding newer solutions that are coming up during the journey. Also, cater to the extended needs of the existing customers."

"Build platforms to simplify the solutions being provided to customers. Look at R and D - moving to virtual reality."

"Apart from regular thinking and planning, Lot of experimentations need to be done to find the right fit."

"In our particular case, two key mistakes were made. One, expenses were committed before revenues and two, product mix was compromised. While profitable business (consulting) kept giving way to low profit (service) business, expenses kept increasing. It was good initially but the management lost focus and resorted to unstructured ways of working."

"We have partnerships with most of the networking product companies. This has helped us to get materials as soon as we need and implement solutions for our customers."

"In the startup phase, concentrate on your core competence. Never ever think that you are or you will remain in monopolistic situation. Try, if you can, to stay one step ahead of your competitors as they will always catch up with you. Also, don't try and be a guerrilla in the initial phases and head on against established players. You rather use chimpanzee approach."

"Narrowed down to focused verticals."

"Evolution of idea gets expanded into other areas. Ex: Amazon - from books to cloud computing platforms. One may find their niche 2-3 years down the lane. Find your area of growth."
"Identify the Market. Define your customer. Understand the right Marketing Channel Fit. Execute... Execute... Execute..."

"Look and develop expertise in emerging technologies."

"In the initial phase, as far as possible, let the expense follow the revenue and not the other way around. Difficult but do-able to a large extent."

"Make long term strategic plans (1 year, 3 year 5 year) and then regularly review the plans against what has been achieved. There needs to be a constant review / feedback mechanism to review what went well and areas of improvement."

“Have a good determination, a good concept and the will to follow through."

"We have built our customer base and now, repeat business /Annual maintenance services keep us going. We serve in Education sector, which we are already a known trusted brand. We have dedicated team on bids/tendering for Government Projects. We have delivered our services successfully. So, develop a good customer base. Partnerships are one way of enabling growth."

**Theme 4: Sub theme 1:: Construct 5:Sub construct 5: Observation 1:**

Word cloud on Services/Solutions strategies that participants had planned and developed during start-up’s initial phase (0-2 years) are shared below. Major pattern found from participants’ data was having “only” one core “Service” or a few “related” or “group” of services during initial years.

![Image](related only service group services)

*Figure 61: Theme 4: Sub theme 1: Construct 5: Sub construct 5 – Services/Solution strategy (Initial years) word count*
Theme 4: Sub theme 1:: Construct 5: Sub construct 5: Observation 2:

Word cloud on Services/Solutions strategies that participants had planned and developed during start-up’s growth phase (2-4 years) are shared below. The word count clearly indicates that “only one service” developed during initial years needs to be enhanced to cater “end to end” service which are “related services” or “group of services” which help in mining the existing customers and help in business growth of the information technology startups.

Figure 62: Theme 4: Sub theme 1: Construct 5: Sub construct 5 – Services/Solution strategy (Growth years) word count

2. Sub theme 2: Management Styles at Information Technology services Startups

Theme 4: Sub theme 2:: Construct 2: Observation 1:

Figure 63: Participants data on Leadership Style at startups
Table 34: Theme 4: Sub theme 2: Construct 2: Leadership Style – Pearson Chi Square Test

The result is significant at p < 0.05 i.e., ”Leadership Style” of the founding member / senior management has homogeneous positive significant factor that is correlated to success of Information Technology services startups.

Other data analyses from data collected

Exit Strategies:
Participants shared their views on their planned exit strategy that they adopted or witnessed as planned in their experiences as below:

![Figure 64: Exit Strategies used by participants in the study](image)
Majority of the participants (63.8% of the participants) in the study didn’t had any exit plan. They intended to grow the business and run the organization for ever while 13% of the participants wanted their business to be acquired by other businesses.

Industry verticals that the startup companies understudy served:

The thirty entities serve various industry sectors depending on their service offerings to the market. There are a few entities which were studied had customers from niche industries. From below data, it can be observed that Education, Retail and IT as industry sectors are served as purely focused verticals.

<table>
<thead>
<tr>
<th>Industry Verticals</th>
<th>Count of Industry verticals served (At the time of Exit / Interview):</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>1</td>
</tr>
<tr>
<td>BFSI</td>
<td>1</td>
</tr>
<tr>
<td>BFSI;FMCG;PHARMA;HEALTHCARE;RETAIL;ECOMMERCE;MANUFACTURING;ENGINEERING;EDUCATION;TRAVEL AND HOSPITALITY;GOVERNMENT;Agnostic to any industry</td>
<td>1</td>
</tr>
<tr>
<td>BFSI;FMCG;RETAIL</td>
<td>1</td>
</tr>
<tr>
<td>BFSI;GOVERNMENT;MEDIA</td>
<td>1</td>
</tr>
<tr>
<td>BFSI;HEALTHCARE;ECOMMERCE</td>
<td>1</td>
</tr>
<tr>
<td>BFSI;HEALTHCARE;RETAIL;ENGINEERING;TRAVEL AND HOSPITALITY</td>
<td>1</td>
</tr>
<tr>
<td>EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>EDUCATION;GOVERNMENT</td>
<td>2</td>
</tr>
<tr>
<td>ENGINEERING</td>
<td>1</td>
</tr>
<tr>
<td>FMCG;PHARMA;HEALTHCARE;RETAIL</td>
<td>1</td>
</tr>
<tr>
<td>GOVERNMENT</td>
<td>1</td>
</tr>
<tr>
<td>HEALTHCARE;ENGINEERING;TRAVEL AND HOSPITALITY;HITECH</td>
<td>1</td>
</tr>
<tr>
<td>HEALTHCARE;RETAIL;ECOMMERCE;TRAVEL AND HOSPITALITY</td>
<td>1</td>
</tr>
<tr>
<td>MANUFACTURING;ENGINEERING;GOVERNMENT</td>
<td>1</td>
</tr>
<tr>
<td>MANUFACTURING;ENGINEERING;MEDIA</td>
<td>1</td>
</tr>
<tr>
<td>PHARMA;HEALTHCARE;MANUFACTURING;EDUCATION</td>
<td>1</td>
</tr>
<tr>
<td>PHARMA;HEALTHCARE;TRAVEL AND HOSPITALITY</td>
<td>1</td>
</tr>
<tr>
<td>RETAIL</td>
<td>2</td>
</tr>
<tr>
<td>RETAIL;ECOMMERCE</td>
<td>2</td>
</tr>
<tr>
<td>RETAIL;ENGINEERING</td>
<td>1</td>
</tr>
<tr>
<td>ENGINEERING;ECOMMERCE</td>
<td>1</td>
</tr>
<tr>
<td>IT</td>
<td>3</td>
</tr>
<tr>
<td>Grand Total</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 35 - Industry verticals that startup entities served
If the current status of the entity and the industry verticals that they served are reviewed, Healthcare, Retail and BFSI rate higher for the success factor of the Information Technology Startups. Serving Ecommerce industry is seen as highest contributing vertical in IT services companies whose current status indicates the failure of business, which has to be explored in future studies.

<table>
<thead>
<tr>
<th>Industry Verticals</th>
<th>Count of Industry Verticals Served by all 30 entities under study</th>
<th>Successfully running / Merged or Aquired</th>
<th>Failed Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFSI</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>FMCG</td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>PHARMA</td>
<td>4</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>HEALTHCARE</td>
<td>8</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>RETAIL</td>
<td>7</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>ECOMMERCE</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>MANUFACTURING</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ENGINEERING</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>EDUCATION</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TRAVEL AND HOSPITALITY</td>
<td>5</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>GOVERNMENT</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Agnostic to any Industry</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MEDIA</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>IT</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HITECH</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Table 36 - Industry verticals served and current status of the startup entity