

**“Entrepreneur’s Management in Aviation Industry: A study of Management  
Strategies applied for a Successful Design & Project Management Consultancy  
(PMC) Services for Airports”**

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**A DISSERTATION REPORT SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR  
MBA (AVIATION MANAGEMENT)**

**OF**

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Signature



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Thanking You

Yours Sincerely

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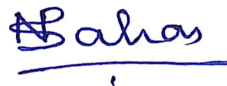
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### Declaration by the Guide

This is to certify that Mr Vikramjitsinh .Narendrasinh. Rajput, a student of MBA (Aviation Management), SAP ID 500070879 of UPES has successfully completed this dissertation report on “Entrepreneur’s Management in Aviation Industry: A study of Management Strategies applied for a Successful Design & Project Management Consultancy (PMC) Services for Airports” under my supervision.

Further, I certify that the work is based on the investigation made, data collected and analysed by him and it has not been submitted in any other University or Institution for award of any degree. In my opinion it is fully adequate, in scope and utility, as a dissertation towards partial fulfilment for the award of degree of MBA (Aviation Management).

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## Executive Summary

In the recent past decades, Airport development in India has shown remarkable growth but is still striving to cater the rapidly increasing demand for Aerodromes. In this Sector, Government has initiated Brown field as well Green field projects. As per IATA, India is set to become the third largest aviation market by 2025, after US & China. In such development, Government welcomes Entrepreneurs bringing in opportunities for New Entrants & motivating the existing Entrepreneurs to perform.

As per a MoCA report, “assuming that India achieves the growth forecast that is being discussed, still the per capita domestic trips for India will be only 0.115 in 2020-21 and 0.266 in 2030-31 from the current level of 0.04 Per capita domestic air trips”. Below is the graph.

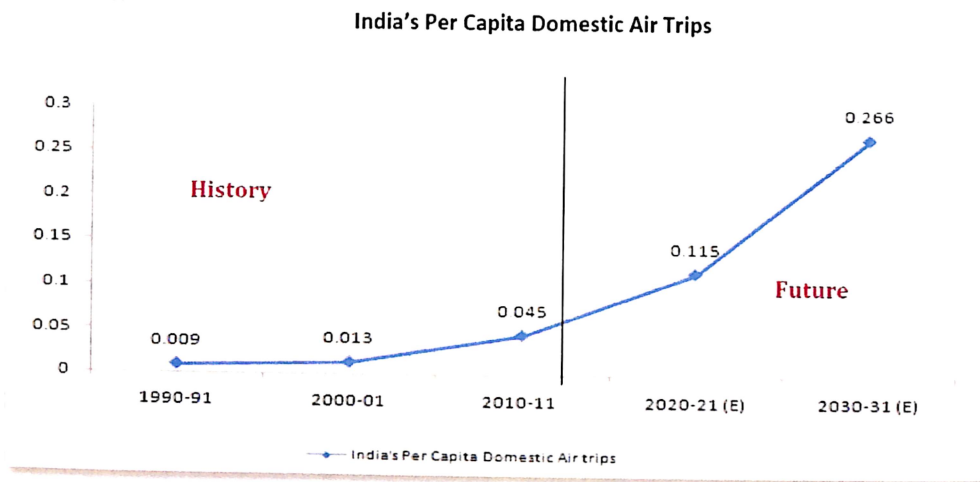


Figure 1: India's per Capita Domestic Air Trips

Among different domains of Aviation, we have selected Entrepreneurs performing in Design & PMC Services particularly for Indian Airports. This dissertation gives an overview of their Management Strategies.

- ✓ This dissertation is the study to limelight & make use of important Management attributes of successful Entrepreneurs.
- ✓ This dissertation also uses some management tools like Delphi technique & Hypothesis tests which will astound on whether was it their Aviation Education/Experience or Natural ability which played major part while selecting & applying the Management traits for the Success they have achieved.
- ✓ Dissertation also focuses on the Opportunities and Threats faced by Entrepreneurs accompanied by SWOT analysis.
- ✓ From various findings in the conclusion, there are factors which will be seen distinguishing them to be Congenital Entrepreneurs possessing comprehensive management capabilities required for healthy survival of their business.

# **Chapter 1 Introduction**

## **1.1 Overview**

Study so far has seen that Aviation is a highly regulated industry wherein Design & PMC Services at Airports requires high level of precision in its work. Entrepreneurs are preferred to have the technical competency to run the business single handedly and take strategic managerial decisions to sustain the competition.

Although the growth in these Entrepreneurship is negligible in proportion to the growth of Aviation sector in India, there is a phenomenal growth in the competency related to Design & PMC Services in the market. There are some factors why entrepreneurs are not finding it attractive enough to venture into this business. These are mainly commercial, motivational, legal and psychological cognitive factors, which influence their competency and sustenance in business.

This research shows that for new entrants there are more influencing factors like, entry barriers, modern skill set, funds, sociopolitical aspect and even their own evolutionary perceptual experience.

Apart from above it is seen that each individual entrepreneur has different skill set and behaves differently in different situation, hence it is difficult to predict any one trend or management trait. Keeping this back of mind this dissertation has emphasized mainly on the investigation on the Entrepreneur's management strategies which kept them going ahead in such business of Aviation sector.

Another common factor seen is the application of technology and traits in modern management. Entrepreneurs should continuously upgrade themselves with new trends and certifications in management. This too contribute towards better competency and performance essential for their sustenance.

## **1.2 Background**

Through this management study in Aviation, we understand that how far the degree of Management and modern trends are useful for the sustenance and growth of Entrepreneur business. It is seen that it also remains a technical passion for most of the Entrepreneurs but on the other hand, this business really is one of the commercial attraction for them.

There are prime factors, which play major role in motivation to Entrepreneurs in this sector of Aviation. But there are also inferior factors which are harmful for their business. The study has identified motivational factors and focuses on what management tools and traits are applied by the Entrepreneurs which have made them achieve the success. How they surmounted their barriers from their lessons learnt reflects from interviews conducted.



Also we realize the magnitude of socio economic factor of such Entrepreneurship contributing for our country. Like Design and PMC Services at Airports there are various other specialized domains in Aviation, but some Entrepreneurs then are trying to make the market oligopolistic because their current barriers in the market are found to be leeching them which is an interesting finding.

### **1.3 Purpose of the Study**

This dissertation was needed to identify application of Management traits with practical experience of Entrepreneurs in the field and also set an approach towards my professional development. This is useful also for budding and upcoming Entrepreneurs. Dissertation also gives an insight towards modern trends in management applied for sustaining and running a successful business in Design & PMC Services at Airports.

Not much literature is found neither the topic is frequent in discussion, but it is very much of interest to the Entrepreneurs of any age and curious to even the corporate professionals. This Research provides a reference to take managerial decision and focus on areas, which need attention for success in this domain of Aviation Industry.

These types of researches can conjoin with post-graduation academic studies, which can give a different angle of thinking towards this business for Airports. This will also help in setting Mission and Vision for any typical practicing firm. Not only Entrepreneurs but Corporate Clients may also change their view towards this business. This domain should no longer be a thankless business of only getting paid but the Design & PMC Service at Airport sector has to upgrade till the culminating point wherein rewards and recognition would also attract relevant personnel to make career in this field of Aviation Industry.

### **Objectives**

- ✓ To recognize Entrepreneur's management strategies for a successful business in Aviation Industry.
- ✓ To identify the challenges faced by the entrepreneurs in sustenance and thereby managerial skill-set required.
- ✓ Knowing what are the opportunities and threats in this business.
- ✓ To determine Rewards and Recognitions or any other motivational factors in this domain.

### **1.4 Research Hypothesis**

A statistical analysis was to be conducted on this subjective topic. Attempt made to convert qualitative data into quantitative and further processed to know the results which then surveyed among experts in relevant Aviation sector, shows that our test was successful and interpretations pertaining to Entrepreneurs management are truly factual was satisfying to us.

## **Chapter 2 Literature Review**

### **2.1 Review Area**

The purpose of this dissertation was to study the Management traits of Entrepreneurs in Aviation. Design & PMC Services for Airport is one of the domain wherein Entrepreneur's business strategy in the recent decade has become exploratory.

Challenges and issues relevant to the subject in the global market are seen different in different territories, due to their socio economic conditions. But the Management facet do not differ and is identified, discussed, analyzed, properly denounced and aimed through this dissertation.

Although Books, Articles and Journals have been read referred relevant to the current study but they are very limited, precisely on Entrepreneur's Management in the Indian Aviation Industry. Hence, more emphasis was given to the practical aspect which is penned with special reference to the Entrepreneur's management experience in Design & PMC Services at Airports. Hence, selection of a perfect Project Guide and his experience had become vital for such a literature.

Another interesting aspect seen was the social responsibility and the contributing factor towards Country's economic development. It was observed that the management attributes studied by Project Management Professionals or the lean Six Sigma management personnel do conjoin to the penned experiences in this dissertation. An Indian Entrepreneur in this Aviation domain can be typically benchmarked from this research.

### **2.2 Factors Critical to success of study**

As this is a rarely researched topic, not much literature or case study is available. The Design & PMC Services Consultancy in Aviation Project is specialized field and requires technical personnel to interact for getting the experience or gaining the insight.

Data collection is one of the critical aspect, as it is acquired from highly technical Entrepreneurs/Experts available. Data should be reliable and hence tested by knowing some details about the personnel interviewed from others including their achievements.

Converting the Qualitative data into Quantitative and processing it for testing the hypothesis is critical to get a valid and reliable result. Hence proper Project Guide is vital for getting the right directions in approaching this topic.

### **2.3 Summary**

Management traits of Entrepreneurs in Aviation especially for the Design & PMC Service Consultant, is to be extracted skillfully by studying their experiences and correlating with principles of Management through taking their interviews.

## **Chapter 3 Research Design, Methodology and Plan**

### **3.1 Data Sources:**

It was revealed that genuine entrepreneurs in this domain are clustered in Mumbai, Pune, Bangalore and Delhi. We have taken a Sample population from Mumbai as it is undergoing with mega Brownfield as well as Greenfield Airport Projects in the recent decade.

Questionnaires and Interviews are the main source for creating the data. Tools and Techniques to process primary data are referred with relevant topics in our MBA in Aviation curriculum books and also Project Management Professionals and Lean Six Sigma academician management materials. Secondary data referred is from Web, Journals and from data sources pertaining to the Entrepreneurship articles. For hypothesis test, Chi square calculator used for getting the probability value (p-value).

Above all, the main source being the Project Guide itself was the key factor which makes the dissertation recognizable.

### **3.2 Research Design:**

Collection of Data and processing it to know the outcomes was initially strategized. Relevant questionnaires which are suitable to ask and can be comfortably answered was envisaged. As Expert opinions do catalyze for better research, hence Delphi method was proposed wherein anonymous experts from the field were also consulted. These experts were the focus group whose viewpoints give different perceptions towards entrepreneurs. Primary data was more emphasized in the analysis to conclude with some new and important interesting findings.

Subsequent to above, various factors were listed and grouped to frame the hypothesis. These factors were selected in such a way to correlate with management principles or theories which were seen applied by these Entrepreneurs, knowingly or unknowingly. To reiterate, Primary data was more emphasized than Secondary data because of getting ensured with better reliability and validity of collected research data. Null hypothesis is framed for each of the variables and tested for its validity.

Typical performing Entrepreneur's SWOT analysis was conducted to conceptualize the entrepreneurship in a better way. Some other methods such as Probability and Impact Matrix for entrepreneur's risk appetites, Communication channel formulated which made them take better decisions in running the business smoothly with clients are also demonstrated.

Questionnaires used were not embarrassing for the entrepreneurs and were more oriented towards their application of management. Some were interviewed on phone but most of them interacted face to face. Some corrections were made by asking in detail questions. So that they can answer the count from 1 to 10 comfortably.

Hence adopting various management methodologies this research arrived at a better rational conclusion.

### **3.3. Survey Questions**

Survey Questions asked were framed such that they are easy and straight to answer. The questions mainly used were;

- What were the Management traits applied by you in this business? How much successful they were in those situations?
- Does applying Management traits leads towards success and thereby help getting Client (Stakeholder) Recognition?
- Do having Skilled Manpower and applying Modern Management trends (Software, etc.) helpful in Success in this PMC Services?
- Do applying Management traits have any control over External factors like Market or Business fluctuations or Statutory laws, taxes, etc.?
- Does applying Management traits improves the Return on Investment or earn profits?
- Is that applying Management trait comes from Passion and Self-interest or is it from gaining knowledge and experience?
- Do you feel that applying Management traits requires any External support like Family or Friend support, Funding, etc.?
- Does applying Management traits can overcome Entry barriers and help in Sustenance in business. What were the barriers you faced?

Survey questions for face-to-face interview and telephonic are shown in Appendix I and II of this dissertation. The survey questions were framed such that all the seven aspects required for the hypothesis were covered and interpreted with respect to the answers and categories. Due to these questions, Entrepreneurs/Experts were able to easily categorize their counts from 1 to 10 against their answers. Accordingly we had our input data ready for the hypothesis.

### **3.4 Interview Procedures**

Group of Entrepreneurs/Experts were focused related to Design and PMC Services in Aviation. Then they were approached using appropriate contacts. Some made their availability on Phone while others had face-to-face interaction session (which was truly helpful). Questions and a short span of time (to get ready with their answers) was given to them in advance for their comfort. Accordingly data was collected and processed.

In the Delphi technique, Experts were consulted on phone and their identity was kept anonymous to others. In the first round similar questions were asked as mentioned above in

section 3.3. Consensus was reached by asking them again the same questions in-depth. Accordingly, data was arranged and tabulated shown chapter 4 for Analysis.

### **3.5 Data Analysis Procedures**

Mumbai region was taken as a sample population for entrepreneurs. Primary data was collected using questionnaires and one to one interviews. Tools and Techniques to process primary data was used referring relevant topics in our MBA in Aviation curriculum and other management books. Dissertation much emphasizes on results from Primary data than Secondary data.

Primary data collected was processed for Descriptive statistics that provides quantitative summary. Data distribution was depicted as a table in this dissertation. Test was performed to find Null or Alternative Hypothesis. Here for each sampling, variables are created and a degree of freedom calculated with respect to low, medium and high frequencies on answers received from entrepreneurs. Validation of hypothesis then tested using Chi-square test. Various correlations presented are based on statistical analysis of the hypothesis.

## Chapter 4 Findings and Analysis

### 4.1. Descriptive Statistics

#### *Testing of Hypothesis*

##### *Chi-Square*

We sought for significant difference between observed distribution of data among the categories and expected distribution based on the Null hypothesis. This was done using Chi Square, degree of freedom and the significance impact at 0.05 level. Chi Square statistic calculator was used for getting the p-value. As done in majority of analyses, we consider an alpha of 0.05 as the cutoff for significance. Hence if the p-value is less than 0.05, we reject the null hypothesis and conclude that a significant difference does exist between the expected and actual result. If the p-value is larger than 0.05, we cannot conclude that a significant difference exists and assume that there is no association between the variables. Accordingly, sampling was conducted for the observations and results elaborated in conclusion section.

- For Precision, answers are categorized in 3 parts. i.e. Low, Moderate and High scores
  - Low score count .i.e. Points given by Entrepreneurs/Experts from is 1 to 3
  - Medium score count .i.e. Points given by Entrepreneurs/Experts from is 4 to 7
  - High score count. i.e. Points given by Entrepreneurs/Experts from is 8 to 10
- Answers are divided in Yes or No with respect to above Categories for more Precise results.

Note: Both the above bifurcations are created in such a way, because different people have different answers and opinions. To bring their qualitative answers/opinion into a precise quantified data such procedure is found very innovative and rational for this dissertation. After the collection of data Chi Square is used further in the hypothesis.

- Degree of Freedom [ DoF ] =  $(c-1) * (r-1)$
- Significance level kept is 0.05
- Chi Square and p-value calculator used: reference –

<https://www.socscistatistics.com/pvalues/chidistribution.aspx>

<https://www.socscistatistics.com/tests/chisquare2/default2.aspx>

Hence we get the result and observe p-value ( $=$ ,  $>$ ,  $<$ ) than 0.05 to conclude whether the Hypothesis is accepted (Null Hypothesis) or rejected (Alternate Hypothesis). Later in Chapter 5 Interpretation of Results Part B these results are tabulated with description.

## 4.2 Correlation/ Regression Analyses

Below is the Correlation analysis for some aspects which are answered by Entrepreneurs/Experts on the subject matter of dissertation. Answers are accordingly categorized by taking the count from 1 to 10 from them. Total there were 18 nos of Entrepreneurs/Experts. Accordingly there answers are categorized.

### 1. Applying Management traits leads towards success and thereby Client (Stakeholder) Recognitions

Table 4.1: Correlation analysis between Applying Management traits and Client Recognitions

	Answer	Category			Row Totals	Column Totals
		Low	Medium	High		
Group1	yes	2	4	6	12	12
	%	16.7%	33.3%	50.0%	100.0%	67%
Group2	no	3	2	1	6	6
	%	50.0%	33.3%	16.7%	100.0%	33%
	Total	5	6	7	18	18
	%	27.8%	33.3%	38.9%	100.0%	100%
	DoF	S-level	Chi <sup>2</sup> -value	p-value		
	2	0.05	2.743	0.254	> 0.05	
Null Hypothesis rejected						

Here Null Hypothesis is rejected and there is a relation between the variables. Applying Management traits may not every time give expected results quickly but are recommended most often thereby getting Client recognitions, which is felt to be important by most of the Entrepreneurs/Experts.

### 2. Having Skilled Manpower and applying Modern Management trends (Software, etc.) is an Management trait helpful in Success in this PMC Services (Consultant business)

Table 4.2: Correlation analysis between having Skilled Manpower and applying Modern Management trends is an Management trait and Success

	Answer	Category			Row Totals	Column Totals
		Low	Medium	High		
Group1	yes	3	4	7	14	14
		21.4%	28.6%	50.0%	100.0%	78%
Group2	no	2	1	1	4	4
		50.0%	25.0%	25.0%	100.0%	22%

Answer	Category			Row Totals	Column Totals
	Low	Medium	High		
Total	5	5	8	18	18
	27.8%	27.8%	44.4%	100.0%	100%
DoF	S-level	Chi <sup>2</sup> -value	p-value		
2	0.05	1.366	0.505	> 0.05	
Null Hypothesis rejected					

Here Null Hypothesis is rejected and there is a significant relation between the variables. Having Skilled Manpower and applying Modern Management trends (like new Software, manpower with enhanced market skill-set, Qualified manpower, etc.) as a Management trait is helpful in achieving Success in this Design and PMC Services. It is highly recommended by most of the Entrepreneurs/Experts.

### 3. Management traits has control over External factors (like Market or Business fluctuations or Statutory laws, taxes, etc.)

Table 4.3: Correlation analysis between Management trait and controlling External factors

	Answer	Category			Row Totals	Column Totals
		Low	Medium	High		
Group1	yes	1	4	2	7	7
		14.3%	57.1%	28.6%	100.0%	39%
Group2	no	9	1	1	11	11
		81.8%	9.1%	9.1%	100.0%	61%
	Total	10	5	3	18	18
		55.6%	27.8%	16.7%	100.0%	100%
DoF	S-level	Chi <sup>2</sup> -value	p-value			
2	0.05	8.042	0.018	> 0.05		
Null Hypothesis accepted						

Here Null Hypothesis is accepted and there is no relation between the variables. Management trait do not have control over External factors (like Market or Business fluctuations or Statutory laws, taxes, etc.). But while applying management traits, External factors are to be reconciled for better results as per most of the Entrepreneurs/Experts.

### 4. Applying Management traits improves the Return on Investment

Table 4.4: Correlation analysis between Management trait and Return on Investment



	Answer	Category			Row Totals	Column Totals
		Low	Medium	High		
Group1	yes	2	4	7	13	13
		15.4%	30.8%	53.8%	100.0%	72%
Group2	no	2	2	1	5	5
		40.0%	40.0%	20.0%	100.0%	28%
	Total	4	6	8	18	18
		22.2%	33.3%	44.4%	100.0%	100%
	DoF	S-level	Chi <sup>2</sup> -value	p-value		
	2	0.05	2.008	0.366	> 0.05	
				Null Hypothesis rejected		

Here Null Hypothesis is rejected and there is a significant relation between the variables. Applying Management traits improves the business and thereby profits. Hence Return on Investment are expected at the earliest as per most of the Entrepreneurs/Experts.

### 5. Applying Management traits comes from Passion and Self-interest

Table 4.5: Correlation analysis between Management trait and Passion

	Answer	Category			Row Totals	Column Totals
		Low	Medium	High		
Group1	yes	2	5	8	15	15
		13.3%	33.3%	53.3%	100.0%	83%
Group2	no	1	1	1	3	3
		33.3%	33.3%	33.3%	100.0%	17%
	Total	3	6	9	18	18
		16.7%	33.3%	50.0%	100.0%	100%
	DoF	S-level	Chi <sup>2</sup> -value	p-value		
	2	0.05	0.8	0.67	> 0.05	
				Null Hypothesis rejected		

Here Null Hypothesis is rejected and there is a relation between the variables. Applying Management comes from Passion and Self-interest. Without Passion and Self-interest, applying Management trait is difficult in its practical application. It has to be natural and sometimes congenital as per most of the Entrepreneurs/Experts.

### 6. Applying Management traits requires any External support to Entrepreneur (like Family or Friend support, Funding, etc.)

Table 4.6: Correlation analysis between Management trait and External Support

	Answer	Category			Row Totals	Column Totals
		Low	Medium	High		
Group1	yes	1	3	2	6	6
		16.7%	50.0%	33.3%	100.0%	33%
Group2	no	10	1	1	12	12
		83.3%	8.3%	8.3%	100.0%	67%
	Total	11	4	3	18	18
		61.1%	22.2%	16.7%	100.0%	100%
	DoF	S-level	Chi <sup>2</sup> -value	p-value		
	2	0.05	7.534	0.023	> 0.05	
Null Hypothesis accepted						

Here Null Hypothesis is accepted and there is no relation between the variables. Applying Management trait do not require any External support to Entrepreneur (like Family or Friend support, Funding, etc). Some think that it is required for gaining some experience from others, but since the circumstances are different in different situation most of the Entrepreneurs/Experts do not necessarily relate these variables.

### 7. Applying Management traits can overcome Entry barriers and help in Sustenance in business

Table 4.7: Correlation analysis between Management trait and Sustenance

	Answer	Category			Row Totals	Column Totals
		Low	Medium	High		
Group1	yes	2	5	7	14	14
		14.3%	35.7%	50.0%	100.0%	78%
Group2	no	2	1	1	4	4
		50.0%	25.0%	25.0%	100.0%	22%
	Total	4	6	8	18	18
		22.2%	33.3%	44.4%	100.0%	100%
	DoF	S-level	Chi <sup>2</sup> -value	p-value		
	2	0.05	2.33	0.312	> 0.05	
Null Hypothesis rejected						

Here Null Hypothesis is rejected and there is a relation between the variables. Applying Management traits can overcome Entry barriers and help in Sustenance in business. The principles of Management always guide the Entrepreneur towards maintaining their vision. It helps in against any reason that becomes an Entry barrier for them. Hence, such a conjunction along-with their experience sets most of the Entrepreneurs/Experts to prefer application of management in their best possible way.

## **Chapter 5 Interpretation of Results**

### **5.1 Interpretation of Results**

It was seen that every Entrepreneur had faced several challenges in establishing the business. Seven common challenges are elaborated and appraised among the selected 24 Entrepreneurs/Experts interviewed and further studied using Delphi Technique.

- 1) **Mind setting up and a Vision:** The foremost challenge faced by the entrepreneurs was making up their mind. This was a challenging task because whether or not, it comes from own passion or family/friend background or even from Horoscope as they said, to maintain the state of mind is about loving your decision as an “Entrepreneur” against any consequence that you face in the present or future. To have better understanding one of the Entrepreneur practicing Six Sigma advises for DMAIC theory that Define and identify the problem, checkout for opportunity, setup a Methodology, Analyze, Implement and try have Control on it.

This is also useful in building a Vision. Most of them have opinion that no matter your Vision statement has been derived from a momentary idea or a deep thought, whenever you think on it you may like to change it but it is always better to refine it, wherein you get enhanced results. Also it is found useful in clarifying your subordinates and others.

Hence following with a suitable Vision statement is one of the Management traits which all of them agreed.

- 2) **Funds:** Six out of Eight Entrepreneurs do had challenge convincing their Investors whether or not they are from their own family members. They didn't had to start with huge amount of capital investment but the task was challenging when it came to establish and take the business to a higher level. Signing new high-end Contracts and maintaining the market trends/standards require funds. Hence automatically all the associated Risk factors were analyzed. Risk matrix was tabulated (in their respective formats) and after series of meetings and discussions with the concerns, financial decision was taken. This one of the Risk Management traits all of them agreed, had followed and found later to be successful.
- 3) **Team Building:** All the Entrepreneurs agreed that proper Personnel Management is the fuel in accelerating their business. Selection of Right personnel on job was not that challenging but grouping experts and make them work together was difficult. Following the trend of forming, storming, norming, and performing with such group of people under these Entrepreneur helped lot in successfully achieving client

assigned targets. Although not all these Entrepreneurs are Management graduates but such trends when spoken, then all of them agreed to similar actions implemented by them.

- 4) **Selecting Clients:** All the Entrepreneurs were serious with identifying and managing their stakeholders. For all most important stakeholder was their Client. Due to the limitation of such business in Aviation sector, getting a ideal Client was challenging for them. Client selection is of vital importance in Design and PMC Services because at any time required Client can deenergize or reenergize your business. Hence Stakeholder Management is essential and agreed by all of them.
- 5) **Competency:** Entrepreneurs are of opinion that if you are not having or afford high professionals then it is to better go with the trait of Human resource management of training the existing subordinates and developing the competency. This also helps in overcoming another challenge of retaining the trusted personnel and enhancing them individually to further strengthen the relationship. Best example was the training given in high-end software like Revit and BIM Modelling required for the modern Design and PMC Services to Client. This is used in design and construction for Terminal as well Airside facilities. This has given them very positive results in the form of free long working hours and even weekend calls to achieve their respective deadlines.
- 6) **Coping unknown Risk:** Entrepreneurs speak out that mostly external factors not in our control are more challenging and to be faced inevitably. Any unpaid bills, taxation, resignations or even at times downfall in market shares, come in front and stand as a challenge wherein we have to divert ourselves to make the most suitable decision which we do not know is right or wrong at that period of time. All these issues were common but one example also was where one of the most technical senior trusted person had a health issue and was not able to come for months. Entrepreneur tells how he managed this including dealing with the health Insurance company and on the other hand managing client deadlines. Hence for such contingencies, Risk Management has to be followed was expressed by all these Entrepreneurs.
- 7) **Market trend and changes:** Entrepreneurs are of opinion that they learnt some Forecasting techniques in Aviation Management to face the challenge of any variance in the market trend or other changes. This was needed particularly for signing new Contracts or take new major decision. According to them new assignments, not only come as opportunities but also may land you with threats. Better Forecasting

techniques like Qualitative approach in market research, Market share analysis and Simulation conducted through their consultant, time series economic modeling trends applied in Aviation Management supported them in the decisions they took and were safe at large. E.g. Decisions looking at - Increasing investments in inflation, Client billing trend i.e. upon certain stages only the bills will be paid, unfavorable Contractual clauses, etc. were cautiously taken by them.

- 8) Other Typical Challenges faced by Entrepreneurs: For new Entrants, typical challenges which they faced were, Difficulty in getting Permissions /Approvals, Office Infrastructure and setup, Capital funding, Lack of motivation, Proper manpower, Unwanted Expenses, Sudden burden of work due to client's urgency, Contract Pricing, Limited market and Existing competitors.

## 5.2 Comparison of Results with Assumptions (Hypothesis)

### Part A: Comparison of Results

Table 5.1: Interpretations of the results we got from the Analysis in section 4.

Sr.No.	Null Hypotheses	Alternate Hypotheses
1	Applying Management traits leads towards success and thereby Client (Stakeholder) Recognitions	
	Actually, do not play major role in motivation or enhancing the business. <b>- IS REJECTED</b>	Play major role in not only motivation but also in enhancing the business. <b>- IS ACCEPTED</b>
2	Having Skilled Manpower and applying Modern Management trends is an Management trait helpful in Success in this PMC Services	
	Increases Competency but has risk of Investment. <b>- IS REJECTED</b>	Increases Competency of the firm which is needed for new Contracts. <b>- IS ACCEPTED</b>
3	Management traits has control over External factors	
	External Factors cannot be controlled but management traits always found helpful to sustain the impacts. <b>- IS ACCEPTED</b>	Management traits has control over External factors. <b>- IS REJECTED</b>

Sr.No.	Null Hypotheses	Alternate Hypotheses
4	Applying Management traits improves the Return on Investment(RoI)	
	Management traits nothing to do with RoI. <b>- IS REJECTED</b>	More the profits, earlier is the RoI. <b>- IS ACCEPTED</b>
5	Applying Management traits comes from Passion and Self-interest	
	Rather than Passion, Business oriented mindset is helpful. Family support not necessary factor nor motivating. <b>- IS REJECTED</b>	Passion as Consultant is helpful for business and is self-satisfying. Family support turns up to be unknowingly essential and motivating. <b>- IS ACCEPTED</b>
6	Applying Management traits requires any External support	
	Others experience remains as lesson learnt but cannot be applied for different situations. <b>- IS ACCEPTED</b>	Others experience can be applied (same management traits) in different situations. <b>- IS REJECTED</b>
7	Applying Management traits can overcome Entry barriers and help in Sustenance	
	Management traits not much useful for new Entrepreneurs. Business sustains the impact as this is more technically oriented specialized business. <b>- IS REJECTED</b>	It helps in maintaining their vision and confidence so that they can overcome the barriers and sustain the competition. <b>- IS ACCEPTED</b>

### Part B: Assumptions

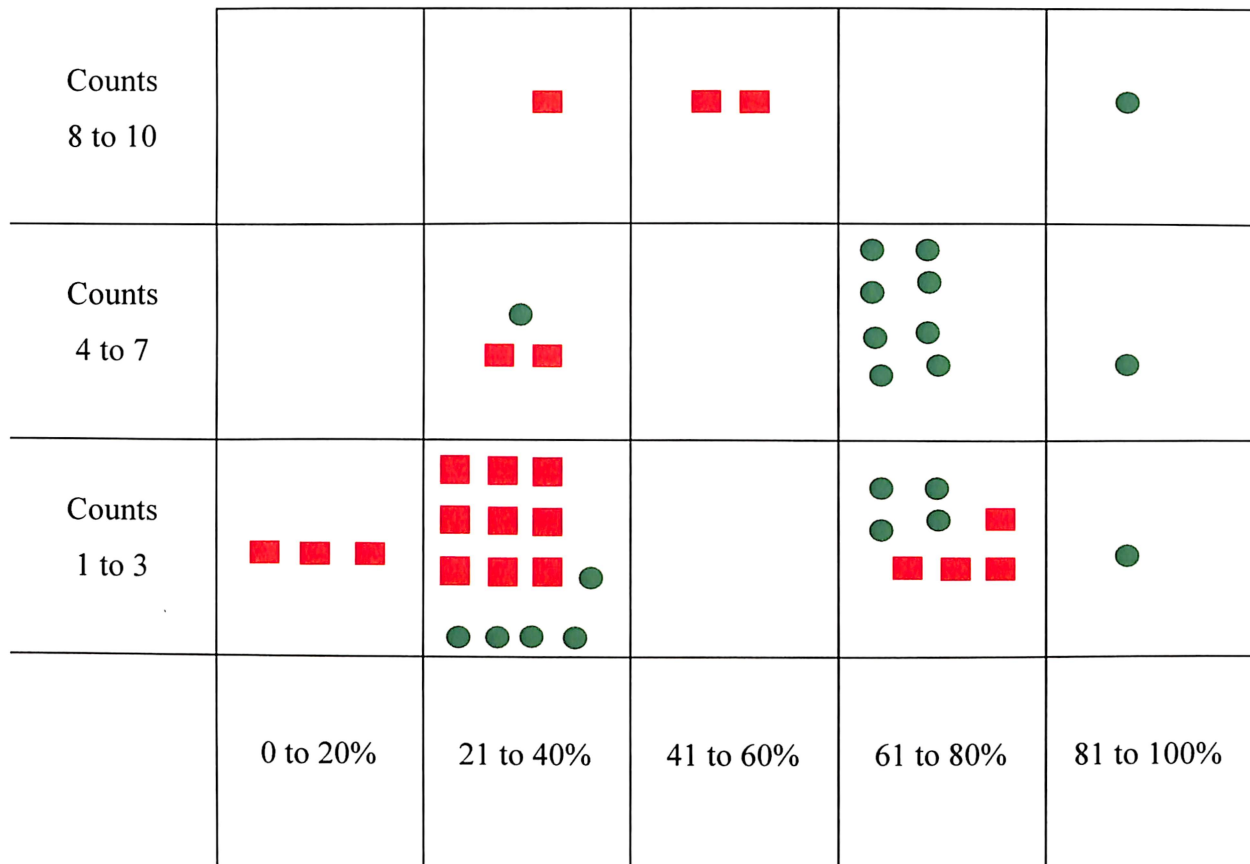
- Data shared by Entrepreneurs /Experts was true based on their achievements. Though after testing the hypothesis the same came out to be reliable.
- The Aviation Entrepreneurs /Expert Consultants in other Metro Cities like in Mumbai can have the similar practical experience in the same domain.
- Entrepreneurs in other country may face similar challenges but the management traits used by them shall be somewhat similar to that used by Indian Entrepreneurs.

**Part C:** Some important observations were concluded in the form of **SWOT** (Strength, Weakness, Opportunity and Threat) Analysis:

1. Enhancing business by applying management traits including application of skilled manpower and modern management techniques is found to be very useful. This can create **OPPORTUNITY** in the present market. Across the Airport Projects for Design and PMC Services, such management practices are highly recommended by all our Experts for the new as well established Entrepreneurs.
2. Design and PMC Services is a high end specialized job, requires skilled manpower and modern techniques. Hence there is a **THREAT** of not getting upgraded with time and market trends.
3. Managing the business with limited investment at times becomes a risk and turns out to be a **WEAKNESS**. Hence not always the Entrepreneur should have a virtue of cost cutting or economic approach in business.
4. Entrepreneurs find Management traits as their **STRENGTH** because they then very often get the expected positive results like Client appreciations, Employee support and confidence, increase in profits, sustaining the competition, overcoming market changes and trends and coping with external factors.

## Chapter 6 Conclusion and Scope for Future

Before concluding we liked to test the Reliability of our interpreted Results. For the **Results to be Reliable** following graphical representation was made from the hypothesis conducted in above section 4.2.



- Null Hypothesis: Majority Observed less than 35 to 40%
- Alternative Hypothesis: Majority observed more than 60 to 80%

Figure 6.1: Graphical Interpretation for Reliability of Data collected for hypothesis

In above figure, Analysis show that the Hypothesis made from observations using interview questionnaires of Entrepreneurs/Experts has more than 60 to 80% of Strength thereby rejecting the Null hypothesis. It also show that the hypothesis is tested and is valid and reliable. In addition, it matches with the interpretations tabled in Section 5.2 Part A.

**Objectives** achieved are summarized:

Entrepreneur's management strategies applied for a successful business were recognized particularly in section 5.1. Thereby Challenges faced by the Entrepreneurs and managerial



skill-set required were identified. Now it can be concluded that though the Entrepreneurs may not be having MBA Degree, but the skill set and traits applied by them were very much same to our Management principles. Principles like having skilled and suitable manpower was practicing Human resources, Risk appetites were determined practicing Risk management, Balancing funds was Financial management and so on as elaborated earlier. Opportunities and Threats in this business is already explored in section 5.2 Part C. As per Entrepreneurs if they enhance their business in one way or the other then Opportunities get created but there are also threats/risks which they analyze based on their experience before taking any new important decision. Once they achieve success from that decision then itself it becomes a motivating factor for them because it is followed by Client and others recognitions as well.

### **Scope for Future work**

- There is much scope in future to explore for Doctoral thesis.
- This study can be elaborated with more number of Experts in the field
- The innovative graphical representation used in section 6 is interesting to test the reliability of results. Similar innovative ideas and analysis can be created to check the validity and reliability.
- Sample size can be increased by collecting Data from more Airports in the Country.
- Foreign Airports can also be tried for testing the hypothesis.

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## **Appendix - I**

### **Research Questionnaire for Face-to-Face Interviews**

1. Personal Details and Achievements (are noted)
2. Business Profile (note)
3. When and what was the Motivating factor that led the decision to be an Entrepreneur?
4. Other Passions and Family Background (noted for information only)
5. Opinion regarding Salaried job over Entrepreneurship (noted for information only)
6. What were the Management traits applied by you in this business? How much successful they were in those situations?
7. Does applying Management traits leads towards success and thereby help getting Client (Stakeholder) Recognition?
8. Do having skilled manpower strengthen the firm or are at times a burden for the firm?
9. Does applying Modern Management trends (Software, etc.) helpful in this Design and PMC Services?
10. How much percentage of business profits have been increased after applying the management traits?
11. Do you take External support like family or friend or a qualified management professional in business? How do you collaborate with others at work?
12. Does applying Management traits overcome Entry barriers? What were the barriers you faced?

Questions are answered in Yes or No at first and then are recognized in low, moderate and high categorization (questions from Sr.No. 5 to 12) i.e. giving a count of 1 to 10. For E.g. Answers felt very sure and confident should be categorized as highly preferred and will be with a count from 8 to 10. Accordingly medium from 4 to 7. Low from 1 to 3 respectively.

## **Appendix - II**

### **Research Questionnaire for Telephonic Interviews**

1. Introduction (Giving contact reference)
2. When and what was the Motivating factor that led the decision to be an Entrepreneur?
3. Family business or Self-driven Enterprise (noted for information only)
4. What were the Management traits applied by you in this business? How much successful they were in those situations?
5. Does applying Management traits leads towards success and thereby help getting Client (Stakeholder) Recognition?
6. Do having skilled manpower strengthen the firm or are at times a burden for the firm?
7. Does applying Modern Management trends (Software, etc.) helpful in this Design and PMC Services?
8. Do you take External support like family or friend or a qualified management professional in business? How do you collaborate with others at work?
9. Does applying Management traits overcome Entry barriers? What were the barriers you faced?

Questions are answered in Yes or No at first and then are recognized in low, moderate and high categorization (questions from Sr.No. 4 to 9) i.e. giving a count of 1 to 10. For E.g. Answers felt very sure and confident should be categorized as highly preferred and will be with a count from 8 to 10. Accordingly medium from 4 to 7. Low from 1 to 3 respectively.

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