

# LEAN START-UP MANAGEMENT (MGT1022)

## DIGITAL ASSIGNMENT – 4

*SUBMITTED TO:*

**Prof. JOSE S**

*SUBMITTED BY:*

**TEAM 5**

Team Member	Reg. No.
PALASH SARMA	19BCE2092
SHARADINDU ADHIKARI	19BCE2105
SOUMYADIP MONDAL	19BCE2107
VIRAJ GUPTA	19BCE2151
JOSHITA ARATIKATLA	19BCE2229



**VIT<sup>®</sup>**  
**Vellore Institute of Technology**  
(Deemed to be University under section 3 of UGC Act, 1956)

## **Question 1: Analyze why Hyundai Sonata, Mahindra Renault Logan and Tata Indigo Manza failed in India. [15 marks]**

### **1.1. Introduction**

Cars are typical high-involvement products, and car companies know very well how to build strong brands; how to charge premium prices; how to keep residual values high; and how to keep customers happy. The main problems are tough competition, overcapacity and low marginal production costs.

There are 10 key challenges facing the automotive industry:

1. Dealing with overcapacity
2. Finding the balance between marketing and branding and short-term sales volume
3. Becoming sustainable – from image to substance
4. Dealing with simultaneous pressure to be efficient, customer-orientated and build strong brands
5. Urbanization
6. Understanding mobility and car culture in the future
7. Learning from and cooperating with other industries
8. Applying a modern view on competition
9. Making money in transparent, commoditised markets
10. Attracting key talent

### **Literature Review**

[1] The Logan & The Failed Partnership Between Mahindra & Renault (2018)

Author:- Motorbeam Team

The article explores the failed venture of Mahindra and Renault and covers the failure of the Mahindra-Renault Logan in depth. It informs us of the various unobvious factors that led to such disappointing sales of the Sedan. It also mentions the effect of public perception of the car and how the public views may have affected the sales of the car. Although the paper is very precise in mentioning the car and its features as well as its possibly fatal flaws, it could use some comparison with Logan's competitors to better highlight its shortcomings.

[2] What went wrong with Logan (2013)

Author:- Swaraj Baggonkar

This article highlights the flaws of the Mahindra-Renault venture in a very statistical manner. It

gives us the numbers that Logan managed to crack in its initial 6 years. It also gives us the reasons for the car's failure from the companies itself, so we can learn what the official reason stated by both companies for the unsuccessful venture is. The article also mentions that the Logan had a very dated and old look which might have contributed to its unpopularity among the masses. The fact that it states the opinions and stats from local dealers themselves shows us that this article approached the research at a grass-root level.

### [3] Principles of TQM in Automotive Industry

Author:- Nicoleta Isac

This paper covers the principles of TQM which are supposed to make. TQM or Total Quality Management focuses on customer satisfaction and delivery of quality goods and services. The paper aptly summarizes the principles of TQM as discipline and philosophy of management which are institutionalized, planned and continuous improvement and assumes that quality is the outcome of all activities that take place within an organization; that all functions and all employees have to participate in the improvement process; that organizations need both quality systems and a quality culture.

### [4] Tata Motors likely to discontinue Manza sedan in India

Author:- Nikhil Puthran

This article discusses the possible halt of Manza cars in 2015 as the car was less than profitable and brings about some much needed points in the discussion of the failure of the Manza. It highlights facts like . Sales for the Manza sedan were pretty decent when launched, but over time failed to generate much sales numbers. It could make better use of existing statistics and tell us more about the factors affecting and causing low sales of the car.

### [5] Hyundai Motor Company in the Indian Market

Author:- Ju-Young Chung

This case study describes the strategies of Hyundai Motor Company for entering and working in India, as part of its global management strategies. With its huge potential in market development, India attracted worldwide attention and was a place of fierce competition among global corporations. In particular HMI's exports as a share of overall sales rose from 35% in 2004 to 49.9% in 2008, 48.2% in 2009 and 66% in 2010

In accordance with the energy policies of the Indian government, the production of I EON is expected to have a price between 270 to 372 thousand rupees, depending on options. 95% of the parts have been obtained from local regions to increase procurement by 10% over i10 and lower the production costs by using low-priced parts with simplified functions for air conditioning and sound.

## 1.2. Analysis

### 1. Hyundai Sonata

Sonata had a rather sad ending in India, even after deliberate efforts from The Hyundai Motor Corp. However, it shouldn't be ignored that the car had a long stint in the Indian market, before the company finally declaring it a "failure".

Hyundai, in 2001, launched its first generation Sonata variant: The Sonata Gold, targeting primarily the premium segment. It was powered by 2.4-litre MPFi engine which generated a massive 165 hp and a peak torque of 236 Nm. On the inside, the car was equipped with the best of the luxury and features. With features such as power steering, power windows, electrically adjustable mirrors, ABS, premium upholstery and much more. However, the car failed overall, considering the price tag it carried with it. Most Indian consumers at that time were probably first-time car buyers. So, they had to play it safe. While the ones who could actually afford it weren't really sure of buying a luxury car from Hyundai, the Santro maker. Image consciousness was paramount amongst some, and it wasn't completely wrong. The typical Indian mentality came into play, "If you are investing big bucks into a car, you deserve to get some image."

So, moving on from the 2001 debacle, Hyundai decided to launch the Sonata Embera. It was yet another attempt to tap the market. Hyundai thought, maybe the first time wasn't the right time. What Hyundai didn't take into consideration was the consumer trends. The car was launched with an engine generating 142 Bhp of power, churning out an impressive 323 Nm of torque. The car was going to be the next big thing in the market. However, it didn't. It had all the good elements in the store, it had everything a car should have. However, the practicality didn't go well with the Indian customers. The Hyundai Sonata delivered a poor mileage of 10.5 kmpl which reduced more in the cities. This didn't fair well. Indians at that time (and even now) has their priorities set. Rather than Luxury, they focus on after-sales cost and gas price requirements. The popular Indian Auto Maker, Maruti Suzuki, has had their marketing department churn out the slogan, "kitna deti hai", referring to the mileage someone's car gives as compared to Maruti's. This was a huge detriment to Sonata as well.

One last try. Hyundai never left the field. They just came in with newer equipment. This was like the last song for Hyundai. The Sonata Fluidic had a 2359 cc engine, and got even more powerful. It generated 198 bhp with 250 Nm of torque. It came with a 6-speed AMT gearbox. Once again, mileage was the sore eye for the Sonata. Considering, it's calibre and engine the mileage was somewhat justified. But Indian consumers have hardly cared about speed, and performance, and that too in a D segment luxury sedan. The car had an ARAI certified mileage of 12.37 kmpl. Adding insult to the injury, the car wasn't proprietarily built in India, and due to import tax tariff and inflation over the last 2 decades, the price had also sore up dramatically.

In the mean time, new players had also emerged in the Indian market, and they really started understanding the psychology of Indian car buyers. The German Automobile Audi took the opportunity and launched their Audi Q1 mini Suv in the Indian market, with a price range very similar to what the Hyundai Sonata had, in its last days. SUV craze in the Indian market at that time also swore up and the people spending this amount of money were going for a Fortuner or the Endeavour. Everyone wanted a big bulky SUV, and why not for the same price range and better mileage. And the people who were still interested in Sedan went for the Skoda Superb (because it was better equipped and was better to drive) or the Toyota Camry (because it was a extremely comfortable and a very reliable car).

One another reason of Sonata's failure was because of gas prices. Sonata was only available in Petrol versions. Due to many economic parameters, historically it has been seen that, in India at least, Diesel prices increase with less coefficient as compared to Petrol. Plus, diesel engines give better mileage by default. So, once again the customers gave it a pass.

## **2. Mahindra Renault Logan**

The Logan was a car designed to be efficient, cheap ,reliable and provide efficient transportation. It was specifically designed for developing markets. It was a vehicle created to get the job done and was devoid of any fancy features or designs. India seems like a fitting choice for such a car. With its population exceeding a billion, India could rake in millions for the companies. So, the joint venture of Renault-Mahindra was created to sell Logans in India.

The Mahindra Renault Logan had a very unsuccessful venture in the Indian market. The car was targeting sales of 30,000 cars per year i.e 2,500 cars a month. The actual numbers don't quite hold up as well as they are only 20% of the projected sales. Logan managed to sell only about 500 cars per month. These numbers were already pretty low and they further dipped to the 400s in the fourth quarter of 2013. This caused the joint venture a loss of 490 crores in the year ending March 31, 2009 on sales of 740 crores.

Up until this point Mahindra had only sold tractors, farm equipment and SUVs. So Logan was Mahindra's first Sedan. This inexperience might have had a small contribution in the failure of Logan in the Indian market. Mahindra owned 51% of the venture and was expected to provide the dealership while Renault was providing the technology and owned 49%.

### Mahindra-Renault LOGAN

2007														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Cumu
P(1.4/1.6)				67	768	678	780	612	524	464	281	301	4,475	
D(1.5)				160	1,791	1,708	2,110	1,640	1,660	1,750	1,279	1,203	13,301	
Total	0	0	0	227	2,559	2,386	2,890	2,252	2,184	2,214	1,560	1,504	17,776	
www.clublogan.com www.clublogan.com www.clublogan.com www.clublogan.com www.clublogan.com														
2008														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
P(1.4/1.6)	507	689	920	600	466	405	414	321	438	320	60	81	5,221	9,696
D(1.5)	1,794	2,066	2,148	1,113	1,088	946	967	1,139	1,314	747	240	192	13,754	27,055
Total	2,301	2,755	3,068	1,713	1,554	1,351	1,381	1,460	1,752	1,067	300	273	18,975	36,751
www.clublogan.com www.clublogan.com www.clublogan.com www.clublogan.com www.clublogan.com														
2009														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
P(1.4/1.6)	179	302	280	163	127	148	160	162	168	132	91	93	2,005	11,701
D(1.5)	418	706	682	387	300	353	284	307	342	269	188	215	4,451	31,506
Total	597	1,008	962	550	427	501	444	469	510	401	279	308	6,456	43,207
www.clublogan.com www.clublogan.com www.clublogan.com www.clublogan.com www.clublogan.com														
2010														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
P(1.4/1.6)	161	160	103	93	125								642	12,343
D(1.5)	395	377	248	210	325								1,555	33,061
Total	556	537	351	303	450								2,197	45,404
www.clublogan.com www.clublogan.com www.clublogan.com www.clublogan.com www.clublogan.com														

Some of the key factors that led to the poor performance of the Mahindra-Renault Logan are:-

- The first blow to Logan came in 2006 when the Indian government reformed its taxes on automobiles, the new tax laws made separate brackets for cars which were under 4 meter in length and those which were over 4 meters in length. The cars which were under 4 meters in length had to pay 10% tax while those over 4 meters like the Logan had to pay 22%. Also what didn't help was the fact that most of Logan's competitors were taking the under-4 meter approach for their cars.
- The other reason was the bland design of the Logan. The creators were so engrossed in making the car efficient that they paid negligible efforts to make it look different. Cars like the Maruti-Suzuki Wagon-R which can be identified at one simple glance tell us how important design can be with its success. In a country of over 1 billion people, you want your car to stand out in traffic in a sea of cars.
- The Logan had to also import many of its parts from Europe which considerably increased the manufacturing expense. The competitors on the other hand manufactured most of the parts in India, so there weren't any additional import costs. These companies also offered better designs with virtually no trade off.
- By the end of its first year, Logan's biggest buyers were taxi services. This may have further dragged its chances of succeeding as this meant that Logan's look become the much dreaded "taxi-look." Which means a taxi came into the mind of an average Indian whenever he/she looked at a Logan. The disadvantage of this look is that no one wants

their car to look like a taxi. Cars play a huge role in one's everyday commute and people would prefer that their everyday ride to their office didn't look like a taxi.

- The competitors like the Swift DZire also had overall better ergonomics than Logan.

It can be concluded that the failure of Logan was not just because of one factor but many including the inexperience of Mahindra in selling Sedans prior to the Logan as it was their first Sedan, Renault's inexperience in the Indian automobile market, unfavorable tax brackets, uninspired design, bad ergonomics, the "taxi-look" and really bad effort at cost-cutting. Logan might have failed to capture the Indian market but its failure led to the creation of the Renault Duster which tackled most of the issues that Logan faced and ended up being a huge hit.

### **3. Tata Indigo Manza**

Tata Motors, India's fifth largest maker of passenger vehicles, has stopped producing the Manza sedan. Launched in 2009 as the Indigo Manza, the car was built on a Rs 2,000-crore platform that also served the Vista hatchback. Tata Motors dropped the Indigo name two years later after providing the sedan a face-lift.

The Manza was positioned above the Indigo and Indigo XL sedans, with petrol and diesel engines produced by a Tata-Fiat joint venture. In 2012, the Manza was rebranded as Club Class Manza to take on rivals Honda City, Hyundai Verna and Maruti Suzuki SX4.

Key Problem Areas:-


- Exterior: Too light for such a heavy diesel engine, the body needs some weight for stability and grip on the road. Bumper is so light even with a cycle it comes out and fixing that takes 500 RS.
- Interior: (Features, Space & Comfort) Life threat during turning, you can't see anything while turning as the pillar is broad and no visibility during turning. Please test drive on turning as well to experience the same. Roof height is high at the back but for a driver like me who's 6 feet it's really a pain driving. Got the power window repaired 5 times but even now it's not working and when things are in warranty it's out of stock.
- Engine Performance, Fuel Economy and Gearbox Hard gears after 35000 and clutch work almost all the people i know (10 cars) between 30000 to 40000 which cost around 15K and out of warranty.
- Ride Quality & Handling Comfortable ride at the speed of 100 and beyond that it's really a bad car.

Correction by Tata Motors :-

In 2012, Tata Motors launched a design refresh across all variants, called the Tata Manza "Club-class." It offered 2-tone body colors (with the roof color contrasting the rest of the body), updated

exterior chrome inserts, 16-spoke alloy wheels, newer 2-tone "Sahara Beige" or "Black Plum" interiors with black Italian leather upholstery on the high-end EXL variant; a chrome-insert interior package, leather-wrapped gear lever, and a Blaupunkt-sourced infotainment system, with a 6-inch true-color touchscreen, GPS satellite navigation software sourced from MapMyIndia, and DVD video playback (usable only when the car is stationary).

But after these upgrades also the tata indigo manza failed to appeal to the consumers which we can see from it's sales figures in 2015,

					
Models	Mar 14	Feb 15	Mar 15	MoM Change	YoY Change
	©TheAutomotiveIndia.com				
Nano	2452	1296	2272	75.31%	-7.34%
Indica + Vista	4287	3128	3746	19.76%	-12.62%
Bolt	Not Launched	2286	1118	-51.09%	-
Zest	Not Launched	2121	2653	25.08%	-
Indigo+Manza	3022	2974	3188	7.20%	5.49%
Sumo	1607	1269	1534	20.88%	-4.54%
Safari+Storme	1018	621	426	-31.40%	-58.15%
Aria	87	24	22	-8.33%	-74.71%
Total Sales	12640	13719	15039	9.62%	18.98%

In order to revive falling sales, Tata Motors came out with a new scheme for its Manza sedan buyers, who will get back 60 per cent of the purchase value if they resell the car to the company after three years.

"Tata Manza has...introduced the 'Club Class Buyback Assurance'. With the Club Class Buyback Assurance, Tata Motors offers its customers 60 per cent of the purchase price after three years," the company said in a statement.



## Question 2

### What steps should be taken to avoid such failures in future. [5 marks]

Every auto forum, enthusiast conversation these days when it comes to 4-wheeler brands devolves ultimately into "why the tin can makers thrive while huge brands like Toyota, VAG fail", rather than looking at why 'xyz' brands fail(ed), we should look at what makes a successful brand, successful in India.

There are 2 ways a brand can be successful in offering a compelling value proposition, or as one infamous Godfather said, "make you an offer you can't refuse".

- Offer more benefits for less price, this is also known as "the steal"
- Offer more benefits for a higher price, this is the brand premium.

To break the Step 1 or 2 as listed above, a brand needs to establish a halo product, and penetrate enough in the market that just by its presence it can scale up the price / value proposition. One brand that does this very well would be Apple (world over and in India too) or even the 1+(Oneplus) brand.

So, moving back to the 2 options available. There are some key elements that anyone in the non luxury end of the market looks for, and these are brand agnostic.

- **Peace of mind:** Now this is largely subjective and market driven. The average lay car buyer does not spend hours in auto forums like this, do research etc. They go by market consciousness or a wide unspoken belief system. Here for instance, a MS is known to give you absolute peace of mind. Right or wrong, this is an absolute belief and other brands can break this (not unless say Maruti Suzuki themselves score self-goals)
- **Accessibility to dealers, and consequently ASS(After Sales Service) networks:** No one likes driving 1 hour just to give your car for a service, at least no layperson will.
- **Cost of ASS(After Sales Service):** Again, the average customer services the car in authorized service centers during the warranty period and possibly shifting to the nearest Garage (not some exclusive F(n)G). So, distances again come into play here. And things like DIY for simple or complex fixes are absolutely ruled out.

These are not directly related to the product but tangential to it, the product needs to be,

- **Cost Effective! NOT CHEAP.** Ask Tata and the failure of their Nano to understand just how this phenomenon works. You CANNOT market something as cheap; it just won't work because the demonstration effect (see above) kicks in. You can't be seen in something "cheap", so cost effective is the key word.
- **Features** - The Indian market likes to consume VFM products, be it cars or underwear and a feature list, which will be compared against its competition is a vital element here.

All of the above are considered features, not just the features you might find in your car. Don't forget, the buying of a car in India is not a personal affair but a family affair (As many in our own forum will testify), so you can wax eloquent on the DSG autobox or the torque etc, and if you are

on the right side of 40, you will get shut down by whatever your mom, wife, dad, elder bro, uncle have to say about it.

Hyundai got this very early on in the game, they are basically Maruti Suzuki v2.0 but with a wider spread of products (Maruti Suzuki usually CANNOT sell in the B segment and above category, and don't even make cars for the D + category). The likes of VAG, Ford, Toyota are neither here nor there. So, in the price benefit grid they would be in the more price, lesser benefits or same price, same benefits areas. So, a product like a Figo, quite a compelling product no doubt but it is in the highly competitive same price, same benefits area which its competition has saturated.

New entrants like SAIC have studied this market and come up with a product that far exceeds the less price, more benefits segment which is why they move so many units of a 20L average OTR sticker price product. Nissan after a dismal performance in the High price, less benefits segment of the grid, has knocked it out of the park with its Magnite which is entirely in the less price, more benefits (though things like dealer network remain poor, but that is how compelling this product is).

Blaming abstract elements like tax policies (SAIC and Kia have the same tax policies a Ford or VAG have, don't they?), or worse, the "market" is just inexplicable to be explained as a fact. If OEM's like VAG, Ford etc., want to succeed? And they can, the Indian auto market has been growing at a crazy clip and will continue to do so for the next few decades, they have to take a page from the likes of Nissan and reinvent themselves. Offering products that do not resonate with the market would be the shortest way to self-destruction in our opinion.

## **PRINCIPLES OF TQM IN AUTOMOTIVE INDUSTRY**

TQM companies are focused on the systematic management of data in all processes and practices to eliminate waste and pursue continuous improvement. The goal is to deliver the highest value for the customer at the lowest cost while achieving sustained profit and economic stability for the company. While every organization should implement its own specialized form of quality management, there are some basic core principles that guide every quality effort.

Learning the principles and practices of TQM will help achieve outstanding results and enlist the support of top management in advancing this concept within the organization enabling area managers or supervisors to create a work environment that gets the best from its workers.

### **Concepts of TQM Philosophy**

Concept	Main idea
Customer focus	Goal is to identify and meet customer needs
Continuous improvement	A philosophy of never – ending improvement
Employee empowerment	Employees are expected to seek out, identify, and correct quality problems
Use of quality tools	Ongoing employee training in the use of quality tools
Product design	Quality should be built into the process; sources of quality problems should be identified and corrected
Managing supplier quality	Quality concepts must extend to a company's suppliers

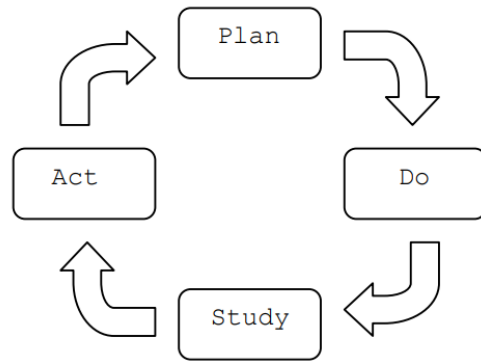
## Concepts of TQM

### 1. *Customer focus*

The first and the most important characteristic of TQM is the attention granted by the company to the clients. Within the automotive industry as well, quality must satisfy and overcome clients' expectations. The purpose is the identification, then the meeting of all client's needs. TQM admits that a perfectly built product has a reduced value as long as it is not what the client desires. This is why we say that the quality level is granted by the client. In any case, it is not always easy to determine what a client desires, because the tastes and preferences change. Also, clients' expectations vary from a client to another. For example, in the automotive industry, the preferences change fast, from small cars to four-wheel drive vehicles and then back to small cars. The companies must gather information constantly, by research groups, market studies, and meetings with clients, in order to remain close to clients' tastes.

### 2. *Continuous improvement*

Customer's expectations are always changing and typically rising as quality management begins to yield results. It is important to remember that when customers are assessing quality, they are not simply comparing us to our performance last year, but to every other organization that is serving their needs. It leads to continuously improving results, in all aspects of work, as a result of continuously improving capabilities, people, processes, technology and machine capabilities. Continuous improvement must deal not only with improving results, but more importantly with improving capabilities to produce better results in the future.



### **3. Employee empowerment**

Employee involvement evolved out of business's need to improve performance. The impact of human resources in the organization depends on the kind of empowerment given to them. In TQM, the role of employees is very different from what it was in traditional systems. Workers are empowered to make decisions relative to quality in the production process. They are considered a vital element of the effort to achieve high quality. Their contributions are highly valued, and their suggestions are implemented. In order to perform this function, employees are given continual and extensive training in quality measurement tools.

### **4. Use of quality tools**

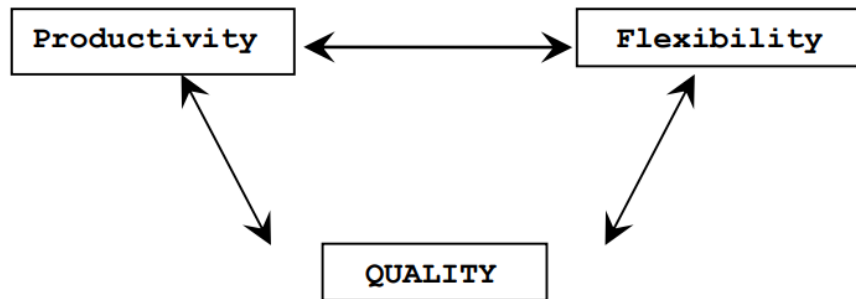
TQM places a great deal of responsibility on all workers. If employees are to identify and correct quality problems, they need proper training. They need to understand how to assess quality by using a variety of quality control tools, how to interpret findings, and how to correct problems. They are easy to understand and at the same time extremely useful in the quality problems identification and analysis. Sometimes, the employees use one mean, but often, the use of a combination of means is of greater help. We will further refer to three of the seven means of quality control, namely the cause and effect diagram, the checklist and the control charts.

### **5. Product design**

A critical aspect of building quality into a product is to ensure that the product design meets customer expectations. QFD enables us to view the relationships among the variables involved in the design of a product, such as technical versus customer requirements.

This type of analysis can be very beneficial in developing a product design that meets customer needs, yet does not create unnecessary technical requirements for production. Figure below displays three important production system design objectives: productivity, flexibility and quality. In traditional production system design, the sole objective was productivity in terms of cost-per-unit or worker-hours-per-unit. Recently, the value of flexibility has been recognized and often takes an explicit role in production system design.

### *Designing production systems for quality*



#### **6. Process management**

According to TQM a quality product comes from a quality process. This means that quality should be built into the process. Quality at the source is the belief that it is far better to uncover the source of quality problems and correct it than to discard defective items after production.

The main benefits of applying this principle :

- Increased ability to create value for both parties
- Flexibility and speed of the common answer to the market changes or to the clients' needs and expectations modifications.
- The optimization of costs and resources

The application of this principle will lead to :

- The establishment of relations able to balance the short term profits with the long term considerations
- The use of the expertise and resources together with the partners
- The identification and selection of the key suppliers
- The establishment of a clear and open communication system
- The communication of information and future plans
- The establishment of common development actions and of certain improvement activities
- The suggestion, encouragement and recognition of suppliers' improvements and accomplishments.

#### **Conclusion**

The principles of Total Quality Management are to seek to satisfy the external customer with quality goods and services, as well as your company internal customers; to satisfy your external and internal suppliers; and to continuously improve processes by working smarter and using special quality methods.

## References

- [1] Gilbert, G. (1992). Quality Improvement in a Defense Organization. *Public Productivity and Management Review*, 16(1), 65-75. Introduction and Implementation of Total Quality Management (TQM) by Khurram Hashmi.
- [2] Abohmed B., Identifying some management approaches to total quality management (TQM) within industrial organizations, University of Wisconsin-Stout, May, 2001.
- [3] Zairi M., Baidoun S., Working paper series Understanding the Essentials of Total Quality Management: A Best Practice Approach – Part 1, Working Paper No 03/03 January 2003.
- [4] Inman R., Blumenfeld D., Huang N., Li J., Designing production systems for quality: research opportunities from an automotive industry perspective, *INT. J. PROD. RES.*, vol. 41, no. 9, 1953–1971, 2003.
- [5] Young-Eun Park and Dong-Kee Rhee; *Asian Case Research Journal*, Vol. 19, No. 01, pp. 29-57 (2015)