

Entrepreneurship
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Start up Case Studies Part 1

Hi Friends, Welcome to the NPTEL course on Entrepreneurship, in this session we will consider several Start up Case Studies which through further light on the way entrepreneurship develops and become successful. As we have aware during the last several sessions, we have considered multiple concepts relating to entrepreneurship and start ups. We have also viewed in several real life examples.

To either reinforce those concepts or to draw additional concepts from those case studies. We have considered global unicorns, we have considered Indian unicorns, we have considered potential unicorns in this process. We also considered and discussed why, start ups succeed and why they are do not. Based on again real life examples, while that way we have discussed several case studies which have significant impact on the development of theory and practice of entrepreneurship.

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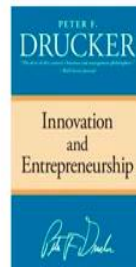
Peter Drucker states that entrepreneurship is neither "magical" nor "mysterious." In his opinion, entrepreneurship is a discipline and, like any discipline, it can be learned.

Kuratko (2016) adds "like all disciplines, entrepreneurship has models, processes and case studies."

Drucker, P.F. (1985). *Innovation and Entrepreneurship*. New York: Harper and Row Publishers.

Kuratko, D.F. (2016). *Entrepreneurship: Theory, Process and Practice*. Cengage Learning, 10th ed.

This module presents 12 case studies of start-ups that were established by professionals or graduates, and developed by them on the path of success, overcoming vicissitudes of entrepreneurial journey. In each case, certain points of learning are summarised.



In this module, we are going to concentrate on 12 case studies of companies, which have been founded by people who are known to me. Those individuals were either students or a professional employees of companies. Of course within the 12, I haven't named one company by name but, I structured it as a hypothetical food processing company. So, let see what these case studies teach us.

Now, why should we study case studies as part of entrepreneurship. We have discussed that entrepreneurship is an extremely challenging aspect of industrial development. We also considered the multiple viewpoints that indicate that entrepreneurs are a rare species. If that is so, if entrepreneurship is something which is driven by a personality trait of an individual, is it appropriate to look at entrepreneurship through case study filter.

The answer to that lies in these 2 quotations, the first is by Peter Drucker they noted management guru who says that, “entrepreneurship is neither magical nor mysterious” in his opinion entrepreneurship is a discipline like any other managerial discipline therefore, it can be learned.

Kuratko, who has authored several works on entrepreneurship ads, like all disciplines entrepreneurship has models, processes and case studies. So, it is very appropriate therefore, that we also look at certain case studies and see how, people develop their entrepreneurial ventures from ground 0.

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Case Studies of Twelve Entrepreneurial Endeavours

The case studies are based on my personal knowledge of the accomplishments of the start-up founders and/or professional CEOs in each case.



The firms cover a wide range of settings - from pharmaceutical to engineering industries, and from educational to culinary services - reflecting multiple innovative business models that are feasible.

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This module presents 12 case studies of Startups that was established by either professionals or students and developed by them on path of success and sustainability. In each case the entrepreneurs overcame the vicissitudes of entrepreneurial journey. Again in each case, we have certain points of learning, which I have summarized as key takeaways.

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What are these 12 Entrepreneurial Endeavors, the Ricon Pharma, ingenus combination is one entrepreneur venture, Groz is another NATSOL is another, Resource bridge, Conzumex, iClean, Myntra, Chennai Business School, Puliyogare travels, Notionpress.com, and the hypothetical food products venture, apart from, Om wellness and healing center. These firms cover a range of settings from pharmaceutical to engineering and also from manufacturing to retail again from educational to culinary services.

Therefore, they reflect multiple industrial settings and they also lead as to multiple innovative startup models that could be considered in each of these industrial settings. To clarify further the industrial settings of 12 entrepreneurial ventures are as follows, the RiconPharma is a science based pharmaceutical start up, Groz is an entrepreneurial firm dedicated to the engineering industry.

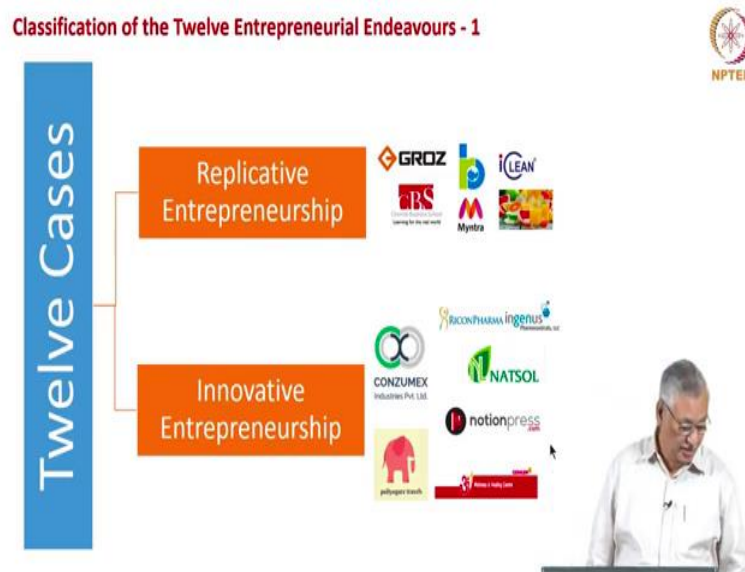
NATSOL is again another science based firm but, in the nutraceutical space, Resource Bridge is a human resource service start up. CONZUMEX industries is what the new technology movement, the new start up movement, is a technology driven, smart wearable start up, iClean is an import substituting engineering start up, Myntra is already established which has grown to a particular level, it was a subsidiary of a Flipkart and continuous to be. This reflects a model of ecommerce transformation under the professional CEO.

We discussed in one of modules beyond founders and founder families this reflect certain of the learning's relevant to that aspect. Chennai Business School is an educational start up

again, a very unique venture, Puliyogare travels is a social entrepreneurial enterprise which builds a community of a likeminded people again an interesting and offbeat venture.

Notion press is a self publishing start-up, it is a leading start-up in the self publishing arena. Om wellness and healing center is a wellness startup with a social purpose and finally the hypothetical food products startup which teaches us a generic model of a establishing a startup in an emulative fashion.

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It is also interesting that these 12 cases reflect the various entrepreneurial classifications we have discussed. We discussed that entrepreneurship could be replicative or innovative. When we say replicative a business model which the startup follows, is already available by and large in the industry. When we say innovative the business model is not available in the industry and has been developed for the first time by the entrepreneur.

Again, these terms are relative the innovative model may not be available in India but, could be available elsewhere, but when we draw the overall boundaries for entrepreneurship development with a national boundary. We can pretty much see how these companies fall under replicative entrepreneurship or innovative entrepreneurship.

So, Groz which looks at the engineering tools, Chennai Business School, Resource Bridge, Myntra, iClean, food products company they reflect replicative entrepreneurship. Whereas innovative entrepreneurship exist in CONZUMEX industries private limited, trying to

discover something new, trying to invent something for the first time in the Smart Wearable's category in India.

Similarly, RiconPharma, Ingenus trying to develop novel formulations, NATSOL trying to develop novel plant based ingredients for nutraceutical and wellness industries, Notion press first self-publishing venture of the kind, and of the scale. Puliogare travels in the culinary service area and Om wellness and healing center again patient cure in a completely different manner.

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Interestingly these 12 cases also fulfill certain other classifications we discussed, we discussed that entrepreneurship could be opportunity driven, that is peoples see an opportunity in the market place therefore, they are setup the startup ventures. Entrepreneurship could also be driven by necessity this shear necessity on the part of the entrepreneurial of finding something very useful to do or the necessity for the customers to find something very interesting immediately.

We also said, that employees themselves could be on the entrepreneurship path way even when they are employed in a particular organization and entrepreneurial ventures need not exactly be social in the true sense of the term but, they could also fulfill social purpose. So, these categories again are fulfilled by these 12 case studies. The engineering tool venture, the fashion venture, the human resources venture, the wellness ingredients venture, smart wearables venture and the hypothetical food products venture. These are based on the opportunities that exist in the market place.

The Om wellness and healing center was based on the necessity for the promoter to have an avocation which is a useful and helpful for himself as well as for the society. Notionpress.com similarly again was burnout of the necessity to do something to meet the publishing needs. To start with theirs own, there were 3 ventures which was set up by employees, when there was still under employment.

They plan for it, they execute them partially and then they moved on. Social entrepreneurship the community building effort of Puliogare travels that falls under social entrepreneurship in a sense. Again these 4 ventures classifications again these 4 venture classifications could be replicative or innovative entrepreneurship. So, this is therefore an interesting mosaic of 6 types of entrepreneurship which we have discussed all through the course and you will find that there are the companies which reflect these types of classifications.

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RiconPharma LLC: Formulating Entrepreneurial Discovery

RiconPharma was founded by Dr Praveen Reddy, Billa who worked as the head of Formulations R&D in Orchid Pharma, itself a differentiated first generation enterprise. Key facts are as below.

- Praveen was a leader of exceptional scientific creativity and methodical management, with a firm grip on all types of formulations development and analytical development.
- Praveen and co-founders worked on a start-up idea for six months, developed an operational plan, roped in investors, and established Ricon Pharma LLC in New Jersey in October 2007.
- The key pivot for their strategy was Ricon Pharma India Pvt Ltd (Ricon India) which was set up as a wholly owned subsidiary in 2008, directly managed by Praveen once he left Orchid in that year.
- By developing multiple formulations in different dosage forms in Ricon India (except capital-intensive injectables), and licensing them to marketing partners in the US, Ricon got off to a quick start.

Heading the start-up, Praveen could practise lean development and achieve faster go-to-market. He attributes his success, in career or as a start-up founder, to his ability to assemble a team of competent scientists and train them to target greater accomplishments.

NPTel

(Video inset of Dr. B. Praveen Reddy speaking)

So, let us first focus on RiconPharma, RiconPharma LLC was set up by Dr B Praveen Reddy whom I knew very well, as a leading pharmaceutical scientist in Orchid Pharma when he was heading our formulations division. Orchid Pharma itself was a first generation enterprise therefore, there was that entrepreneurial air in the company.

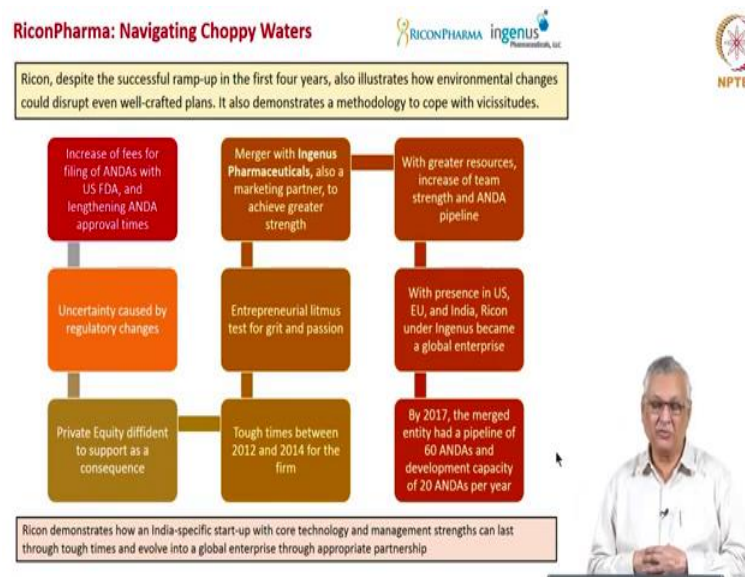
He was a leader of exceptional caliber; he knew different kinds of formulations and he was also a great organization builder and team manager. Apparently, he felt that his capabilities extend far beyond what he could do for a single company. And potentially he could serve the larger pharmaceutical industry in a broader fashion.

Therefore, he teamed up with certain co-founders and even as he was employed in the company, started working on this idea and created along with his co-promoters, Ricon Pharma LLC, New Jersey in October 2007. But, the core of this venture was Ricon Pharma India. Because, that company would have the ability to bring in the Indian frugal advantage to development of formulations.

And it was managed by Praveen once he left Orchid that year. By developing multiple dosage forms or multiple formulations, even different types dosage forms, very quickly RiconPharma India could establish a critical mass, and some of them could be marketed to other marketing partners, and a quick start for the company could be achieved.

Heading this company Praveen practiced rapid lean development, he achieved faster go to market and also learned to combine the best of exploratory research with the best of conclusive research and he had an ability to assemble a team of competent scientist at short notice and train them to target greater accomplishments. So, that was base with which the company was successful.

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However, RiconPharma also reflects that, even well-crafted entrepreneurial ventures could enter choppy water. As I said the key assumption of RiconPharma was that, there was this Indian formulation development advantage and there was the huge billion dollar opportunities that exist in the U.S market for the abbreviated new drug applications called in short ANDA by Indian pharmaceutical companies and which could be manufactured either in India or in other countries.

So, despite the rapid and successful ramp up in the first 4 years, there was environmental challenges which were impacting RiconPharma in the past the US FDA was not charging any significant fees for approval of ANDAs and for inspection of the facilities, which turned out those ANDAs however the backlog of a ANDAs grew to such an extent because of the low budget allocations for US FDA for generics evaluation that US FDA and the US government thought of a different model.

The model was on getting extra fees, steep increases in fees from ANDA submissions as well as from facility programs. So, as a result during the period 2012 to 2014 on one hand there was a huge backlog of ANDAs which had there on lengthening queue times. There was also this additional burden of having a higher fees, for filing of ANDAs and also for posting through the entire approval process.

Therefore, there was uncertainty caused by the regulatory changes so, whatever the business plan that was made or the business model that was the basis for the RiconPharma venture was played by some kind uncertainty. Which meant that private equity was a little diffident to support the venture.

The company saw tough times between 2012 and 2014 and that was also the time when the founders as well as the team phased the entrepreneurial litmus test for grit and passion. At that point of time the company had few strategic options but, they did bite the bullet and decided to take the acquisition help from a larger company Ingenus pharmaceuticals which also happen to be marketing partner so, that the firm could achieve greater strength.

So, with greater resources the company could achieve an increase of team strength as also the ANDA pipeline. The company also became a more global enterprise with presence in US, EU and India. Therefore, from an India and New Jersey specific company Ricon become a much more US, Europe, India spread out company. By 2017 the merged entity had a pipeline of 60 ANDAs, I believe it has increased to over 80 ANDAs now. And the development capacity was significant 20 ANDAs per year.

So, this example tells us how an India specific start up with core technology and management as the key competencies could last through tough times and evolve into a global enterprise through appropriate partnership. And the appropriate partnership was made when the company had the early critical mass to demonstrate its capability. And assure the partner that yes here is a vehicle that could deliver on the goals in spite of the changing landscape.

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RiconPharma's Collaborative Strategy

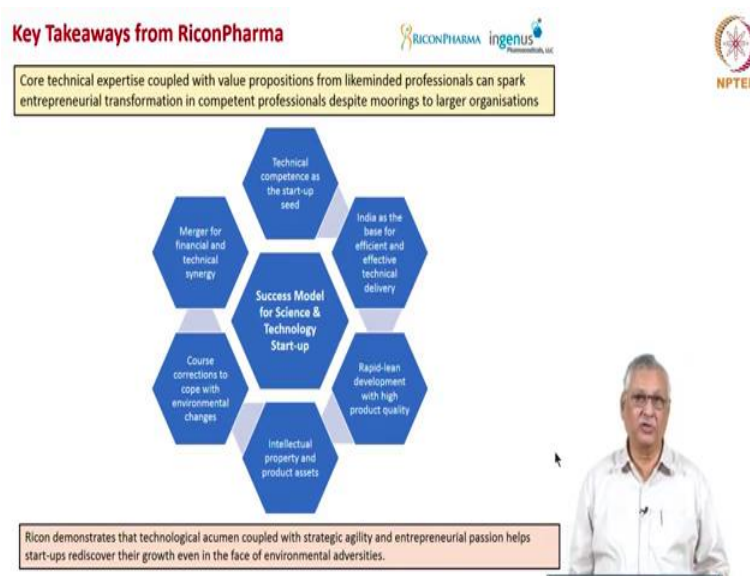


So, when you look at the model, the model you can say has been of 4 stage model, 1 there is this India competitive advantage which endures even now which can help lean development of products, pharmaceutical products out of India. A critical mass of ANDA portfolio in multiple dosage forms that is the India competitive advantage which is demonstrated.

The second phase comprises survival in external turbulence, headwinds are inescapable, search for partners and survival and growth also become imperatives and this is the phase when the entrepreneurial litmus test of grit and passion takes place. The third phase is one of corporate resurgence when the companies merge their strengths; achieve enhanced operational and financial strength, a larger team and the bigger portfolio of ANDAs.

This also provides an access to manufacturing footprint as it offered in the case of Ingenus Ricon merger. Ultimately the final phase is one of a global competitive advantage which has an optimized global footprint both for development and manufacturing, and wider therapeutic portfolio and complex generics and scheduled drugs. And the ability to make even injectables as required particularly for areas such as oncology.

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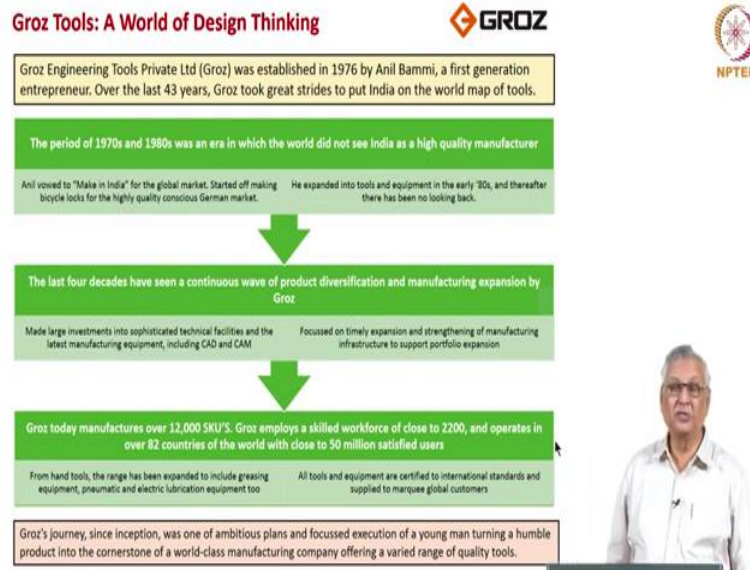
So, in terms of the key takeaways the success model for science and technology start up could be discussed and presented in this manner. One, technical competencies the startup see, without technical competence there is no starting point. But, this model emphasizes, the technical competence helps the company establish a critical mass, and once the critical mass is established and proven it provide not only strength internally but also provides attractiveness externally.

Second, India as the base for efficient and effective technical delivery, there are now two opinions that India provide the necessary wherewithal for frugal development of formulations and also supply in the global markets. The third one is rapid lean development with high product quality, agility.

Agility of manufacturing, agility of development characterize Indian pharmaceutical market and that has been demonstrated ample measured by Ricon. The products have been complex therefore intellectual property could be built and product assets could be monetized from time to time.

However, this model had also been successful because of the course corrections which the company could do at the appropriate rather than hold on to the first developed model. And the company was open to merger for financial and technical synergy. So, it demonstrates that technological acumen coupled with strategic agility and entrepreneurial passion helps startups discover or rediscover their growth even in the phase of environmental adversities.

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Then let us look at, Groz tools I would term this as a world of a design thinking, Groz engineering tools private limited, Groz for short was established in 1976 by Mr Anil Bammi, a first generation entrepreneur. Over the last 43 years, Groz took great strides to put India on the world map of tools.

So, if you recall, during the 1970s and 1980s India was particularly known for high quality manufacture particularly in engineering and consumption facing product classifications. And India also was not a great place where people said that Make in India meant that high quality out of India.

However, that was the time when he decided that I will demonstrate to the world that quality products particularly, quality engineering products could be manufactured out of India. So, he started with bicycle locks to German market which itself was very well-known and is still well-known for the quality parameters, the market adheres to.

Based on the success, he expand into tools and equipment in the early 80s and thereafter there was no looking back for him. The last 4 decades have seen at Groz a continuous and enhancement of the development and manufacturing capability, including computer aided design and computer aided manufacturing and investments in a manufacturing facilities across several regions of the nation.

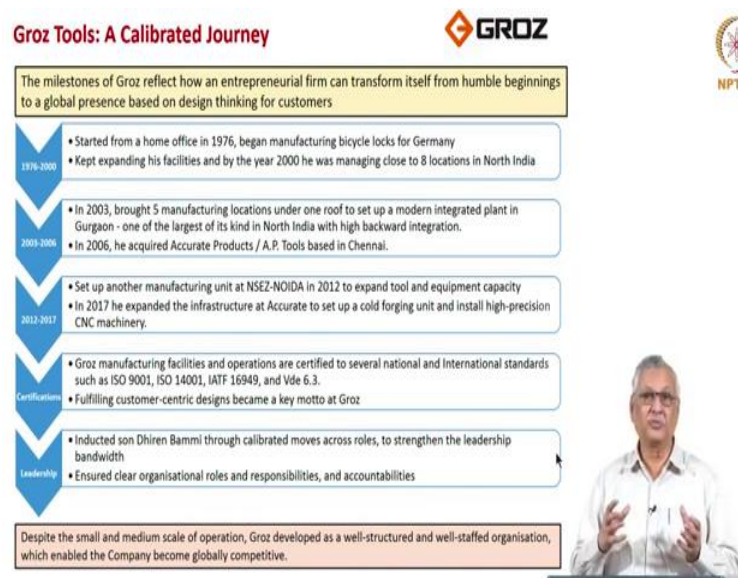
This was also supported by a match between the product expansion and manufacturing expansion. Today Groz manufactures over 12,000 SKU's which is small number for a

medium scale enterprise. It employs a skilled workforce of close to 2000 people operates in over 82 countries of the world with close to 50 million satisfied users.

From hand tools, the range has been expanded to include greasing equipment, pneumatic and electric lubrication equipment too. And most importantly all the tools are not only certified by the marquee customers which the company supplies to but the company itself has got several international certifications relevant to the tooling industry.

So, the model adopted by Groz and the journey the company undertook was one of ambitious plans and focused execution of a young person who was determined to turn a humble beginning into a global enterprise. And the basis was an approach towards world class design and world class manufacturing they based on a wide range of quality tools which multiple countries could find useful.

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There are the milestones for Groz which I have described in this chart. There were basically, 4 periods 1976 to 2000, 2003 to 2006, 2012 to 2017 and the current phase. In each of these phases you could see the growth triggering development in a particular manner. Started with the home office in 1976 manufacturing bicycle locks, kept expanding his facilities and by the year 2000 Anil was managing closed to 8 locations in North India.

Then came the phase of a manufacturing consolidation, when 5 manufacturing locations were brought under one roof, a modern manufacturing factory and with high level of backward integration. In 2006, he also acquired Accurate Products A. P. tools based in Chennai, so that

expanded not only the regional footprint reaches the manufacturing base and also added newer kinds of products to the portfolio.

Set up another manufacturing unit at NSEZ-NOIDA in 2012 to expand tool and equipment capacity. In 2017 he expanded the infrastructure at Accurate, Chennai, to setup a cold forging unit as well as to install high precisions CNC machinery. The trend has always been on investment for computer aided manufacture and computer aided paint shop facilities.

The manufacturing facilities have all the international certifications that are relevant for the manufacturing sector and also for the tool sector ISO 9001, ISO 14001 quality and environmental systems respectively and also IATF 16949 and Vde 6.3. relevant for the tooling industry. In all these journey fulfilling customer centric design became a key motto at Groz.

And also, as he was aging, he inducted the Dhiren Bammi his son, through calibrated move across several functions and gave certain of the responsibilities which are forward looking and there has been a clear division of responsibilities between the father and son duo as to how the company would be managed.

The line of succession was clear but, also the lines of responsibility and accountability were also clear. So, when you look it despite the small and medium scale of operation, Groz developed as a well structured and well staffed organization almost like a microcosm of a large industrial enterprise.

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The Wheel of Globalisation for Groz



So, the globalization for Groz was a wheel, a wheel of development for Groz it started with customers centricity of the highest order. Typically, the field staff would visit the various customers in their host countries and then, see the tooling requirements and then come back with the ideas and designs which the design department would work.

So, the entire development in manufacturing plant was woven around the specific needs of customers. So, that has led to a proposition that design thinking should be not only confined to the design and development department but should be spread across all the value chain. So, that the customer needs could be met on an end to end basis.

Therefore, there was this in-house manufacturing capacity for quality assurance because quality is the most important parameter in export operations. Because the tooling requirements were so varied and also innovative in certain respects, the company required a huge capacity to manage the customer orders which the field staff would bring every now and then.

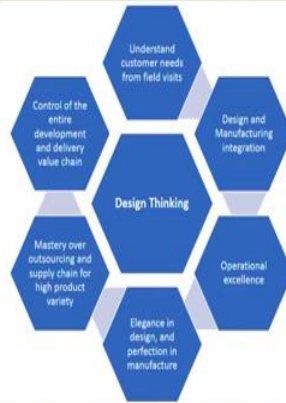
Therefore, supply chain management, which had a combined infrastructure of both in house and external that become very important. There was an aggressive global marketing development and finally the entrepreneurial leadership balance at top. These were the drivers of Groz as the company set out on the global chain

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Key Takeaways from Groz



Groz demonstrates that, more often than not, passion and commitment enable a start-up founder fight national perception battles and emerge successful even globally.



Groz is an instructive example of how a founder who walks the talk can create a unique organisational culture of competencies and competitiveness within the framework of a creative business model.



From the point of key takeaways, what it says is that from a passion and commitment start point the startup founder can do many things which may not be imagined by the environment at that point of time. So, this is only because of the passion and energy level of the founder that the national perception that existed against India's quality image could be fought successfully and finally emerge successfully even globally.

So, the design thinking model which was at the base of this kind of evolution was based on A understanding of customer needs from filed visits, integration of design and manufacturing in everything which Groz did. Operational excellence to get the best quality and the lowest cost position. Elegance in design and perfection in manufacture this is something which was a kind of a very demonstrative, demonstrable fact throughout the company's facilities. Every door for example, of the office is crafted in a hand-crafted temple architecture manner so to say.

So, anyone who walks through these doors are is witnessed to the kind of a perfection that exist in the office would understand that the DNA of company is perfection in whatever they thought about and whatever they executed. So, elegance in design and perfection in manufacture became the DNA of the company. Mastery over outsourcing and supply chain for high product variety and control over the entire design to delivery value chain.

It is an instructive example of a founder who walk the talk who align his team members constantly and continuously on the higher order goals which the company had and therefore,

could create a unique organizational culture of competencies and competitiveness within the framework of a business model that was creative and powered by design thinking. This is an illustration of design thinking in an engineering setup.