Role of Passion as a Mediator between Motivational and Individual Traits of Technology Entrepreneurs

Srividy Prathiba C.S

Abstract: Background and Objectives: Technology today plays a major role in devising a creative business idea and implementing the same. The process of translating an idea into business depends on the individual who is able to harness his individual potential and self-motivation to bring about a business venture. This paper aims at devising a structural equation model on the individual factors and motivational factors which can bring about a technological business venture.

Methods: A conceptual framework has been prepared and tested with a structural equation model. The study was conducted with primary data collected from 100 techno entrepreneurs in the city of Chennai and Bangalore using a structured questionnaire.

Results: Exploratory Factor Analysis (EFA) confirmatory factor analysis (CFA) and structural equation modeling has been used to identify the various motivational and individual factors that facilitate individuals becoming entrepreneurs taking up businesses which use technology for its growth. Structural equation modeling was used to test the hypothesis.

Conclusions: The findings highlight the individual and motivational factors as the most substantial development in recent times.

Keywords: Technopreneurs, Entrepreneurs, Technology driven business units, Angel investor, funding options, human capital

I. INTRODUCTION

The crux of technology entrepreneurship has been described as the most substantial development in recent times. The process of technology entrepreneurship is about identifying, producing, and developing opportunities, and to resolve these issues using technology is known as technology entrepreneurship. Technology entrepreneurship focuses on technological opportunities that require technological as well as managerial abilities. High levels of technology entrepreneurship are being witnessed across the globe with the advent of advancements in technology. Thus, technology entrepreneurship is a global and multifaceted phenomenon. Technology entrepreneurship makes use of technology to produce, distribute, and market their products to customers. Thus, it involves a process of bringing together intellectual tech savvy people with the ability to take up risk. Success of technopreneurship firms hinges on effective team work.

Technopreneurs are entrepreneurs who are able to juggle technology to commercialize new products. These businesses are said to have high growth potential and is said to harness major customers. They are said to take up high levels of risk and they do not fear failure rather look at it as an opportunity for growth.

II RATIONALE

Passion is said to have arbitrating effect between Individual traits /motivational aspects and technology entrepreneurship due to the following reasons: Rognvaldursaemundsson (2003) has opined that technology based firms take different roles like, generating new technological ideas or aiding in their diffusion. The study also reveals that passion is the driving force behind such firms. CosminMihaiNacuand SilviaAvasiliță (2014) presents the influence of various social and environmental aspectson technological entrepreneurship. The study further highlights on various resources and govt initiatives play a vital role in entrepreneurial success.

Abetti, P.R (1992). in their article ‘Planning & building infrastructure for technical entreprenurship’ has characterized technology entrepreneurship as a system, policy & as an individuals’ attitude which depends on motivational aspects and individual traits.Alexandrujoa and Marian NĂSTASE (2014) in their article titled ‘Technology entrepreneurship and entrepreneurial strategies’ states that innovation and advancements in technological aspects are considered as the main drivers of entrepreneurship. Thus, there is a need to analyze the ecosystems that affect technology entrepreneurship. Jolly 1997 articulate that, techno-entrepreneurs will have to put up with non-technical activities like managing and sustaining businesses by continuous innovation.

Cardon, Greigore, Stevens, and Patel (2013), recommends that the domains of passion like inventing, and developing provide directions for future research. Katharina Fellnhofe, Lappeenranta 2017 in their article titled, the power of passion in entrepreneurship education pronounces that, Entrepreneurship Education centers to Bosma N, Hessels J, Schutjens V, Van Praag M &Verheul I (2012) pronounces that entrepreneurial role models provide both inspiration and guidance to new entrants in the field of entrepreneurship. Tony Bailetti in his article titled, Technology Entrepreneurship: Overview, Definition & distinctive Aspects (2012) states that study on technology entrepreneurship serves an important function as it is viewed as a vehicle that facilitates prosperity in individuals, firms, regions, and nations. Hence this study becomes inevitable.
Role of Passion as a Mediator between Motivational and Individual Traits of Technology Entrepreneurs

Cooper (1977) lays emphasis on using new technical knowledge. Dorf and Byres (2005) stresses upon identifying technological opportunities which are highly viable, after seeking expert’s opinion, look out for capital resources and finally manage its growth and risk. Manimala 1999 & Petti and Zhang 2011 have analyzed that technology entrepreneurship is still a relatively less explored theme in developing countries like India and China. Thus, this study aims at understanding the factors that motivate entrepreneurs to take up technology based businesses.

Need for the Study
A Report of the RBI presents a different depiction as compared to the past. Many entrepreneurs have turned tech-savvy. Entrepreneurs are getting antagonistic day by day in marketing and rolling out new products. These developments have deep rooted impact on the economy. Thus the challenge before banks is to empower, marshall and channelize the entrepreneurs’ dynamic ventures towards business growth in the process paving way for technology optimization. Therefore, it is imperative that we identify what are the entrepreneurial drivers that motivate an entrepreneur and the mediating effect of passion on technology entrepreneurship. Thus, this research focuses on collecting data from successful entrepreneurs in Bangalore and Chennai taking into account the leveraging effect between individual and motivational factors that provides necessary back up for technology entrepreneurs. It further analysis the mediating effect of passion on technology entrepreneurship.

Research Gaps
On the basis of review of literature, there is scope for research in the domain of technology entrepreneurship in Bangalore and Chennai. Thus the research gaps are:
- To identify the individual traits and motivational aspects of technology entrepreneurship
- The study the mediating effect of passion between individual traits, motivational aspects and technology entrepreneurship
- Lack of integrated framework between the three constructs amidst technology entrepreneurship in Bangalore and Chennai

Objectives
1. To identify the individual traits, motivational aspects and techno entrepreneurial factors among the entrepreneurs operating in Bangalore and Chennai.
2. To develop an adapt scale for individual traits, motivational aspects and factors affecting technology entrepreneurship.
3. To evaluate the impact of passion on technology entrepreneurship
4. To evaluate the validity and reliability for each of the constructs
5. To test the theoretical framework.

Conceptual Model and Hypotheses Development

![Conceptual Framework](image)

Figure 1. Conceptual Framework
The conceptual model of the research is developed based on the literature survey in which two main constructs and their components are assimilated together as shown in the figure 1. Each path between the constructs and the components represents the hypothetical relationship to be verified using structural equation model.

III RESEARCH METHODOLOGY
Primary data was collected for the purpose of the research needs from entrepreneurs in Bangalore and Chennai and secondary data is also used. Bangalore and Chennai has been chosen for the study as both these places are the hub of highly valued and successful startups. The most prominent reason being availability of IT skill in abundance. The startup scene in Bangalore and Chennai has grown by leaps and bounds and they have been a leader in bringing about this transformation.

Research instrument: The survey method of data was implemented to gather the primary data. The structured questionnaire was adopted to accumulate the primary data from the sample of 100 entrepreneurs in Chennai and Bangalore.

Sampling Details: The sample for this study includes 100 technology entrepreneurs in Bangalore and Chennai. Convenience method of sampling was employed for selecting the respondents for the study.

Limitations of the study
The study is not a longitudinal study and is restricted to 100 respondents.

IV. PILOT STUDY
A preliminary investigation is conducted to check the reliability of the statements (Permanent, dependent variables). In Likert’s five point scale. The reliability is measured through Cronbach’s Alpha method to verify the simultaneous variance for all the items regarding factors that affect technology entrepreneurs. At the point of inception the Cronbach alpha revealed are presented in the table below. These values are above the bench mark values of .75 therefore it can be concluded that the statements are very clear for the respondents to express their insight.
the age group of 31-35, followed by 40% in the age group of 36-40, and 18% of respondents in the age group of 41-45 years of age.

**Educational Background:** 35% of the respondents were Postgraduates, 40% of the respondents were professionally qualified and 25% of the respondents were Graduates.

**Gender:** Male accounted for about 85% and female respondents accounted for 15%.

**Place of business:** 40% of the respondents were from Chennai and 60% of the respondents were from Bangalore.

**Factor Analysis** Factor analysis is a tool of multi-variate analysis that is based on the interrelationship between a set of variables. By applying factor analysis, numerous variables are analyzed such that it can be explained in a single factor. (De Groot et al., 1982) states that factor analysis is used to reduce a number of variables into overall groups.

**Individual Trait factors, Motivational factors and Techno entrepreneurial factors.**

Exploratory principal components analysis using a Varimax rotation was used to summarize the items into an underlying set of individual traits, motivational factors, passion and technology entrepreneurship factors. All the factor loadings of 0.5 or above were identified in the factor matrix; (EFA) Exploratory Factor Analysis has been used to identify the various factors. Principal Component Analysis method is used and the following results are obtained:

**Table II: Demographic Details**

| Personal Profile | Respondents Details | No. of Respondents | % of Respondents |
|------------------|---------------------|--------------------|-----------------|
| Age              | 25-30               | 12                 | 12              |
|                  | 31-35               | 30                 | 30              |
|                  | 36-40               | 40                 | 40              |
|                  | 41-50               | 18                 | 18              |
| Total            |                     | 100                | 100             |
| Gender           | Male                | 85                 | 85              |
|                  | Female              | 15                 | 15              |
| Total            |                     | 100                | 100             |
| Educational Qualifications | PG | 35 | 35 |
|                  | UG                  | 25                 | 25              |
|                  | Professional qualified | 40   | 40 |
| Total            |                     | 100                | 100             |
| Place of the Business | Chennai  | 40 | 40 |
|                  | Bangalore          | 60                 | 60              |
| Total            |                     | 100                | 100             |

**Source computed**

Age of the respondents: 12% of the respondents were in the age group of 25 to 30 followed by 30% of respondents in the age group of 31-35, followed by 40% in the age group of 36-40, and 18% of respondents in the age group of 41-45 years of age.

Educational Background: 35% of the respondents were Postgraduates, 40% of the respondents were professionally qualified and 25% of the respondents were Graduates.

Gender: Male accounted for about 85% and female respondents accounted for 15%.

Place of business: 40% of the respondents were from Chennai and 60% of the respondents were from Bangalore.

**Table I - Cronbach Alpha’ Reliability Table**

| Measure                  | No. of statements | Cronbach Alpha | Variance |
|--------------------------|-------------------|---------------|----------|
| Individual factors       | 15                | .839          | 83.9     |
| Motivational Factors     | 10                | .827          | 82.7     |
| Passion Factors          | 6                 | .874          | 87.4     |
| Techno entrepreneurial factors | 12              | .804          | 80.4     |

Statistical Tools: Structural equation modeling (SEM) was used to explore the relationship between the components of individual traits, motivational factors and passion on techno entrepreneurial factors. Three types of analysis for scale development was used namely, EFA, CFA and structural equation modeling was used. Exploratory factor analysis was used to identify the number of factors. In EFA, KMO and Bartlett’s test, rotation component matrix was used for identifying individual factors, motivational factors, passion and techno entrepreneurial constructs.

Confirmatory factor analysis was used to validate the emergent factor. CFA deals with measurement models on the relationship between underlying variable and observed measure. In CFA, measurement model was used as a confirmatory tool for testing the measurement theory. CFA resulted in five factor model for individual factors and three factor model for motivational factors and techno entrepreneurial factors. And lastly, structural equation modeling technique was used a statistical methodology that requires a confirmatory approach (hypothesis testing) to analyze a structural theory. Second order structural equation modeling was used to test the hypothesis. In structural theory second order structural equation modeling was used to test the hypothesis. In SEM, four constructs and thirteen factors were used to run the model.

**V FINDINGS**

The results provide valuable insights into the individual and motivational factors that drive technology entrepreneurs.

**Kaiser-Meyer-Olkin Measure of Adequacy**

| I F   | TEF  | MF   | PF   |
|------|------|------|------|
| .806 | .757 | .793 | .818 |

Bartlett’s Test of Sphericity

| Df  | Chi-Sq  | Sig. |
|-----|---------|------|
| 105 | 566.400 | .000 |

Variance 0.804, 0.757, 0.793 and .818 as in table 1.

Source: Computed

Kaiser H F,1970 ) Meyer – Olkin and Bartlett's Test of Sphericity provides information about the factorability of the data. As a measure of sampling adequacy KMO test was used. The Kaiser – MeyerOlkin Measure of sampling adequacy value is 0.806, 0.757, 0.793 and .818 as in table III and Bartlett's Test of Sphericity with approximate Chi – Square value is 566.400, 335.987, 301.012 and 150.582 respectively. These values are statistically significant at 5% level. Therefore, it can be concluded that the sample size of the research is adequate for the factors and all the variables considered for the research. **Individual trait factors:** It is found that 15 variables pertaining to individual traits are reduced into 5 predominant factors with total variance of 69.376. These factors also possess individual variances, 19.493, 15.536, 14.948, 11.668% and 7.730%. The Eigen values above 1 are noticed for the 5 factors. The variable loadings for each factor are measured using Rotated Component Matrix. The results reveal that individual traits of technology entrepreneurs operating in Chennai and Bangalore is extracted into 5 principal factors. These factors are explained below:
Role of Passion as a Mediator between Motivational and Individual Traits of Technology Entrepreneurs

### Factor Analysis – Individual Factors

| F.no | Variable                                      | Factor loading | Name given to the factor |
|------|----------------------------------------------|----------------|--------------------------|
| F1   | Commitment and values                        | 0.843          | Conviction               |
|      | Persuasion                                   | 0.801          |                          |
|      | Self confidence                              | 0.751          |                          |
|      | Drive and energy                             | 0.734          |                          |
| F2   | Goal setting – monetary achievement          | 0.769          | Vision                   |
|      | Visionary                                    | 0.692          |                          |
|      | Farsighted growth of business                | 0.601          |                          |
| F3   | Knowledge, Skill and ability                 | 0.915          | Competency               |
|      | Ability to handle a group                    | 0.818          |                          |
|      | Devise realistic business strategies         | 0.712          |                          |
|      | Process and strategic orientation            | 0.636          |                          |
| F4   | Ability to take calculated risks             | 0.624          | Risk                     |
|      | Ability to handle unexpected risks           | 0.573          |                          |
| F5   | Networking ability                           | 0.869          | Behaviour                |
|      | Locus of control                             | 0.859          |                          |

Source: Computed

**Confirmatory Factor Analysis - The individual entrepreneurial traits.**

To test the validity of the scales AMOS was used. The data were selected for assumptions of CFA. For the individual traits scale, CFA results revealed 5-factor model. Single headed arrows represent direct dependents like, ability to devise realistic business strategies (.74) and handle unexpected risks (.54), locus of control (.87) and self-confidence (.76) the most prominent individual traits. Double headed arrows reveal that conviction has a significant effect on vision; vision has an effect on competency, competency on behaviour and behavior on risk handling. Thus it can be concluded that individual drivers are conviction, risk, behaviour, vision and competency. The CFA provided a satisfactory fit to the data as indicated in the table V below. All estimated loadings like, GFI, AGFI, CFI, NFI, RMA and RMSEA were significant.

### Table V: Individual Trait factors – Model Fit

| Measure                                      | Threshold |
|----------------------------------------------|-----------|
| Chi-square/df (CMIN/DF)                      | 2.78      |
| P-value for the model                        | .000      |
| Goodness-of-Fit Statistic (GFI)              | .906      |
| Adjusted Goodness-of-Fit Statistic (AGFI)    | .935      |
| Comparative Fit Index (CFI)                  | .901      |
| Normed-Fit Index (NFI)                       | .961      |
| Tucker-Lewis index (TLI)                     | .924      |
| Incremental Fit Index (IFI)                  | .917      |
| Root Mean Square Residual (RMR)              | .501      |
| Root Mean Square Error of Approximation (RMSEA) | .049     |

Source: Computed

**Motivational Factors**

It is found that 12 variables pertaining to motivational factors are reduced into 3 predominant factors with total variance of 56.580%. These factors also possess individual variances, 25.407%, 21.785% and 9.388%. The Eigen values above 1 are noticed for the 3 factors namely support, aspiration and inspiration respectively. The variable loadings for each factor are measured using Rotated Component Matrix and are explained below:

### Table No.VI- Motivational Factors

| F.no | Variable                                      | Factor loading | Name given to the factor |
|------|----------------------------------------------|----------------|--------------------------|
| F1   | Support from family members                  | 0.622          | Support                   |
|      | Support from friends and relatives           | 0.599          |                          |
|      | Support extended by educational institutions – (providing opportunities for exhibiting entrepreneurial skills) | 0.537 |
| F2   | I will have more power to execute what I want to do | 0.897          | Aspiration                |
|      | I will get good recognition and job satisfaction | 0.782          |                          |
|      | I will earn more money using my skill and ability | 0.767          |                          |
|      | I will be giving employment to those in need | 0.756          |                          |
| F3   | Success stories of entrepreneurs inspire me   | 0.760          | Inspiration               |
|      | Successful entrepreneurs inspires me as a Role model | 0.730 |
|      | I don’t have to work under anybody else inspires me | 0.679 |
|      | Flexibility of work timings inspires me       | 0.655          |                          |

Source: Computed

**Confirmatory Factor Analysis – Motivational factors.**

The data were selected for assumptions of CFA. For the motivational factor scale, CFA resulted in three factor model. Single headed arrows represent linear dependents like, providing jobs to others (.69) and success stories inspire technology entrepreneurs (.75). Double headed arrows reveal that inspiration, support systems, and aspirations have an effect on each other.
The Confirmatory Factor Analysis provided a model fit to the data with significant estimated loadings as indicated in the table VII below.

Table VII: Motivational factors – Model Fit

| Measure                                      | Threshold |
|----------------------------------------------|-----------|
| Chi-square/df (CMIN/DF)                      | 1.993     |
| P-value for the model                        | .000      |
| Goodness-of-Fit Statistic (GFI)              | .946      |
| Adjusted Goodness-of-Fit Statistic (AGFI)    | .941      |
| Comparative Fit Index (CFI)                  | .984      |
| Normed-Fit Index (NFI)                       | .961      |
| Tucker-Lewis Index (TLI)                     | .947      |
| Incremental Fit Index (IFI)                  | .958      |
| Root Mean Square Residual (RMR)              | 58        |
| Root Mean Square Error of Approximation (RMSEA) | 51        |

Source : Computed

Passion factors: It is found that 6 variables pertaining to passion are reduced to 2 predominant factors with a total variance of 63.420%. These factors also possess individual variances 45.560% and 17.861%. The Eigen values above 1 are noticed for the 2 factors. The variable loadings for each factor are measured using Rotated Component Matrix. The Rotated Component Matrix shows that 6 passion factors of technology entrepreneurs operating in Chennai and Bangalore are extracted into 2 principal factors. These factors are explained below with the respective variables.

Table No. VIII- Passion Factors

| F.no | Variable                                         | Factor loading | Name given to the factor |
|------|--------------------------------------------------|----------------|--------------------------|
| F1   | I am excited to identify new products and services | .818           | Innovation               |
|      | I am excited to fulfill unmet market requirements | .767           |                          |
|      | I enjoy identifying new uses for existing products | .766           |                          |
| F2   | Working on my own project excites me             | .975           | Nurture                  |
|      | I enjoy nurturing a new venture                   | .725           |                          |
|      | I enjoy being the owner of a business venture     | .592           |                          |

Source : Computed

Confirmaotory Factor Analysis – Passion factors.

To test the validity of the scales AMOS was used. The data were selected for assumptions of CFA. For the individual traits scale, CFA results revealed 2-factor model. Identifying new products (.77) and working for their own project (.72) excites technology entrepreneurs is explained by single headed arrows. Double headed arrows reveal that innovation has an effect on nurturing. Thus it can be concluded that innovation nurtures one’s business venture.

The CFA provided a perfect model fit to the data as indicated in the table IX below with significant estimated loadings.

Table IX Passion factors – Model Fit

| Measure                                      | Threshold |
|----------------------------------------------|-----------|
| Chi-square/df (CMIN/DF)                      | 2.12      |
| P-value for the model                        | .000      |
| Goodness-of-Fit Statistic (GFI)              | .928      |
| Adjusted Goodness-of-Fit Statistic (AGFI)    | .965      |
| Comparative Fit Index (CFI)                  | .910      |
| Normed-Fit Index (NFI)                       | .951      |
| Tucker-Lewis Index (TLI)                     | .996      |
| Incremental Fit Index (IFI)                  | .901      |
| Root Mean Square Residual (RMR)              | .907      |
| Root Mean Square Error of Approximation (RMSEA) | .091      |

Source : Computed

Technology entrepreneurship Factors

It is found that 10 variables pertaining to technology entrepreneurship are reduced into 3 predominant factors with total variance of 62.373. These factors also possess individual variances, 22.199, 21.896% and 18.311%. The Eigen values above 1 are noticed for the 3 factors. The variable loadings for each factor are measured using Rotated Component Matrix. The Rotated Component Matrix shows the 10 variables which promote technology entrepreneurship in Chennai and Bangalore is extracted into 3 principal factors, namely HR resources, FR resources and Government initiatives. These factors are explained below with the respective variables.
Role of Passion as a Mediator between Motivational and Individual Traits of Technology Entrepreneurs

Table No. X- Technology entrepreneurship Factors

| F.no | Variable | Factor loading | Name given to the factor |
|------|----------|----------------|--------------------------|
| F1   | Potential human capital | .726 | HR resources |
|      | Ability to create and exploit technological innovations | .691 | |
|      | Colleges and Universities promoting entrepreneurship | .682 | |
| F2   | Availability of venture capitalists | .786 | FR resources |
|      | Availability of angel investors | .756 | |
|      | Bank/other sources of finance availability/funding options | .655 | |
| F3   | Technology Incubation centers (TBI) | .825 | Government Initiatives |
|      | Technology Innovation Management & Entrepreneurship Information Service (TIME IS) | .670 | |
|      | Incentive schemes | .635 | |
|      | Technopreneur Promotion Programme (TePP) | .541 | |

Source : Computed

Confirmatory Factor Analysis Technology entrepreneurship

To test the validity of the scales AMOS was used. The data were selected for assumptions of CFA. CFA results revealed that the 3-factor model. Availability of potential human capital(.76), venture capitalist(.76) and promotion programs by Government (.68) plays vital role on technology entrepreneurs. Double headed arrows reveal that HR resources have a significant effect on FR resources and FR resources have a significant effect on Government initiatives. The CFA provided a satisfactory fit to the data as indicated in the table IX above. All estimated loadings like, GFI, AGFI, CFI, NFI, RMA and RMSEA were significant.

Figure V- Technology Entrepreneurship

Table XI- Model Fit

| Measure | Threshold |
|---------|-----------|
| Chi-square/df (CMIN/DF) | 2.214 |
| P-value for the model | .003 |
| Goodness-of-Fit Statistic (GFI) | .910 |
| Adjusted Goodness-of-Fit Statistic (AGFI) | .911 |
| Comparative Fit Index (CFI) | .941 |
| Normed-Fit Index (NFI) | .912 |
| Tucker-Lewis index (TLI) | .934 |
| Incremental Fit Index (IFI) | .971 |
| Root Mean Square Residual (RMR) | .054 |
| Root Mean Square Error of Approximation (RMSEA) | .053 |

Source : Computed

Model Fit

H₁ Individual traits and motivational traits are positively related to entrepreneurial passion
H₂ Entrepreneurial passion is positively related to technology entrepreneurship.

Structural equation modeling for ascertaining the impact of individual traits and motivational traits on technology entrepreneurship

The effect of individual traits and motivational traits on passion and passion on technology entrepreneurship is tested using structural equation modeling approach. Structural equation modeling is a proficient method of assessing the measurement error where it can be incorporated commonly in the observed and latent variables. Therefore the connotation among measured variables conviction, vision, competency, risk, behavior, inspiration, aspiration, support and the latent variable namely technology entrepreneurship were assimilated in structural equation modeling Figure VI illustrates the SEM model on the standardized regression coefficients. The current research hypotheses have been delineated on the source of the model fit summary which is outlined below. The research is conducted to find out the effect of individual and motivating factors on passion and technology entrepreneurship, thus the above hypotheses is projected. The study reveals that individual traits along with motivational traits play a vital role on technology entrepreneurship.
Thus, it can be inferred from the above the coefficients of motivational aspects are .71 and that of individual factors are .40 which signifies that every increase in motivational factors and individual trait factors is said to create a passion to take up technology entrepreneurship. The study throws light in understanding the motivational factors which enable entrepreneurs to take up technology entrepreneurship. The research attempts to provide empirical evidence on how aspiration and inspiration along with support systems generate a passion in individuals to take up technology entrepreneurship. The study reveals that success stories of entrepreneurs, aspirations to earn and provide jobs encourage individuals to take up technology entrepreneurship. The study focuses in identifying the motivational aspects that motivate individuals and enable an entrepreneur to take up technology entrepreneurship. The explorative analysis has made an attempt to address the factors that contribute to technology based firms, this exploration has made an attempt to address the factors that motivate individuals and enable an entrepreneur to take up technology initiatives. The study has probed to analyze the basic individual factors and motivational aspects of technology entrepreneurship. The results reveal that passion powerfully plays a mediating role in enhancing technology entrepreneurship. Structural Equation Modeling (SEM) reveals the mediating effect of entrepreneurial passion on technology entrepreneurship. These effects were found to be stronger in case aspiration and inspiration from motivational factors.

### Table XII - Conceptual Model fit

| Measure                              | Threshold |
|-------------------------------------|-----------|
| Chi-square/df (CMIN/DF)             | 2.252     |
| P-value for the model               | .121      |
| Goodness-of-Fit Statistic (GFI)     | .907      |
| Adjusted Goodness-of-Fit Statistic (AGFI) | .919 |
| Comparative Fit Index (CFI)         | .962      |
| Normed-Fit Index (NFI)              | .915      |
| Tucker-Lewis index (TLI)            | .941      |
| Incremental Fit Index (IFI)         | .902      |
| Root Mean Square Residual (RMR)     | .058      |
| Root Mean Square Error of Approximation (RMSEA) | .048 |

Table XII shows the model fit summary of the research model. It is understood that the significance value of p is .121 which is superior to 0.05 which is a perfect fit. The goodness fit and adjusted goodness fit index values are almost equal to .90, which indicates it is an acceptable model fit. The value of comparative fit index is .96, which also represents a worthy fit to the model and the value of RMR and RMSEA is .058 and .048 which specifies that it is also an acceptable model. Thus, the hypotheses, an individual and motivational trait is positively associated with entrepreneurial passion and passion in turn is positively associated with technology entrepreneurship is accepted.

### VI IMPLICATIONS

The study focuses in identifying the motivational aspects and individual traits that help in igniting a spark of passion among individuals to take up technology entrepreneurship. There are many factors that contribute to technology based firms, this exploration has made an attempt to address the factors that motivate individuals and enable an entrepreneur to take up technology initiatives. The study has probed to analyze the basic individual factors and motivational aspects of technology entrepreneurship. The results reveal that passion powerfully plays a mediating role in enhancing technology entrepreneurship. Structural Equation Modeling (SEM) reveals the mediating effect of entrepreneurial passion on technology entrepreneurship. These effects were found to be stronger in case aspiration and inspiration from motivational factors.
In case of individual traits vision competency and risk handling was predominant. The study has made a genuine effort in identifying what is it that makes a successful technology entrepreneur. There are number of ‘I’ factors which appeal to an individual that provokes them to be successful technology entrepreneurs. Thus, the results indicate that inspiration coupled with inquisitiveness and innovation leads to successful technology entrepreneurs.

**VII CONCLUSION**

Technology entrepreneurship has gained importance over years, and today it has been identified as an important factor for economic growth. There have been many research works that has been done in areas like, ascertaining the government initiatives, the economic impact of technology entrepreneurship and the entrepreneurship ecologies that affect technology driven units. As recommended by Cardon, Gregoire, Stevens, and Patel (2013), highlights the realms of passion, innovation and nurturing the business ideas. This study focuses on identifying what the basic factors that motivates an individual and urges him to take up entrepreneurship ventures that are technology driven.

**REFERENCES**

1. Abetti, P.R. (1992) Planning & building infrastructure for technical entrepreneurship, International Journal of Technology management 7(1-2), 129-139
2. Alexandru-roja and Marian NÂȘTASE (2014), ‘Technology entrepreneurship and entrepreneurial strategies’ at the 8th International Management Conference "Management challenges for sustainable development", November 6th-7th, Bucharest, Romania
3. Bosma N, Hessels J, Schutjens V, Van Praag M &Verheul I (2012). Entrepreneurship and Role Models. Journal of Economic Psychology, 33(2), 410-424.
4. Cardon, Gregoire, Stevens, and Patel (2013) Measuring Entrepreneurial Passion: Conceptual Foundations and Scale Validation. Journal of Business Venturing, 28(3), 373-396.
5. Cooper A.C. and Bruno A.V. (1977), "Success among high-technology firms", Business Horizons, Vol. 20, pp. 16-22.
6. CosminMihaiNacuca and Silvia Avasilcai(2014) Technological ecopreneurship: conceptual approaches, Procedia - Social and Behavioral Sciences 124 229 – 235
7. Dorf, R.C.,Byers, T. H. 2005. Technology ventures: From idea to enterprise. Newyork: McGraw-Hill.
8. Jolly. C. (1997). Commercializing New Technologies: Getting from Mind to Market, Boston, Harvard Business School Press
9. Kaiser HF (1974). An Index of Factorial Simplicity. Psychometrika, 39(1), 31-36.
10. Katharina Fellhofer, Lappeenranta 2017 The power of passion in entrepreneurship education: entrepreneurial role models encourage passion, Journal of Entrepreneurship Education, Volume 20, Issue 1, 2017 pg 58-87
11. Manzama, M.1999. Policies and founder characteristics of new technology based firms (NTBFs): a comparison between British and Indian firms. Entrepreneurship Theory at Crossroads India: Wheeler Publishing
12. Rognvaldursaemundsson (2003) entrepreneurship technology and growth process: a study on small and medium sized technology firms. Chalmers University of Technology , Sweden
13. Tony Baletti (2012) Technology Entrepreneurship: Overview, Definition, and Distinctive Aspects Technology Innovation Management Review 5-12.