

# Ministry of Higher Education and Scientific Research

## National school of management



### Master's dissertation

### Professional Master in Quality Management

## Quality management system implementation project

### Case Study: SARL Heetch El Djazaier

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**Abstract:**

Transportation plays today a major infrastructure for each country that intend and plan to build a strong economic system and boost it to participate in international exchanges, although Algeria's government has made some actions to enhance it but unfortunately the challenges are still far greater than what has been accomplished.

The aim of this study is to contribute to the Algerian transportation services with the implementation of the ISO 9001:2015 standard at the level of the Peer to peer car sharing company Heetch El Djazaier, the standard is a generic one directed to give requirements to establish a quality management system which will grant the presence of some critical to quality factors in the service delivery thus improving quality of life for the citizens as well as enhancing customer experience and improving how the company Organizes itself internally and its external relations by using the appropriate tools to guarantee the progress of the company on all its aspects.

**Key Words:** Transportation, ISO 9001, QMS, Implementation.

**Résumé :**

Le transport joue aujourd'hui une infrastructure majeure pour chaque pays qui ont l'intention et la bonne planification de construire un système économique fort et de le booster pour participer aux échanges internationaux, bien que le gouvernement de l'Algérie a fait quelques actions pour l'améliorer mais malheureusement les défis sont encore beaucoup plus grands par rapport à ce qui a été accompli.

L'objectif de cette étude est de contribuer aux services de transport algériens avec la mise en œuvre de la norme ISO 9001:2015 au niveau de l'entreprise de covoiturage Heetch El Djazaier, la norme présente est générique censé à donner des exigences pour établir un système de management de la qualité qui garantira la présence de certains facteurs critiques à la qualité dans la prestation de services, améliorant ainsi la qualité de vie pour les citoyens ainsi que l'amélioration de l'expérience du client et l'amélioration de la façon dont l'entreprise s'organise en interne et ses relations externes en utilisant les outils appropriés pour garantir le progrès de l'entreprise sur tous ses aspects.

**Mots clés :** Transport, ISO 9001, SMQ, Mise en œuvre.

### الملخص:

يعتبر النقل من أهم البنى التحتية الرئيسية لكل دولة تنوي التخطيط لبناء نظام اقتصادي قوي ودفعه وتطويره للمشاركة في التبادلات الدولية، على الرغم من ان الحكومة الجزائرية قد اتخذت بعض الإجراءات لتعزيزها ولكن للأسف التحديات لاتزال أكبر مما قد تم إنجازها.

الهدف من هذه الدراسة هو المساهمة في خدمات النقل الجزائرية من خلال تطبيق معيار ISO 9001:2015 على مستوى شركة النقل المشترك هيتش الجزائر المعيار هو من النوع العام موجه لإعطاء متطلبات تأسيس أنظمة التسيير بالجودة الذي سيضمن بدوره وجود بعض عوامل الجودة الحاسمة في تقديم خدمة النقل وبالتالي تحسين نوعية حياة المواطنين بالإضافة لتعزيز تجربة العملاء وتحسين كيفية تنظيم الشركة لنفسها داخليا وعلاقتها خارجيا باستخدام الأدوات المناسبة لضمان تقدم الشركة من جميع النواحي.

**الكلمات المفتاحية:** النقل، نظام التسيير بالجودة، ايزو 9001، تطبيق

## **Acknowledgement:**

“God grant me the serenity to accept the things I cannot change, and the courage to change the things I can; and wisdom to know the difference”

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## List of abbreviation

QMS: Quality management system

ISO: International standardization organism

B2B: Business to business

IANOR: Algerian institute of normalization

ALGERAC: Algerian organism of accreditation

AFNOR: French association of normalization

IWA: International Workshop Agreement

IEC: International Electro technical Committee

ITU: International Telecommunication Union

AS: Algerian standard

NA: Algerian norm

TC: Technical committee

SDG's: Sustainable development goals

P2P: Peer to peer

HLS: High-level structure

VTC : Voiture de transport avec chauffeur

CEO: Chief executive officer

CRM: Client relationship management

# **General introduction**

Since the last two decades the world has been evolving exponentially in all directions, and this development is characterized by diversifications in different domains, touching our everyday life in most perspectives, and it would be ill defined to say that we reached our full potential of growth nevertheless we can acknowledge some form of it as from technological to intellectual, social development, yet the world is lacking development in a lot of critical points as for the psychological state of human beings and even though this might seem irrelevant to the subject of research it is of high importance because if we want to create a developed world we ought to be brave enough to say what is not going well with it and we need in humility to admit its shortcomings and try to understand it in order to improve it, because obviously we would be the only species accountable for the rising up or the downfall of this world , so we need to have the moral lucidity to create such a world. And this development isn't a mere chance throughout the whole history of human kind, but more of a historical accumulations of our ancestors efforts to create a better tool , a better way of doing things, from building the Egypt pyramids which historian investigated in real depth and as Yang mentioned ‘’ Scientist argue that the tools and measurement used in building the pyramids were so closely and professionally done that there had to be a systematic system for assuring the quality’’ (Liu, Development of Quality Management Systems: How Have Disruptive Technological Innovations in Quality Management Affected Organizations, 2013) to Hammurabi's laws & ancient Greeks passing through Chinese civilization and getting into the industrial revolution, thus we have been able to advance in a slow pace but surely based on a phenomenon called accumulation. And if we would be talking about development of life conditions and enhancement, quality would be the ultimate central answer, as a concept it isn't a new invention to humans, but existed alongside the human existence although its form altered from one generation to another, but the essence of it never faded from human life.

Once we put our vision on the reality of our modern life with its positive and negative edges, we get to see the economic recession that Algeria is facing, quality weighs more and more in our everyday life, since life became extremely easier our systems became more complex and harder to master and manage.

Thus, innovation is needed to satiate our needs, in a world inclined more and more towards internationalism, Algerian enterprises have to rise their performances if they aspired to compete on a high level and grant their sustainability in the markets.

In this context it is essential and important that Algerian companies run towards modern management systems to provide necessary proofs that its products and services are able to

compete internationally and grant that they already provide quality products and services to their clients locally.

Although a question for me was evident and needs to be asked: is it more interesting as value surplus to lead a project of contribution to implement a quality management system to get certified and have the apparent shell of a quality provider or to get to the core and essence of it which is to get improvement of performance alongside with a pack of positive features into the organization and its clients?

With all that being said, the main motive for me to establish this research was more inclined toward instituting an improvement culture as a quality management system according to the international organization of standardization 9001 V 2015, since the Algerian transportation providers are usually unprofessional and lack serious work when it comes to client orientation, and I judged that it is high time that Algerian citizens have better quality of services and products. With a hope that it will snowball on the economic and social fabrics and enhance quality of life altogether in Algeria.

### **The problematic**

Several Algerian enterprises from private and public seems unable to manage their resources to produce the optimized outcomes, thus they are lacking managerial solutions.

Since that the transportation field in Algeria is kind of underdeveloped compared to developed countries it is high time to apply great reforms to make transportation easier to make people's lives easier and more flexible since that public transportation companies can't offer fast comfortable means to its citizens, neither private transportation owners can, thus we notice the rise of peer to peer car sharing appeared to enhance the transportation experience and satisfy that need.

The international standard 9001 Version 2015 allows companies to enhance their performance and improve their competence in different organizational areas, such as process mastery and control and continuous improvement. And that's what is going to be undertaken in the following of this project in SPA Heetch el Djazaier as a peer to peer transportation company.

The processes which will be discussed in the questions are already established but needs more management to produce effective results.

And after several days passed at the company and discussion with my tutors (academic and at the enterprise) we have sensed the need to improvement and setting up a system to manage different task related to quality monitoring.

So after reflection and discussions with my tutors we formulated the problematic as next: To which extent the contribution of the setting up of a quality management system will help Heetch el Djazaier to develop and enhance their current management system?

And of this Centrale question derives two other secondary questions:

How could Heetch master their processes more efficiently and effectively?

How could Heetch face risks to their core processes?

### **The methodology:**

Geared toward answering those questions we are going to conduct a general diagnostic of the state of the current management system (before the implementation of the new one), to have a better clear vision about the shortcomings and limitations of the system and establish a plan of action to work on as a basis.

Due to the limits which are: time and resources the application of the plan of action is going to be according to priorities set by me and the tutors and the responsible of processes of the concerned enterprise, and the rest of the plan should be followed and pursued eventually.

The responsible on the project is going to be me assisted by my tutor oussama Benseddik the operations manager at Heetch, to have an effective organization and quality management system and to enhance processes and understand how they interact with each other.

The answer on the problematic will be a comparison of the initial management system and the instituted quality management system using the diagnostic tool, which is a checklist to make the difference in radar forms to make it obvious and measurable.

### **The interest of the subject:**

My task is to initiate a quality approach in order to set up a quality management system in accordance with ISO 9001: V2015 with a view to improve the current management system.

It is important to note that the application of such project is based on the Deming wheel (plan, do, check, act) since the structure of the standard is based on that wheel which is continuous improvement. The results of this work will not be evident in the time limit of the duration of

my internship which is four months, which gave me just enough time to establish the first two phases of the Deming wheel. (Plan, and do)

My field of research is going to be Heetch el Djazaier a peer to peer car sharing transportation Services Company, active since 2019 in Algeria, and subsidiary of the parent company in France which started in 2012, now present in more than 6 countries.

**Announcement of the plan:**

This research is structured as follows; the first chapter is dedicated to the literature review and conceptual framework to understand and highlight the work of scientific research that has been carried out to date and to get a hold on the different concepts of quality, followed by the second chapter handling the methodology of the project and its general context, whilst the final chapter is devoted to the presentation of the host organization and the analysis and discussion of the results.

We sincerely hope that we will be able to answer on the questions and provide clear results and satisfactory to the needs expressed earlier.



# **CHAPTER 1: Conceptual Framework & literature review**

## Section 1: Literature review

In This part we are going to explore some of the previous works which were realized by a respectable number of researchers related to our subject of research, which will help us in understanding the complexity of its different levels and components.

We all know when it comes to the implementation of a quality management system it is a project to be held In specific care due to its sensitivity that's why we figured that there may be certain project management tools and practices to look up in the literature review to make it more successful, and bear fruit of previous researches, as well as the relation of the project to performance and benefits of The iso 9001 implementation.

According to (Saida Echour, 2021) article which tackles the quality approach and performance as a separate entities and the relationship between the two of them, insinuating that there is poorly a weak feedback from research in this area and it doesn't provide a cutting edge conclusion. " There is a great deal of research on quality management, but the results are far from being fruitful and do not provide clear confirmations of the positive or negative impact of this approach on organizations performance (Saida Echour, 2021)They explained furthermore the relation between the quality approach and performance and the important factors to have an effective implementation of the QMS.

They exposed a study which was conducted by Fonseca and Domingues in Portugal 2018, alongside with other studies done previously to show what are the main difficulties encountered by enterprises to implement a quality management system , and they were as follows : " the risk and opportunity-based thinking, determination of the organizational context with relevant the internal and external issues, identification of relevant stakeholders and their relevant requirements, organizational knowledge and change control " (Saida Echour, 2021)

While other researchers might disagree slightly and offer other perspectives to the practices that enterprises found problems in applying as next:

Table 1 Quality management practices according to literature

Quality practices	Authors
<ul style="list-style-type: none"> <li>• Costumer focus</li> <li>• Continous improvement</li> <li>• Strategically based</li> <li>• Total employee Involvement</li> </ul>	(Pambreni et al 2019)

<ul style="list-style-type: none"> <li>• Thinking based on identification of risks and opportunities and adopting risk-based thinking</li> <li>• Identifying the organizational context with relevant internal and external issues</li> <li>• Identification of the relevant stakeholders and their relevant requirements;</li> <li>• Organizational</li> <li>• knowledge change control</li> </ul>	(Fonseca and Domingues, 2018)
<ul style="list-style-type: none"> <li>• The system implementation Planning Commitment</li> <li>• Implementation of procedures</li> </ul>	(Feng, Terziovski and Samson, 2008)
<p>Mmanagement practices:</p> <ul style="list-style-type: none"> <li>• Senior management commitment and support.</li> <li>• Infrastructure practices:</li> <li>• Quality organization</li> <li>• Employee training</li> <li>• Worker participation</li> <li>• Supplier Quality Management</li> <li>• Customer focus</li> <li>• Ongoing support The basic practices:</li> <li>• quality system Improvement</li> <li>• Information and analysis</li> <li>• Use of statistical quality techniques</li> </ul>	(Lakhal, Pasin, and Limam 2006)
<ul style="list-style-type: none"> <li>• Lleadership</li> <li>• Training</li> <li>• Relationship employee involvement</li> <li>• Product/service Design Supplier</li> <li>• Quality Management</li> <li>• quality data analysis</li> <li>• Process management</li> </ul>	(Kaynak, 2003)
<ul style="list-style-type: none"> <li>• Lleadership</li> <li>• Strategic planning</li> <li>• Customer focus</li> <li>• Information and analysis</li> <li>• People management</li> <li>• Process management</li> </ul>	(Prajogo & Sohal, 2003)
<ul style="list-style-type: none"> <li>• Lleadership and Commitment</li> <li>• Training and awareness</li> <li>• Team</li> <li>• Culture</li> </ul>	(Reed et al. 2000)
<ul style="list-style-type: none"> <li>• Rrelationship with customers</li> <li>• Support for Senior management</li> <li>• Work force Management</li> <li>• Relationship with suppliers</li> <li>• Statistical control feedback</li> </ul>	(Flynn et al., 1995)

<ul style="list-style-type: none"> <li>• Process planning management</li> <li>• Product Design Process</li> </ul>	
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Source : Saida Echour, Taibi Nbigui 2021

Those results show how many variables there are when it comes to practicing quality, and we can notice that certain elements are repeatedly mentioned and some others are mentioned only once, this is due to the subjectivity of the researchers and the context of their research, but the repeatability of certain elements in different contexts shows their weight and importance as quality practices to master the success of the implementation process.

The researchers did not stop at this point, but went further to investigate how literature dealt with performance and its assessment as well the nature of the criteria which defines it, since it is obvious that performance has multidimensional nature and can't have only one face of a coin, so subjectivity affects it depending on the standpoint of the preceptor. They took Pesqueux's concept of global performance which he defines it as: numerical result of a classification objective in relation to a reference frame or measurement scale. This reference can be in relation to the one self, to improve one's performance and/ or relates to others according to Pesqueux.

This definition lies mainly on the work of Gilbert's model of performance and it has three axes which are: Relevance, Efficiency, and Effectiveness

All of which they interact with each other in a triangle way, and their sum represents the performance's level based on the measurement of each axis.

But to measure a performance is sometimes hard, especially when it is not tangible such as the organizational performance when in contrast financial performance is easily calculated and used usually as metric, that's why this model does not focus merely on the financial aspect but takes into consideration the non-financial indicators as well. These indicators are divided into four axes (finances, clients, internal processes and organizational learning) (Saida Echour, 2021)

Since we explored for now what the researchers had to say about different important quality practices in implementing a quality system management and how is performance to be assessed, now we move to the last part which is the relation between the quality approach and the performance.

S. Echour and T.Nbigui constructed their conclusions on the results of The study which done by Feng and al in 2008 based on 613 companies in the industrial and service sector in New Zealand, Australia, and found out that there is a positive relationship between ISO certification which is the quality approach and the operational performances, but it was to be noticed that it is weakly not significant, and they argument that the chances to have a successful implementation of the ISO reference would be due to marriage of good planning and when the philosophical aspects of the organization are coupled with employee training, periodic audits, corrective actions and commitment at all levels of the organization (Saida Echour, 2021)

And they pursue to argument according to Terziovski and al that organizations that voluntarily adopt the certification approach are more likely to have improved organizational performance, and that those organizations who paved those roads for themselves participating proactively in the quality approach without mere pressure of the markets and competition or suppliers requirements are destined ultimately to enhance their performances and will bring a competitive advantage.

And the more in depth we go more findings on the positive impact and relationship between the quality approach and certification and the performance, such as Charlees and al, (2005) study investigating a number of 21,482 certified enterprise in The US using non-certified companies in the same industry of the same size as comparison samples, ‘ ‘ They concluded that the certification leads to productivity improvements and financial performance’ ’ and asserted that companies who did not sought certification suffered variation in their performances and had economic declines as a consequence. More findings confirm that the ISO 9001 effectiveness directly contributes to product quality and operational performance it has an indirect impact through the moderator of operational (Saida Echour, 2021)

This is not to mean in any way that this approach is the only one toward performance enhancement nor that it is the ultimatum state, because the implementation of a standard doesn’t qualify you to have permanent competitive advantage thus each enterprise has to pour in more resources and have to invest in quality to have inimitable characteristics and rise above competition.

Here is a list of table to summarize the different findings on the relationship between the quality approach and performance:

Table 2 Different authors finding about relationship with quality approach and performance

Authors	Findings
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Mei Feng, Mile´ Terziovski and Danny Samson, (2008)	There is a positive and significant relationship between quality practices: (implementation, organizational commitment and planning) and operational performance.
Lassâad Lakhhal (2006)	There is a significant relationship between management and infrastructure practices and operational performance
Terziovski, M., Power, D., & Sohal, A. S.(2003)	There is a significant and positive relationship between leader’s motivation to adopt ISO certification and business performance
Charlees J. Corbett, María J. Montes-Sancho, & David A. Kirsch, (2005)	The certification leads to productivity improvements and financial performance. The companies not having sought certification have experienced substantial deterioration in asset performance, productivity and sales
Kafetzopoulos, D. P., Psomas, E. L., & Gotzamani, K. D, (2015)	It has no direct impact on manufacturing firms’ business performance, it has an indirect impact through the moderator of operational performance.
Lambert and Ouedraogo, (2008)	ISO certification has a significant impact on knowledge creation and management.
Terziovski and Guerrero, (2014)	ISO 9000 certification statically does not have a significant impact on product innovation.
Pambreni, Y., Khatibi, A., Azam, S., & Tham, J, (2019)	The customer focus, continuous improvement, strategically based, and total employee involvement have a positive and significant effect on organization performance.
Fonseca and Domingues, (2018)	The principal reported benefits of quality practices are: risk-based thinking, mapping of the organizational context, and stakeholder identification
Hale Kaynak, (2003)	The quality practices: leadership; training; relationship employee involvement; supplier Quality Management; and process management, are an impact on Inventory management performance; financial and market performance.
Prajogo, D. I., & Sohal, A. S, (2003)	The practice of: leadership; strategic planning; customer focus; information and analysis; people management and process management are significantly and positively related to the product quality and product innovation performance.
Reed, R., Lemak, D. J., & Mero, N. P. (2000)	The practice of: Leadership; commitment; training and awareness; teams and culture can generate a sustainable competitive advantage.

Flynn, B. B., Schroeder, R. G., & Sakakibara, (1995)	The top management support was found to be critical to both infrastructure and core quality management practice.
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Source : Saida Echour, Taibi Nbigui 2021

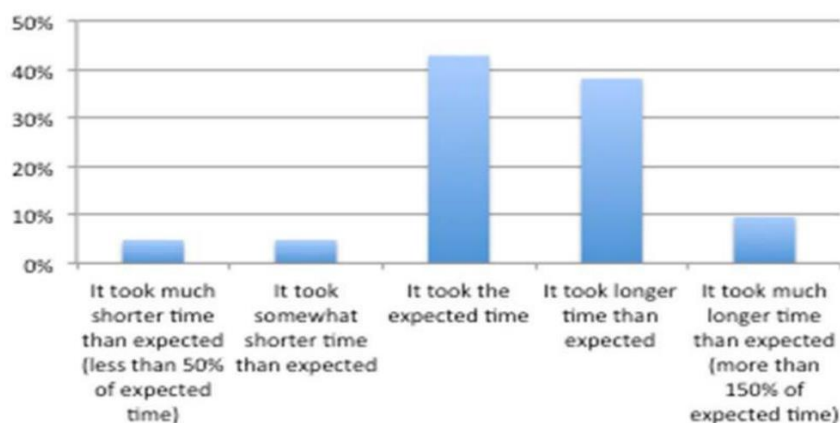
Although that there is a certain contrast in some academic papers on some findings about the existence of a positive relationship between quality approach and performance and its absence, but those results are characterized by lack of consensus, even though certain results suggest that there certain factors has to appear to make the relationship positive.

Meanwhile, Helgi Thor Ingason talks about project management practices in the implementation of an ISO 9001 quality management system and how those two disciplines intertwine in the process, and he conducted a study to know how implementation of the ISO 9001 standard in several enterprises in Iceland, the extent to which project management was applied, what tools and techniques were used and what the most important success factors were in their implementation the domains of those companies was at a crossed so that results would be more representative.

The investigation was done by a semi structured questionnaire destined to a total of 21 quality managers, the organizations are of very different types and sizes but to some extent so variability is present sometimes from construction to manufacturing information security to education, and results showed that there are considerable variation from one company to another concerning the methods of planning and time of the implementation “ On average, the time for implementation was 18 months, the maximum time was 48 months but three organizations reported that the implementation had taken 6 months” (Ingason, 2014)

The next figures demonstrate the time relativity of the perception of the participants in the implementation process and how much they imagined it might take vs what had been undergoing to implement the system.

Figure 1 Participants' perception of the time it took to implement the system, as compared to the planned time



Source: Ingason 2014

Further investigation was carried next as to know what type of method in leading on the implementation as a project was used, ‘‘ 29% said that the implementation was carried through by following an initial plan. Another 29% stated that the implementation was carried through by following an initial plan that had to be changed frequently. However, 33% of the participants stated that the implementation was carried through using continuous and regular communication between the relevant parties; there was no formal plan. In 10% of cases, the implementation was primarily in the hands of one person, namely the quality manager’’ (Ingason, Helgi Thor, 2014)

This finding is very important and shows how each company and quality manager executed the process on its own way, this tells us that there are no prescription or secret formula as long as you are being effective and efficient since it is all contextual on the size & the type of sector and timing for sure without taking into consideration the level of success of each of those methods.

The last finding was which factors contributed to make a successful implementation, it was shown by a scale from 0 to 8 and how much each factor was mentioned and it went as follows:

Figure 2 Overview of key success factors in the implementation, as indicated by the participants



Source: Helgi Thor Ingason 2014

We can notice that management participation has scored the higher factor in making the implementation more successful, which shows how critical this can be alongside with participation of the employees in the process in addition to good preparation and organization which grants the good going of the process and the rest goes down by order of repetition.

It is important to note that among the 21 organizations that were taken as a sample in this study were divided into categories, those who applied the implementation according to Project management principles and tools “ The average time for implementation in the case of these organizations was 13 months; in all cases, this was the time that had been planned for the implementation “ (Ingason, Helgi Thor, 2014), However for organizations which carried the implementation without project management tools and principles except for some “The average time for implementation for these organizations was 24 months and this was always a longer time than the organizations had expected “ (Helgi Thor Ingason, 2014)

In my opinion the results of this study gives us important insights on how implementation should be handled, and what are the tools and factors necessary to make it successful. For even if we apply and sought the implementation as any project which has a time limit and special outputs and that it is proven that those organizations which applied this way were more effective but it doesn't mean that they have the sustainability of that implementation which is something which ought not be neglected.

So overall this study showed us that there aren't an ultimate way to implement a quality management system, rather there are certain aspects that should be respected to get a decent process, such as the good organization which resulted in lesser internal costs represented by time spent in the process, and the implication of management and its support as well as the active participation of the employees is a key success factor. So it must be understood that project management can be very important when it comes to implementing a quality management system yet it must not be overused and must use it for good end, as Helgi puts it: "the standard should be practiced rather than by standardizing the practice.

We are fully aware that companies realized the importance of the quality management standards and their role and effectiveness toward implying continuous quality improvement, and today more than ever competition has reached its climax with the internationalization of markets and customer expectations are growing every day companies faced the dilemma to have unique minimum of quality, as also stated and highlighted by (Isuf Lushi, Ana Mane, Ilir Kapaj, Remzi Keco, 2016) in their article which talks about the benefits of implementing the ISO 9001:2015 as a road map to provide quality Products/ services and improve internal performance, they found after considerable research in the literature that there are 13 benefits consulted and covered by their research. Which are as follows : "Exports, Efficiency, Improvement in competitive position/competitive advantage, Improvement in systematization, Improved quality in product/service, Improved image, Improvements in employee results, Improved customer satisfaction, Improved relationships with suppliers, Improved relationships with authorities and other stakeholders, Market share, Profitability and Sales and sales growth" (Isuf Lushi, Ana Mane, Ilir Kapaj, Remzi Keco, 2016), and they found that there are three benefits are most analyzed by researchers which are: "improved efficiency, improved customer satisfaction and improvements in relations with employees" (Isuf Lushi, Ana Mane, Ilir Kapaj, Remzi Keco, 2016) and those three benefits cover sensitive elements in the organization as the brand image , internal vibes and more control over the processes, this doesn't mean that others are neglected or have less value, to go in more depth other authors disagreed and proposed to classify those benefits generated by the ISO 9001:2015, as in the case of Lee (1998) who classified them to three categories "benefits gained with respect to internal operations , benefits gained with respect to customer relations, benefits gained with respect to subcontractor relations" (Isuf Lushi, Ana Mane, Ilir Kapaj, Remzi Keco, 2016) whereas Casadesús, Jiménez and Heras (2001) classified them into internal and external benefits , and some other researchers as Naveh & Marcus (Isuf Lushi, Ana Mane, Ilir Kapaj, Remzi Keco, 2016) use the distinction of operational

and financial performance , on the first hand they used for example: defect rate, cost of quality as operational performance indicators and on the other hand they dwelled on market share, sales, and export growth for the financial part of the equation. So the clearest benefits are observed on the operational side with contrast to

This research paper covered also the debate of the relationship between the ISO 9001: 2015 implementation and any significant financial performance, and it tells us clearly as Isuf Lushi puts it “there is not such an unquestionable relationship between the standard and the financial results” (Isuf Lushi, Ana Mane,Illir Kapaj,Remzi Keco, 2016)

So the clearest benefits are observed on the operational side with contrast to the inconclusive financial ones.

One of the important findings as doing my research was Janis Priede’s article which explored the topic on how much quality management systems are important and a strategic tool to increase companies’ competitiveness, he elaborated on what he has found in the literature as the main reasons to implement a quality management system which are as follow (Priede, 2012)

- The existence of a well-defined document procedures improve outputs of the processes and make sure everyone got the instructions clear on how to execute tasks.
- Quality measurement helps top management to assess the current processes and plan for potential improvement.
- Procedures help to correct the defect whenever it occurs and how to do it.
- Defect rates decrease once the company understand and know the source of those defects and reduce them at an earlier point time
- Documented procedures are easier for new employees granting them efficiency in their launching
- Increasing market share allowing more growth and potential possibilities.
- Lower production costs and non-conforming products by analyzing costs and applying preventive actions, optimum cost will be reached.

As an effect to grasp what everything has been reviewed there are certain approaches which each company should be looking for as models of reference as Deming’s circle and which is the structure of the standard itself, which a logical wheel turning around endlessly to reach the desired objectives. From planning which is done in the strategic level to the execution on an operational level after providing the necessary resources for the success of the operations, there

must be a check for the obtained results to verify how effective the operation was, and was the planning's goals met or not, and to assess those results and acted upon them to enhance the operation continuously.

So to master the quality approach of implementing a quality management system each organization has to master certain aspects and tools to be able to analyze the situation which will allow it to find the suitable moment and provide the needed resources to exploit the opportunity, from the right style of communication and stressing on the valorization of the human capital to the company's understanding of the principles of quality and how to approach them one step at a time, and make them as the pillars and guiding light towards the capitalization of continuous improvement culture which should be the main focus and the essence of the approach, nevertheless quality implementation may seem at times non-rewarding or non-promising, and it may cost time resources and energy and have to pour investment to make it work, yet its consequences are worth the effort, they bring more opportunities to explore, more knowledge and becoming economically wise to assure the company's ability to survive and thrive in the market while ensuring its sustainability

## **Quality is not an act, it is a habit**

**Aristotle (384–322 BCE)**

### **Section 2: Conceptual framework**

#### **1 Introduction to quality**

In the new globalization era, management is changing because new needs are rising requiring more innovative tools to master the momentary management and satisfy current and future demands and in this way classical ways of management aren't that effective in facing today's challenges in business that's why since customer's requirements are developing exponentially new methods of delivering the products should be with the same pace of the requirements development. That's when we have to delve into the concept of quality.

##### **1.1 The concept of quality**

Quality concept has developed over the years shaped by the previous era's circumstances resulting in having different forms and using different tools to get different objectives, but before talking about its history we have to make sure we are all talking about the same understanding of the term. "However, in discussions in which the word quality is used, people

will differ in their viewpoint either because the word quality has more than one meaning or they have different perceptions of what the word means or because they are drawing conclusions from different premises or concepts”. (Hoyle, 2018) That’s why it is so important to clarify it at the start.

There exists a multitude of definitions from dictionary ones to the jargon of standards as ISO 9000, so we are going to expose some of them and addressing them in more light later on.

Freedom from deficiencies or defects (Juran) – The meaning used by those making a product or delivering a service.

Conformity to requirements (Crosby) – The meaning used by those designing a product or a service or assessing conformity.

Sustained satisfaction (Deming) – The meaning used by those in upper management using quality for competitive advantage.

The degree to which a set of inherent characteristics of an object fulfil is requirements (ISO 9000:2015) – The meaning used by those managing or assessing the achievement of quality.

So we can perceive that the definitions Varity depend on the background on use such as designing or making a products/service and on hierarchical level of vision and the management of quality internally as the ISO 9000:2015 indicates. But one shouldn’t limit himself to one perspective because quality as an objective can be linked to any organizational aspect such as: product, service, people, strategy, resources. Rather the context of use is a key point.

With that all being said we can observe the notion of relativity when it comes to defining quality, yet as a final conclusion when can say that it is related to the perceiver and his satisfaction toward that system or product’s quality level. “In the final analysis it is the customers who set the standards for quality and they do this by deciding which products to purchase and whom to buy them from”. (Hoyle, 2018)

## **1.2 Historical development of The Quality concept**

Quality is an old concept as the oldness of human existence, it developed with the primeval humans in rendering their lives more effective, and it resulted in using different tools or creating new laws or using different technics to enhance their current situation. Going back to the ancient civilization we can notice and witness the existence of the quality signs in building the pyramids for example which they have sustained all kind of external factors till this day “ Scientist argue

that the tools and measurement used in building the pyramids were so closely and professionally done that there had to be a systematic system for assuring the quality” (Liu, Development of quality management systems : how have disruptive technological innovations in quality management affected organisation, 2013). In addition to the findings on the Babylonian civilization & Hammurabi’s law which was so severe when it comes to building construction and death penalties awaited the constructor if a building falls. As perceived by historians the Chou’s constitution about public administration and governance, witnessing one of the most important findings is the first systematic organizational structure which is considered as “ as the first quality system in fundamental level “ (Liu, Development of Quality Management Systems: How Have Disruptive Technological Innovations in Quality Management Affected Organizations, 2013)

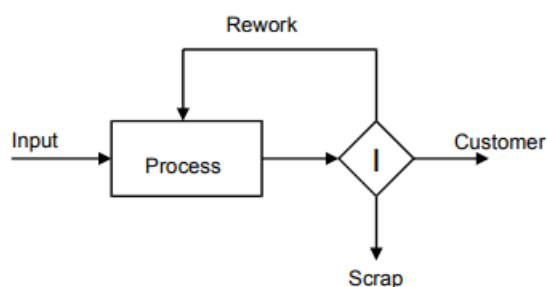
Alongside with the rising of ancient Greece civilization which contributed to quality in different fields such as Philosophy, art and justice system in addition to the Roman Empire and its contribution to construction of arms and tools “The Roman Empire was the first in establishing a structured construction system”

After highlighting the existence of quality in ancient civilizations (B.C), we can now reveal the after Jesus Christ era (AD), the craftsmanship era was the next age which lasted for so long (500-1500) which contributed to quality in various ways, in this era it was known that producers were the sellers at the same time and their clients were probably from the same geographical zone, since trading was limited by means of transportation and the notion of selling services were barely absent and more difficult, which creates a necessity for the product to sell itself by its inherent characteristics and quality so if a craftsman were to sell more it would be due to word to mouth advertising linked to his products quality and price to some extent , and it reached a more organized way to assess the works by “ the creation of guilds of craftsman developed the thinking further with established “masters” assessing candidates for membership” (Knowles, 2011) to assure the mastery of crafting thus product quality.

Quality standardization came to see light in the 12th century In Medieval Europe in the practice of hallmarking silver, so when a silver product was done making “it was tested at an assay office and if it met minimum standards of silver content, it was stamped with a hallmark” (Nancy R. Tague, 2005, page 19) and as a result “the highest skilled craftsman taught the apprentice to produce and assure quality” (Yang Liu, 2013, page 5).

The next important milestone in the development of quality was the first industrial revolution in the period from between (1760 -1840) with the transition from hand making to machines, with the use of steam and water power which led to the creation of factories and the increase of automation, this remarkable change conducted the separation of jobs and specialization in work, this was one of Taylor's contributions in the late 1880s and early 1900s which is called Taylorism, The idea behind it was to divide the planning from production , so specialized agents are responsible for planning and craftsman would be responsible for production and a new group who was capable of differentiate between conforming and non-conforming items so they were assigned the role of assuring the quality of products. So basically the concept of inspection was to either push the product forward or return it to manufacturing to get reworked and considered as scrapped as the next figure shows:

Figure 3 the introduction of inspection to the business process



Source: Graeme Knowles, 2011

The effect of this new introduction was the shift of responsibility from the individual craftsman to the inspectors who in an autonomic and separated way, Nevertheless this creation of a barrier which is the quality inspection between production and management ‘ ‘ the last vestiges of the worker self-respect are removed when management discuss production problems with inspectors but not the workers who are part of the process” (Graeme Knowles, Quality management, page 14), so it is important to highlight that scientific management dissociated humans from the work they are doing because they are told to apply work instruction more than to react to the process as humans thus not participating in detecting anomalies and creating organization success, however even if Taylor's system met the needs of his time it have to be

developed more in the future. That's why another era arise since the previous system wasn't that effective and it lets products go to inspecting phase even if they are defective and this costs firms a lot of time and money, and there is a need that the defect need to be noticed earlier in the production line, and that's how quality controls emerged, and it was mainly to deliver more consistency and economies more time and energy.

The next progress point of quality was process control method which is based on statistics, it was initiated by Walter Shewhart, and his main goal was to find the variation of processes and search for its cause to eliminate it thus controlling it more and mastering it.

His methods were used as well in the Second World War, the US army In order to stay effective in war they adopted The SCP known as statistical process control to assure the quality of ammunition, guns etc.

And during this period arise several organizations which have an interest in discussing and contribute into the quality field and improve it, which are the American society for quality, International Organization for Standardization and the Japanese Union for Scientist and Engineering. All of those organizations were created barely in the same time frame owing to the awareness and the results that quality had showed in earlier times.

In the years after the second world war people started recovering from war losses, United states citizens were able to consume in a first time as it has never happened before, Meanwhile japan was destroyed and trying to rebuild itself and concentrating on establishing good basis for its economy, in those circumstances a consultant named Edward Deming was invited to apply his statistical methods which made Japanese companies know great growth and success' 'he has been referred to as the father of the third industrial revolution'' (Graeme Knowles, Quality management, page 15). Furthermore he published two major quality inventions the first is the PDCA ( plan, do , check, act ) cycle known as the Deming wheel which is about 4 basic steps to guarantee the continuous improvement, the second was the 14 principle of management.

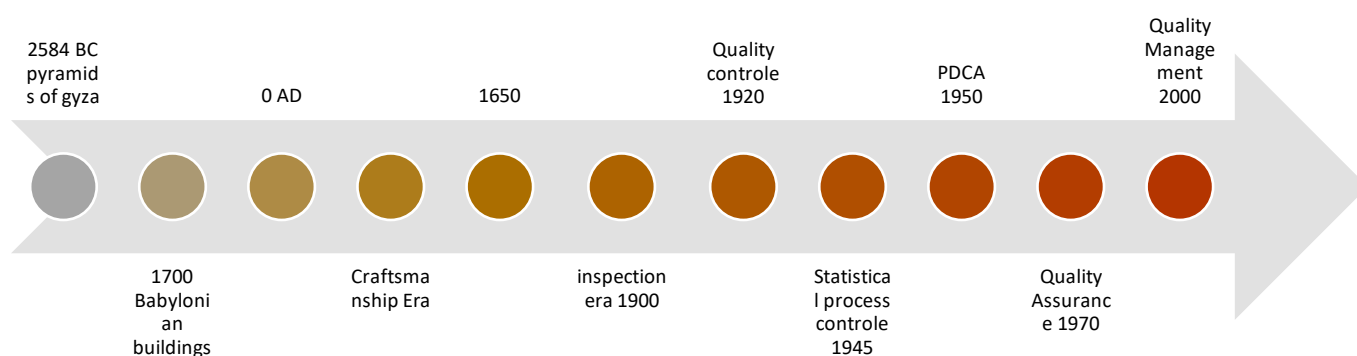
Without Forgetting the contributions of several other references in quality such as Juran which focused his efforts on ' ' senior management who he believed to be responsible for majority of quality problems "(Graeme Knowles, Quality management, page 15). Crosby which is considered to be the Quality guru and he promotes the concept of ' 'Right first time''.

The last and not least Milestone is the apparition of standards, the Japanese company's outperformed the American ones because the inclination of the latter into quality, and a need to standardization was felt and its vulgarization with the worldwide economic trades.

And happily it did not stop there, there has been remarkable mega initiatives such as six sigma and lean management, the two methods show great promising results in reducing waste and better process control, even though they have been around for a good time but their pre-eminence is obvious in modern business.

All this chronological development allowed more quality mastery which contributed to better life quality around the world, and the next figure display the chronological order of it better:

Figure 4 the historical development of quality management



Elaborated by ourselves depending on research

### 1.3 Quality of services:

The global market is being shaped everyday by new factors, laws, standards, etc. but the roots of competitiveness are still orbiting around efficiency, innovation, effectiveness, but quality seems like it is one of the most reliable ways to achieve competitive advantage since the latter must be renewed now and then, and quality management has a core principal which simulate the continuous improvement.

Quality as a concept is a little bit unique because it is hard to measure the quality of a product or a service less or more as discussed earlier, and the concept of quality of services is considered

to have an elusive concept that is difficult to define and measure, But we can define it as ‘‘a comprehensive customer evaluation of a particular service and the extent to which it meets their expectations and provides satisfaction’’ (Miklós Pakurár, 2019), service quality is more difficult to be assessed by the costumers than product quality because of the lack of tangible evidence associated with services so the definition isn’t a static one it differs from one person to another , and that is owing to its properties which are heterogeneous state intangible nature, thus making the level of influence of subjectivity interfere considerably in assessing the level of its quality since it relies mainly on the user experience’s judgement.

Organizations have become conscious that enhancing service quality is crucial to their survival (Sheng-Hshiang Tsaur, 2014) especially organizations that exercise their core business processes in the services field, because it is related to another notion which is customer satisfaction, so the costumer will be the judge of the organization’s processes and outputs and he will evaluate the perceived value depending on what he expected beforehand , so ‘‘Service quality can be viewed as a measure of how well the delivered service level matches consumer expectations’’ (Bojanic, 2008).

Some studies have shown that quality can be considered as factor of success for organization such as the research about the B2B services buying (Bieriko and Chmiela) ‘‘proved that the quality is the first factor that is mentioned when business organization buys services (price was found as less important)’’ (Urban, 2010)

And since industries have known immense augmentation, now modern economy is more inclining toward services because they are easier to expand and they play an important role in modern economy. Despite services being a large segment of the economy, there aren’t many models dealing the topic.

So basically the service quality is the comparison between costumer’s expectation and the perceived service delivered by the organization, and in endeavor to measure quality of services (Parasuraman, Zeithaml and Berry 1988) has developed a model composed of 10 determinants of service quality but they have been condescend later on into 5 dimensions due to overlapping between them, and they are stated as follows’’: (Bojanic, 2008, p. 31)

1. Tangibles: physical facilities equipment, and appearance of personnel
2. Reliability: ability to perform the promised service
3. Responsiveness: Willingness to help customers and provide prompt service

4. Assurance: Knowledge and courtesy of employees and their ability to inspire trust and confidence

5. Empathy: Caring individualized attention the firm provides its customers

## **2 standardisation and transportation bodies:**

### **2.1 Standardization:**

Standards (norms) are a direct result of standardization, the word norm is originally Latin which means “rule“ historically norms started to appear in technical fields such as electricity and metallurgy then it has expanded to surpass only the technical part, and it encompass all types of domains to products services.

Standardization has been a crucial factor contributing to the development of industries, even though it was created to “foster their interchangeability so as to facilitate mass production and the repair and maintenance of products and service” (Heras-Saizarbitoria, 2018) and since it has expended to include different fields and it became a factor which strengthen innovation within countries and internationally on different levels, for several reasons.

There exists several definitions of standardization, for instance the international organization of standardization defines it as: “Document established by consensus and approved by a recognized organization that provides, for common and repeated use, rules, guidelines or characteristics, for activities or their results aimed at achievement of the optimum degree of order in a given context” (ping, 2011) and the Algerian legislator has defined according to the law N°16-04 of 14 Ramadan corresponding to June 19, 2016 relating to standardization : “the activity of establishing, in the face of real or potential problems, arrangements for common and repeated use aimed at obtaining the optimum degree of order in a given context”

The establishment is done by a standardization organism but it is discussed before its release by all the interested parties and partners of the subject in consideration as the next figure demonstrates and simplify:

Figure 5 Interaction between elaboration of norms and interested parties



Source: elaborated by ourselves

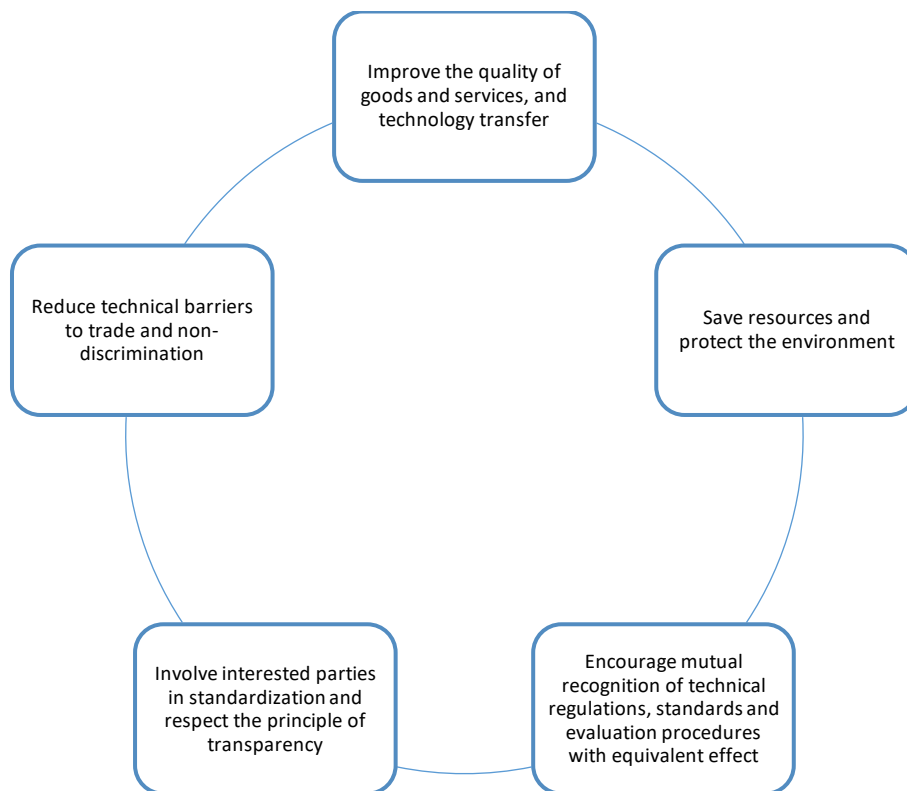
So the purpose of normalization is to supply reference documents containing solutions to different problems from technical to managerial ones, concerning various points such as products, services, management systems to render business interaction more favorable between interested parties. And the willingness to adopt those standards on general is voluntarily. However, a standard can be made compulsory by a regulatory text (order or decree) established by an authorized institution.

There exists several typology for standards but more commonly there are four types of norms which are (CEN-CENELEC, 2021):

1. **Fundamental standards** : which concern terminology, conventions, signs and symbols, etc.;
2. **Test methods and analysis standards** : which measure characteristics such as temperature and chemical composition;
3. **Specification standards** : which define characteristics of a product (product standards), or a service (service activities standards) and their performance thresholds such as fitness for use, interface and interoperability, health and safety, environmental protection, etc.;
4. **Organization standards**: which describe the functions and relationships of a company, as well as elements such as quality management and assurance, maintenance, value analysis, logistics, project or system management, production management, etc.

Standardization can be considered as a support for the achievement of the economical, ecological and social goals which can lead to economic growth , life quality and the realization of sustainable development, and it has other objectives as shown down below :

Figure 6 Objectives of Standardization



Source: Elaborated by ourselves

## 2.2 The international organization of standardization. (ISO):

As we have exposed earlier in the development of the quality concept through history, there has been a turning point when practitioners and professionals sensed the need to organize the international exchanges and that was by creating the international organization of standardization, Today its standards are barely accepted all around the globe they contributed amazingly in the international exchange, enhance quality in different aspects and way more than that.

The ISO word is derived from the Greek word which means “Equal” Meaning to use alike standards worldwide, it was formed in 1947 as a non-governmental organization in order to accompany organizations and companies to reach a good the level of quality internally in terms of managing or in delivering products or services. ISO consists of about 165 countries as members although it keeps growing and these member nations are mostly represented in ISO by their national standards organizations as IANOR in the case of Algeria which will be discusses next.

ISO’s main mission is to «bring together experts to share knowledge and develop voluntary, consensus-based standards” (standardization I. o., 2021) to provide new more practical

solutions and respond to global challenges in different fields with its “797 technical committees and subcommittees to take care of standards development” (standardization I. o., 2021) and to remove technical barriers of exchange.

The first standard published was (Standard reference temperature for industrial length measurements) and it dates back to 1946 it was called a recommendation at the time, then it began to publish journals to introduce itself and the technical committees as well.

Today ISO has almost 23934 standard and it has successfully participated in the all aspects of technology and manufacturing, shortly we can stress the objectives the organization hence (organization, 2019):

- Make products Compatible so they can fit and work well with each other.
- Identify safety issues of products and services.
- Share good ideas and solutions and best management practices.

Three bodies are responsible for the planning, development and adoption of international standards which are: ISO which is responsible for all sectors except electro technical which is the responsibility of IEC (International Electro technical Committee) and telecommunications are managed by ITU (International Telecommunication Union).

The ISO has one main deliverable which is the international standards, as well as a secondary one IWA International Workshop Agreement which is an instrument developed by market players and other stakeholders aiming at getting a recognized ISO document without going through the formal process of standardization.

The outbreak of Coronavirus at the end of 2019 and the resultant global pandemic has had an impact on most activities around the globe, and the ISO has showed great resilience and reactivity when it published a standard about the work conditions during the covid19 pandemic, under the appellation (occupational health and safety management — General guidelines for safe working during the COVID-19 pandemic, ISO/PAS 45005) in a goal to Maintain business continuity and sustain the economical downfall.

The ISO has always been looking forward to progress, and since we spoke about its present state and history we should at least get a little insight of its future strategy is and how it is going to be deployed, the ISO vision for the scope of 2030 is “Making lives easier, safer and better”, and to realize this vision they are leaning on their goals which are represented by the next figure:

Figure 7 ISO Goals for 2030



Source: ISO Strategy for 2030

Those goals are linked with the organization's six priorities, so they tend to expand the utilization of the standards with easy access for everyone worldwide, and deliver standards to markets when needed as well as seizing potential opportunities when it comes to meeting global needs, for the second goal it is mandatory to highlight the importance of the standards and innovating in every update, and for the last goal it is crucial to strengthen its members and its capacity as well as focusing on inclusivity of all stakeholders and diversity in their system. (ISO, ISO strategy 2030, 2021)

Now that we have presented the ISO briefly now we can move to its representative in Algeria and discover it in the next section.

### **2.3 The National organization of standardization**

Since that the standardization in the world have been developing Algeria had to follow the steps of more developed countries, and participate in the international economic circle even though the standardization has a voluntarily aspect but slower standards are gradually imposed and their adopting has become a necessity, and that's where IANOR interferes on the national level.

IANOR is the national organism of standardization according by the Law n ° 16-04 corresponding to June 19, 2016 amending and supplementing Law n ° 04-04 relating to standardization.

It has been created by Executive Decree n ° 98-69 of February 21, 1998 amended and supplemented by Executive Decree Executive Decree n ° 11-20 of January 25, 2011, it is labelled as a public institution with industrial and commercial nature.

It is a member of the ISO & IEC (international electronic committee) and it is the official exclusive representative of ISO in Algeria, it has set up an experienced multidisciplinary team around four major professions at the service of companies and communities mainly to:

- Develop the referential requested by economic players :

That's by keep economic actors informed and help them to develop on the commercial and strategic level, and providing them support services and companion.

- Help the economical actors to access normative referential :

The organism conceive products and services which are of high importance to economical actors calling them to use latest techniques in their fields.

- Help the actors to apply normative referential :

Through training and offering auditing and advising services as well as communicating latest versions of referential and helping them to adopt them.

- Propose a certification offer :

The certification has become one of the main marketing tools lately, with the rise of costumers' consciousness, and once an organism decide to follow a standard IANOR offers product certification (TEDJ brand) based on Algerian standards (A.S).

The previous missions shows the important role the organism of standardization is playing as a bridge between international organizations as ISO & the World Trade Organization and the local economic sphere and as a regulator and advisor to participate in the promotion of progress and competitiveness in Algeria.

## **2.4 Urban transportation**

Transportation has passed through history through several steps depending on the era's technological progress, and we are going to introduce the biggest milestones of urban transportation in history.

### **2.4.1 Evolution of Urban transportation**

In ancient civilizations humans used animals such the horses as a mean of transportation, still it meant that dependency on animals should be altered with a better solution, so the first invention in history was the wheel because it has impacted future civilizations it was noticed the first time by historians in the 3500BC in Mesopotamia which is an ancient civilization located in western Asia, but that was just the start since they invented the cart later on which is a “ two wheeled cart pulled by a horse” (Herbst, 2006), the chariots saw success and fast spread all across the world in Europe and china Rome and Greece.

During the roman civilization they started to build roads and they established “the Via Apia which is the apian way and it is considered to be the first highway in history it ran 261Km from Rome to Taranto, and then to the whole world that's why there is a saying “All roads lead to Rome” (Herbst, 2006)

After delving in the ancient history, we come to the Middle Ages in Europe where the four wheeled coaches has been built in hungary in 1550, it was more comfortable than the previous one, it is basically two horses pulling the coach , mainly they were used for transportation and mail delivery.

With the rise of innovate means of transportation and the industrial revolution, the first produced car with a gas engine was made in 1814 in Germany by Karl Benz and it continued to spread in America, and today we have whole roads occupied by different cars running on different types of fuel.

And this over usage of cars had led to air pollution which reduced air quality, so humans were forced again to innovate to come up with a better alternative, and they invented the green cars to assure more environmental sustainability and better life quality.

### **2.4.2 Transportation in the modern world.**

As it is known that urban transportation has many means if we divide them by rail infrastructures and road infrastructure so the first has many ways as the metro, tram way and train and for the road one there are motorcycles and bikes plus cars and buses. And the same means can be divided by aspect of usage as personal and public. The roads fleets with millions

of hybrid cars & electric bicycles, “Vehicles driven by artificial intelligence is no longer fiction” (H.E. Abdullah Al Maeeni, 2020) as Tesla cars and the effect of internet of things is manifesting itself obviously with the rise of artificial intelligence and that would affect and include all types of transportations.

Nowadays, over half of the global population (55%) resides in urban centers, and, by 2050, this percentage is projected to increase by 68%” (Dimitra Tarasi, 2021) and as that population growth is expanding, demand for more infrastructures are increasing in return, that’s why those means of transportation has to satisfy the demands of citizens and connect a city and between other cities and make their life more easier with respect to some dimensions as: availability of some those means to each individual and their affordability depending on the Costs of monthly transport as percentage of average income as well as efficiency leaning on time of moving from a place to another and the waiting times, convenience which is reflected mainly by comfort of the travel and their closeness to other types of transportation and sustainability finally to ensure the security of travelers and the environmental effects of those means toward nature.

There are several characteristics of urban transportation in today’s world we can mention congestion which is so prevalent in large urban agglomerations, and public transport inadequacy which is mainly due to failure at planning for rush hours and availability in relation to demand, as well as parking difficulty which is caused by loss and shrinking of public spaces, in addition to pollution fuel consumption and Co2 emissions which affects our ecosystem very negatively, it was noted that transportation was responsible for 24% of direct CO2 emissions from fuel combustion in 2019 (H.E. Abdullah Al Maeeni, 2020) and finally accidents , the roads are crowded and it leads drivers to hasten due to delays caused by congestion (Rodrigue, 2020).

As it is hard for the governments to ensure affordable transportation to its citizens, private companies started to innovate by giving offers as car sharing and carpooling as well as ride hailing ( called also peer to peer transportation) which is one of the most successful yet one of most rapidly growing forms of shared-mobility services all across the world. It is mainly as the traditional taxi services serving passengers to urban trips but more costume to passenger’s requests through a platform (mobile app or website), with enhanced trips conditions to reservation service and online payment & dynamic prices and availability plus information on the road state thanks to the GPS technology in smartphones which guarantees a fast trip, all those factors made it a success.

It has responded to a need positively and contributed in facilitating transportation across the world, and creating new jobs, yet it has some negative effects as increase traffic congestion and greenhouse emissions as well as competing with active transportation systems and public transportation.

There is a study that has discussed behavior of urban passengers in choosing the travel mode in the field of ride-hailing services alongside other modes of urban transportation in the US and according to the researchers (Rayle et al., 2016) ride hailing is a hidden demand in urban transportation and its users are younger more educated and have above-average incomes (Rezaei, 2021). And it turned out that clients of the car hailing services chose the former due to two factors which are safety and cost as the main reasons for deciding to trip via ride-hailing.

Despite the convergent opinions about the ride hailing services, it is mandatory to stress the role those services played in the last decades and how they affected urban mobility positively, nevertheless they need to be aware of their shortcomings and try to innovate more to respond to recent socioecological problems with more smart mobility and practical solutions and collaborate with the state to balance the strategy of urban transportation plan for the future to improve quality of life of its citizens.

## **2.5 Norms and referential applicable to transportation services**

As cities are expanding, travel demand is escalating, and consequently, urban transportation planning and management become a huge challenge. The role of International Standards and harmonized technical regulations becomes undeniable in the face of recent challenges, and the standardization community has been supporting progress with respect to have a sustainable future and address the population's need. In such a context of continuous development standardization organizations need to produce adequate standards for good practices that provide the transportation sector with practical solutions.

In this momentum ISO in 2020 has issued two standards to help the world use less energy and reduce the impact of mobility and transport on the environment “ (H.E. Abdullah Al Maeeni, 2020) The first one is the ISO 37161 entitled smart community infrastructures –guidance on smart transportation for energy saving in transportation services and the ISO 37162 Smart community infrastructures, smart transportation for newly developing areas. Both standards are in the publication in their life cycle.

Both standards serves specific ends, the first aims at “describing what smart transportation for energy saving targets and how it works in transportation systems according to the general

guidelines on smart transportation of ISO 37154 and it identifies specific ways to save energy consumed in transportation operation and services” (ISO, ISO 37161, 2020), the second one specifies a procedure to arrange smart transportation for newly developing areas and linking them with other around cities” (ISO, ISO 37162, 2020)

Both the standards contribute and realize eight SDG’s (Sustainable development goals) which are established by the United Nations as general goals and guidelines, and they are as follow” (ISO, Iso standard, 2021):

- decent work and economical work
- Industry innovation and infrastructure
- Affordable and clean energy
- Life on land
- Climate action
- Good health and well being
- Sustainable cities and communities
- Reduced inequalities

We are going to expose a list of some of the standards, referential applicable to transportation services globally and nationally in the next tables (the list is not exhaustive):

Table 3 A List of Standards applicable to transportation

<b>Domain</b>	<b>Reference</b>	<b>Title</b>	<b>Technical committee</b>	<b>Stage</b>
Road vehicles	ISO 611:2003	Road vehicles Braking of automotive vehicles and their trailers :Vocabulary	ISO/TC 22	Review
Road vehicles	ISO 3006:2015	Passenger car wheels for road use : Test methods	ISO/TC 22	Review
Road vehicles	ISO 2958:1973	Exterior protection for passenger cars	ISO/TC 22	Review
Road traffic safety management systems	ISO 39001:2012	Requirements with guidance for use	ISO/TC 241	Review
Road Traffic safety	ISO 39002:2020	Good practices for implementing commuting safety management	ISO/TC 241	Publication

Intelligent transport systems	ISO 4426:2021	Interface Protocol and Message Set Definition between Traffic Signal Controllers and Detectors	ISO/TC 204	Review
Intelligent transport systems	ISO/TR 14806:2013	Public transport requirements for the use of payment applications for fare media	ISO/TC 204	Publication
Electronic fee collection	ISO 12855:2015	Information exchange between service provision and toll charging	ISO/TC 204	Review
Intelligent transport systems	ISO/DIS 5345	Identifiers — Processes	ISO/TC 204	Enquiry
Intelligent transport systems	ISO 14296:2016	Extension of map database specifications for applications of cooperative ITS	ISO/TC 204	Review
Intelligent transport systems	ISO17267:2009	Navigation systems — Application programming interface	ISO/TC 204	Review
Smart community infrastructures	ISO 37167:2021	Smart transportation for energy saving operation by intentionally driving slowly	ISO/TC 268	Publication
Smart community infrastructures	ISO 37154:2017	Best practice guidelines for transportation	ISO/TC 268	Publication
Smart community infrastructures	ISO 37165:2020	Guidance on smart transportation with the use of digitally processed payment (d-payment)	ISO/TC 268	Publication

Source: Established by Us depending on [www.iso.org](http://www.iso.org) (consulted on 20 July 2021)

Since we exposed some of the norms related to transportation globally now we change the scope to national context as the next table shows:

Table 4 A List of National Standards related to transportation

Reference	Title	Technical committee	Source
NA 13617	Logistics and service transport - Public passenger transport - Definition of quality of service, objective and measures.	CTN 58	EN 13816 : 2002
NA 13633	Public passenger transport - Basic requirements and recommendations for quality measurement systems carried out	CTN 58	EN 15140 :2006
NA ISO 24014-1 (NA 13704)	Public transport - Interoperable fare management system - Part 1: Architecture	CTN 58	ISO 24014-1:2015
NA 13660	Transport services - Logistics - Glossary of terms.	CTN 58	EN 14943: 2005

Source: Elaborated by ourselves depending on <http://www.ianor.dz> (Consulted on 6 July 2021)

We can notice the lack of Algerian standards when it comes to transportation, and we conclude that more emphasis and bigger importance should be directed toward this sector due to its sensitivity in the flourishing and advancement.

### **2.6 The Certification process:**

Certification has become one of the main marketing tools recently since costumers are more conscious concerning products and services delivery, that's why companies tend to get certified to show their integrity and transparency and prove to their clients that they are worthy in an ever evolving competitive environment.

Before delving into the process of certification it is important to note the different types of certification:

- Product
- Service
- System (organization)
- Process
- Persons

According to IANOR the process of certification is an activity whereby a third party gives written assurance that a product (a process/ service) meets specified requirements of a specific standard.

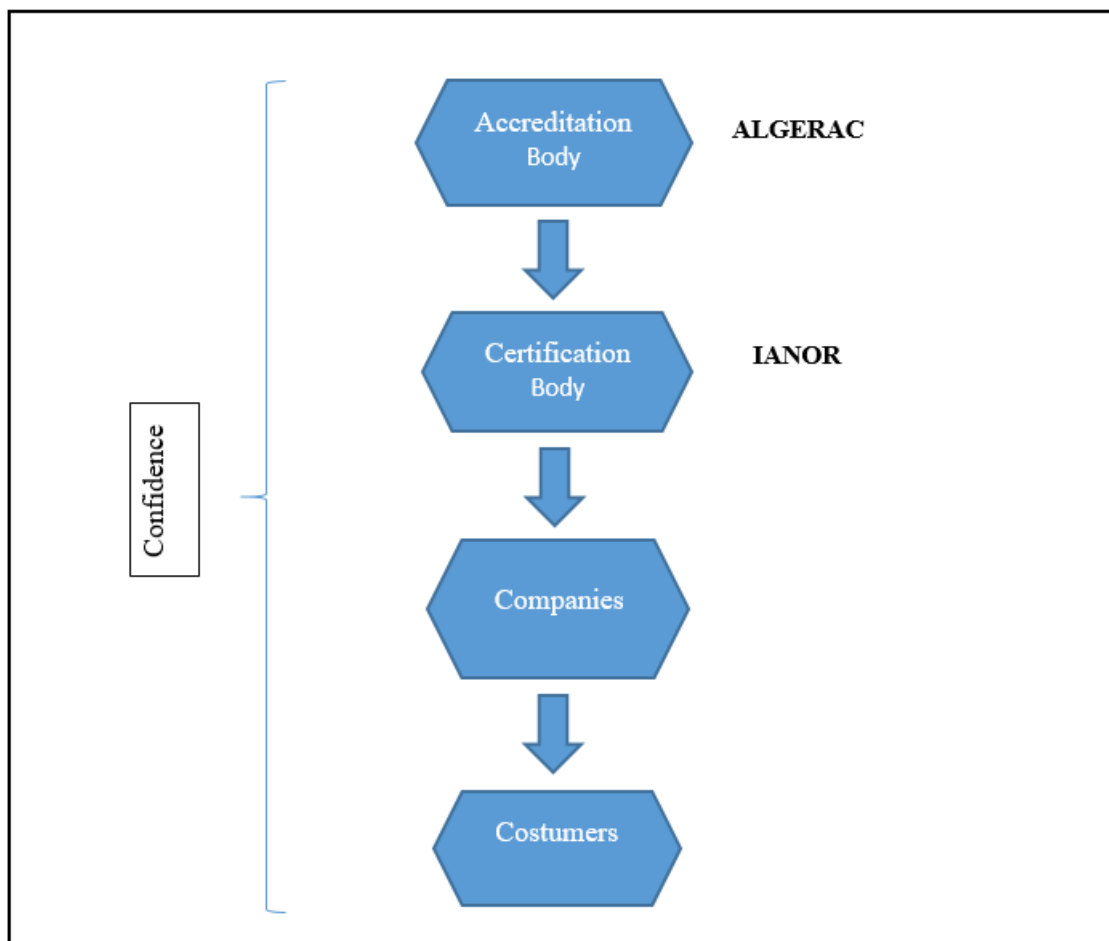
To understand the certification and its functions in real world, as we have known previously that ISO is the international organization for releasing standards and it has different members across the world, IANOR is its representative in Algeria, but we have to shed light on another concept which Accreditation.

Accreditation is defined as “an evaluation, by an accreditation body recognized by its peers, which certifies that conformity assessment bodies have the technical and organizational competence to perform tests, analyzes, inspection and certification activities” (ALGERAC, s.d.)

The organism of accreditation in Algeria is ALGERAC, and they use different referential depending on the sector and nature of the activity to assess the technical and organizational capacity and competence of certification bodies. Those two activities are both equally important and they operate in a complementary way with integrity and impartiality.

We will be presenting in the next figure the relation between accreditation bodies and certification bodies and their interaction with the companies and costumers.

Figure 8 chain relation between activities of certification and accreditation and costumers &amp; companies

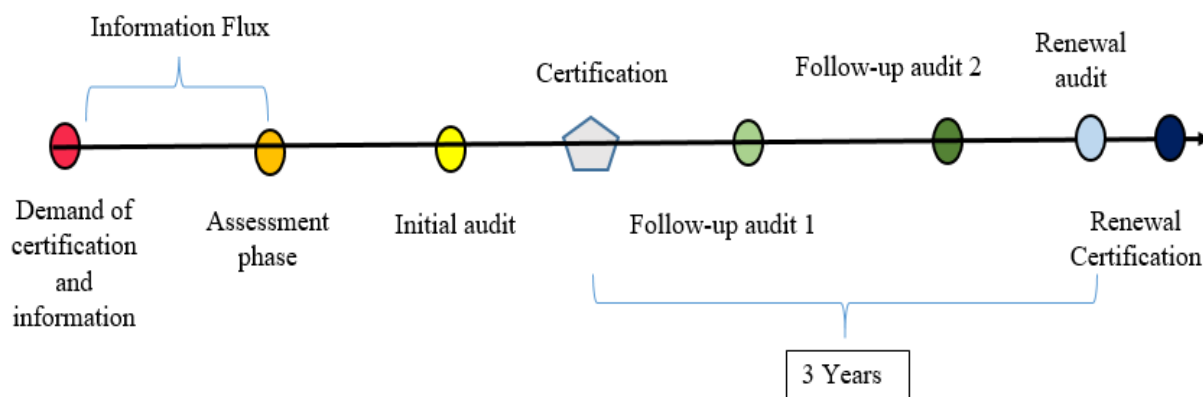


Source: Elaborated by ourselves

Now that we have grasped the basics, and since we are dealing with an ISO 9001 Implementation we are going to present its process of certification, it is based on annual audits on a three years basis after getting the certificate.

An ISO 9001 certification process duration differs from one company to another due to variables at play such as size of the company and domain of activity as well as the implication and motivation of its employees and the culture of the company, all those factors affect the period, and the next figure is going to be an explanatory example of the certification process:

Figure 9 The certification process



Source: elaborated by ourselves

After going through the challenges of modern transportation and how the standardization community have contributed in transportation and their plans for a more sustainable future, now we can fully grasp the current context of standardization nationally and globally, which will allow us to move to exploring the ISO 9001:V2015 in further detail in the next section.

### 3 Introduction to the ISO 9001

ISO 9001 is one of the most known international standards for quality management systems, a lot of companies and organizations rely on it as a compass to enhance their performance and to get more clients satisfactions as well as to get more conformity in delivering products and services and to be agile and prove more efficiency in managing the available resources.

But the Previous standard doesn't operate alone, but needs the ISO 9000 family, that's why we are going to be exposing the different complementary aspect of those standards and their relation to the discussed standard.

#### 3.1 Family of the ISO 9000

The ISO 9000 has series of standards which works in harmonious way to achieve their ends, and they form a basis for establishing effective and efficient quality management systems.

This section of standardization is the responsibility of the technical committee ISO/TC 176, by developing and maintaining the ISO 9000 family. Great results can be obtained by using the entire family of standards in an integrated manner. And the family consist mainly of 4 standards as follows:

- **ISO 9000: Quality management system (Basics and vocabulary) :**

This standard provide fundamental concepts, principles and vocabulary to use for quality management systems, the standard also describes concepts and principles of quality management which are universally applicable, it aims at giving assistance to related standards and fully clarify the basics of the field, its latest version was published in 2015.

- **ISO 9001: Quality management systems (Requirements):**

This standard is a set of requirements to establish a quality management system and maintain it, the last version was published in 2015 and it is the fourth in the series and it was updated to meet current needs of organizations in different sectors. It aims to bring the assurance of product quality and increase customer satisfaction.

- **ISO 9004: Quality management system (guidelines for improving performance):**

This standard is focused on giving guidelines to improve the performances of quality management systems and reach sustainability & improving the efficiency and effectiveness, the latest version of the standard was released in 2018.

### **3.2 History of the ISO 9001:**

Now that we are aware of the ISO 9000 family, we are going to delve deep into the history of development of the standard ISO 9001.

We must acknowledge first that the standard requirements are generic which means general and must be carefully interpreted to suits the organization's context. The first ISO 9000 series from the international quality management standards were published in 1987, with a goal to reduce exchange barriers and facilitate international trade and to create assurance that products meets the expressed and hidden needs of customers.

Still it has been ever since revised and got republished several times to guarantee the consistency with the evolution of the socio-economic context, the standard has been revised and republished in 1994 with “placing emphasis on product assurance using preventive actions, instead of just checking the final product it also required companies to comply with documented procedures – recognizing the trend to manage quality by control rather than assurance.” (BSI, 2017)

For the 2000 version it placed the concept of process management at the heart of the standard (Fahmi abu Al-Rub, 2020) known later as process approach, it marked a radical change

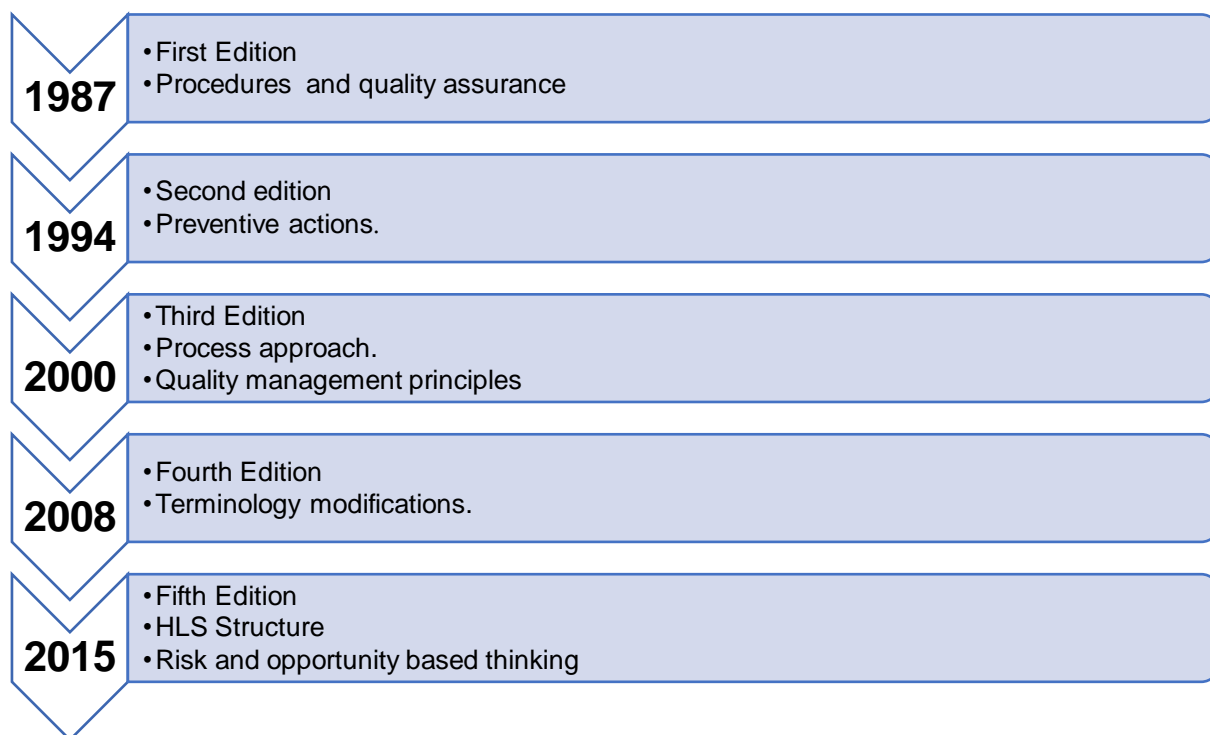
compared to previous versions and it stressed to understand the clients requirements to design the processes on that basis and track customer satisfaction, it introduced as well eight core quality management principles.

The 2008 version brought light into the previous versions requirements and explained in more depth what each meant, so there isn't any radical changes noticed.

The 2015 version brought some new updates such as integration of new requirements in addition to take into consideration the based risks and opportunities thinking in implementing the quality management system, “and the addiction of services (ISO, 2015) and some changing in vocabulary, and the biggest change was the structure, with “the introduction of high level structure which allows integration with other ISO management standard thanks to a common structure” (Fahmi abu Al-Rub, 2020)

Since we have presented the history of the standard, it is better to illustrate it for better clarity of the historical development.

Figure 10 Development of the ISO 9001



Source: elaborated by ourselves

### 3.3 Structure of the standard:

The standard's last version has a structure of 10 chapters, divided by sub chapters, each tackles an aspect of the organization and has several requirements, the structure of standard is intended to provide a coherent presentation of requirements, rather than a model for documenting an organization's policies, objectives and processes.

Most of the recent Quality Management standards have common elements and adopt the common structure HLS (High level structure) which adapts the cycle of continuous improvement PDCA (Plan, Do, Check, Act), this was intended to simplify the integration of other complementary standards with this one and to facilitate their reading and interpretation by users. The PDCA cycle can be applied to all processes and to the quality management system as a whole.

The PDCA cycle can be shortly described as (ISO, 2015):

- **Plan:** establish the objectives of the system and its processes, and the resources needed to deliver results in accordance with customers' requirements and the organization's policies, and identify and address risks and opportunities.
- **Do:** implement what was planned.
- **Check :** monitor and (where applicable) measure processes and the resulting products and services against policies, objectives, requirements and planned activities, and report the results
- **Act:** take actions to improve performance, as necessary.

The standard is composed of 10 chapters, and have 309 requirement divided on 7 chapters and the chapter are as follows (ISO, 2015):

- Chapter 4 :Context of the organization
- Chapter 5: Leadership
- Chapter 6: Planning
- Chapter 7 : support
- Chapter 8 : Operation
- Chapter 9 : Performance evaluation
- Chapter 10: Continuous improvement.

### 3.4 Principles of the quality management according to ISO 9001 V 2015.

The international standard ISO 9001:2015 is founded on certain principles, and those principles has been a guide to so many companies to master their quality management systems, and help with performance improvement, “They were developed and updated by international experts of ISO/TC 176, which is responsible for developing and maintaining ISO’s quality management standards” (ISO, Quality management systems, 2015), we are going to expose those principles in some details and explain their pertinence and utility and the rationale behind their existence and their given importance.

It is important to note their order is not due to their importance in any way, that is why we established a table to expose the rationale and benefits of each principle that can be found in annex A (Table16).

So applying quality principles in the company can contribute in great way to its results, “those principles contain well-harmonized and best possible solutions from present managerial theory and practice. They are defined to act jointly, which in essence means that harmoniously, in synchrony and synergistically” (Luburić, 2015) so those principles were translated into requirements and guidelines ISO 9001:2015 while assuring the methodological structure to apply those principles will lead to establishing a roadmap for sustainable success.

### **3.5 Benefits and barriers of the standard implementation**

Since we have introduced and explained in depth some of the core concepts of the standard it is time to also highlight and expose some benefits and barriers of the standard. So there are some elements which reduce the possibility of successful implementation, “the literature classifies the most common barriers in two ways: the barriers related to leadership and those related to the engagement of people” (Marcos Sanchez-Lizarraga, 2020)

The first one carries problems such as lack of communication and misunderstanding of the standard’s requirements, financial issues and absence of strategic thinking & lack of a continuous improvement focus , while the second barrier lead to lack of motivation and cooperation , resistance to change as well , insufficient training and resistance to change. (Marcos Sanchez-Lizarraga, 2020).

Another important barrier reported by researchers is the time needed for implementation, when it comes to companies with limited resources and to a short period, some researchers add that the paper work bureaucracy within the business can be a hurdle to the implementation.

For the benefits that follow the implementation are wide we are going to mention some: an increased improvement to the business' quality system and productivity, additionally some authors described how the ISO 9001 standard improves the speed of services and reduces customer complaints related to services, as acquiring wide competitive characteristics which is reflected by a larger margin of profits and increased market share and reduction of waste" in addition to the reduction of defective products & improvement of internal communication" (D. Aggelogiannopoulos, 2006).

So with that being said each company must take hold of what its priorities are and take into consideration what constraints it may have to face, by seizing the appropriate possible opportunities and transform them into benefits for the company, and with assistance of knowledge management it would be able to control and anticipate some of the hurdles along its way and enhance the implementation process to get results-Oriented Approach which leads to greater efficiency and effectiveness.

#### **4 The quality Management system**

The quality management system is considered one of the most important management tools to increase the competitiveness and enhance brand image, that's why we have created this section to bring to light to its different aspects.

##### **4.1 Definition of the quality management system.**

Quality management systems are dynamic systems that develop over the course of time and can be built on the basis of requirements of a reference or a standard or a model, yet One of the most popular quality management systems in the world is ISO 9001 standard. In addition, it is defined by ISO 9000:2015 as "a set of activities by which the organization identifies its objectives and determines the process and resources required to achieve desired results, so it is a set of interrelated or interacting elements of an organization, aimed to establish policies, objectives and processes in order to accomplish those objectives. These elements include the structure, roles and responsibilities, planning, operation of the organization, policies, practices, rules, convictions objectives and processes to reach these objectives" (ISO, 2015) and it is defined by American association of quality as : "The application of a quality management system in managing a process to achieve maximum customer satisfaction at the lowest overall cost to the organization while continuing to improve the process" (Liu, Yang, 2013)

Since that we have given the theoretical definition it is better to give illustrative example of how a QMS would look and interact with its components as illustrated in Annex A (figure 26).

## **4.2 The documentary Structure of a quality management system**

Every organization no matter its domain of activity or size need a documentary system sometimes to process client's orders or using it internally for reviewing and for traceability , reasons differ but their existence is highly critical. That's why for the quality management systems alongside with different requirements there exists certain required documents to guarantee the good functioning of the system and its cohesion.

The term Documented information was introduced as part of the common High Level Structure (HLS) and common terms for Management System Standards (MSS) (ISO, 2017).

The standard ISO 9001:2015 requires a minimum level of documents to achieve the strategic and quality objectives of the organization, the documented information required by the standard, of which there are 21 in the last version, and they are divided into multiple types of documentation. «Quotes for customer enquiries, order acceptance, availability of controlled engineering drawings, purchase orders on suppliers with appropriate purchasing information, identification system for the storage of products and displaying work instructions in manufacturing areas are some of the examples of practicing the requirements of documented QMS” (Natarajan, 2017)

The documentation system shows that the organization is capable of handling its internal processes and controlling them as well as delivering systematically products and services of quality to their customers and interested parties, however it must also contribute to enhance the organization's performance, it should be comprehensible and well communicated inside the organization so it will accomplish its mission fully.

There exists several needs to establish a documentary system of which we mention (Natarajan, 2017):

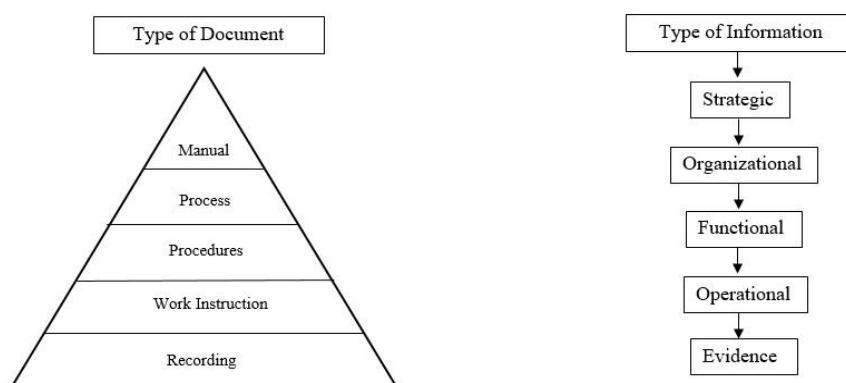
- To provide products with consistent performance to customers.
- To improve processes continually.
- To convert the expertise of individuals into organizational knowledge.
- To conduct audits of QMS processes for conformance.
- To be a supplier for large organizations

But the establishment of those documents isn't the only task for organizations but they have to assure that those documents reflect reality and are up to date, when it is necessary and this was

explicitly expressed by the standard requirements. At the same time, the standard did not specify the state documents should be if paper or digital for example and it depends on the organization's culture to be pragmatic and effective.

Documents nature differ due to its purpose of existence and the activity of the organization and there exists several types that are functional on different levels in the organization as follows:

Figure 11 Different Levels of Documentation according to ISO 9001:2015



Source: Elaborated by ourselves depending on research

As we can notice each has its purpose and function at a certain level, and we are going to give a brief explanation of each one:

- **Records:** they are the proof that aspect of the manual has been followed and applied; they are used to assure traceability, so they provide data for corrective actions if necessary.
- **Work instructions:** they are centered about how a task should be executed or done, they are characterized by the big amount of details in them, it is deal if the specialist in documentation who writes those down and he apply what he is doing.
- **Procedure:** They describe the methods that will be used to implement and perform the stated policies it is related to responsibilities and who do those tasks, and where the documentation will show that task was performed.
- **Processes:** They describe what are the necessary activities of the organization to provide desired results and realize objectives and apply what the quality states and claim.

- **Manual:** The first tier of this pyramid, it defines the quality approach and it describes the company's policy in terms of quality management and the structure of the system. And clarifying needs and actions to be taken to realize the quality objectives.

Now that we have explained the hierarchical order of the documented quality management system and understood the rationale of each component, we should highlight a complementary aspect which is their communication through ought all the organization in a clear subtle way to achieve set up goals.

### **Conclusion of the chapter**

At the end of this chapter we can say that we have gone through the various theoretical frameworks and concepts to some extent, which we thought will help us better grasp the subject of our research and to take the current national and international context in terms of urban transportation and standardization.

Research showed that the implementation of QMS approach have positive effects on the organization when it is well planned and executed, and with the guidance of the standard ISO 9001:2015 as a wide used frame to build the quality management systems to guide and control an organization in terms of quality and to enhance its performances ultimately.

However, it is important to present the context of this project which is going to take place, and how we have planned and dealt with its risks and opportunities.

## **CHAPTER 2: GENERAL CONTEXT OF THE PROJECT AND ITS CHALLENGES**

## Section 1: Presentation of the organization and its market

### Introduction

In this section we are going to expose the Peer to peer car sharing market since it is a new concept in Algeria more or less till now, we will try to demonstrate the role of the actors as well as Heetch's story of development in addition to its strategic orientation.

### 1 The Peer to Peer car sharing business:

#### 1.1 Introduction of the Peer to Peer car sharing:

The peer to peer transportation or referred to more commonly as VTC (Voiture de transport avec chauffeur) in French, the term refers to a technological platform intended to put users and drivers in contact with private driver services as a bridge between the two.

In order that the mobile app/web platform is be able to function both passenger and driver has to possess a smartphone so they can GEO-locate each other, once the demand is passed through the platform the programmed system links the closest order to the supplier which is the car owner, to take a passenger from point A to Point B. So basically it offers the same services as taxi drivers, but in as a more advanced service, and some differences persists as explained by the next table:

Table 5 the difference between taxi services & P2P car sharing

P2P Car sharing	Taxis
Prices are determined by an equation calculating the price depending on distance and time , so price change for example in rush hours , but the client has the price before he confirms his demand so he is more aware and it gives him better options. ( Price is higher )	Prices are fixed each year by prefectural decree by the ministry of transportation and the price depend on distance and time, the client is not aware of the price before he takes one. ( moderate price )
By reservation only. It is the guaranteed that the driver is going to give you the ride, if it is canceled for any reason you will be notified.	The reservation of taxis barely inexistent apart from the hand wave to the taxi, to insinuate that you want a ride.
They use the same roads but P2P drivers use GPS to take the best route at the moment to make sure the ride don't take long and comfortable to the passenger.	They rely on their knowledge of the road which is not so informative sometimes.
No stop points are made once the ride began expect for urgencies.	A lot of pick up and drop stop points which takes longer time.

The ride is customized so the costumer decide its conditions and point of drop and pick up just by some clicks	The ride is shared by passengers going in the same direction relatively
Tractability of the ride: all the details of the ride are saved in the company's database so in any case there are ways to retrieve that data if necessary.	There is barely no traceability of someone's rides.

Source: Elaborated by ourselves

### **1.2 P2P Car sharing history in the world:**

The P2P car sharing has seen the light in the world the first time in 2009 by the bias of the 2009-288 of 29 July 2009 law on the development and modernization of tourist services, it was actually in France and EASY TAKE was one of the first companies to rush into the business, at the same year another company was founded in san Francisco which is the Giant Uber , 2 years after they moved to new states in the United states and later on the same year they reached European cities as Paris, London, and other cities like Sydney and Seoul. "As of April 2016, Uber services are available in 405 cities in 60 countries on all 7 continents" (Slavulj, 2016) and today they are all around the world as a leader in The P2P business.

The concept found extreme welcome and it began to spread around the world, shortly companies began to enter the business Such As: Lift, Grab, Bolt...etc.

So the P2P actors came to supply and satisfy a need that existed and which is so important leaning on the technological advancement and the rise of social media to deploy it in favorable context to develop, and promote to the idea to make it broader and reach their target clients more effectively.

### **1.3 Peer to peer car sharing in Algeria:**

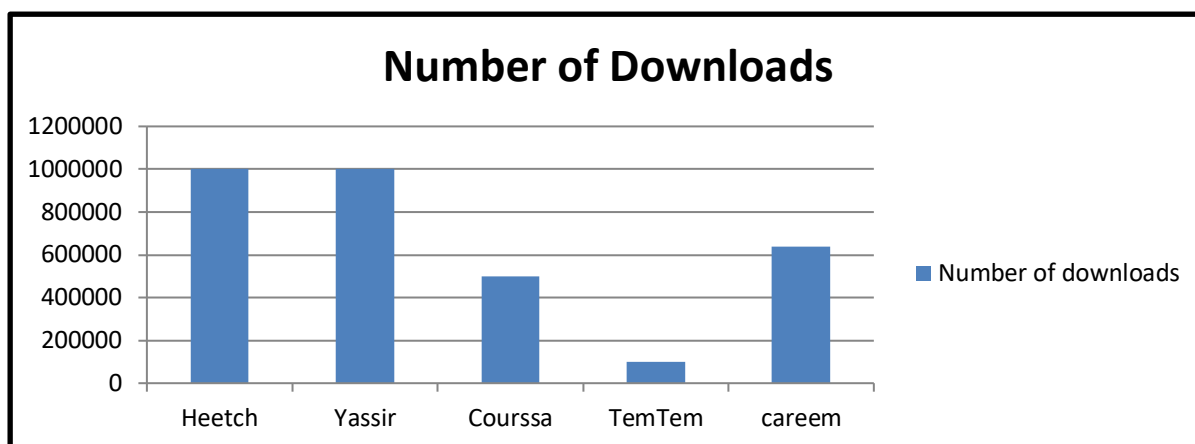
So since P2P market is expanding exponentially abroad it was still unexplored market in Algeria, that's why initiatives took place in 2017 with the apparition of Yassir The first company providing the service, it was followed later on by other competitors such as Heetch in the year 2019, Courssa in 2018, Temtem in 2018 and Amir as well as kareem in 2019 which is bought by uber later on.

So the Algerian market has strong potential because of the demographic evolution and the lack in means of transportation which makes it a target for investors to launch their companies there and get a part of the market share, and since 2017 the market continues to welcome new

entrants. More than ten players are present now, and the competition is very tough between them.

And the next figure shows the current principal actors in the market, and the number of downloads of their mobile:

Figure 12 Number of Downloads of P2P Services for Heetch and its competitors



Source: Elaborated by ourselves depending on internal information

We can notice that on top of the list Heetch and Yassir having approximate number of downloads, and after revealing the number of downloads we can say that Yassir and Heetch are direct rivals followed by Courssa.

This shows intense rivalry and amount of potential in a market just launching, we will expose next the main actors of the sector in a general way in annex B (Table17).

## 2 History of Heetch:

Heetch is a French startup which was launched in 2013, its development story is one of a kind, the French market wasn't fully satiated in 2013 and prices of uber were a lot more expensive than regular cab drivers, and the three friends noticed with a piercing look that lack of supply and inadequacy in term of prices and the existence of an opportunity to seize it, that's why the two friends Teddy Pellerin and Jacob Mathieu decided to give it a chance and launch Heetch by using only 3 developers who bought later on some shares and became partners , at the beginning it was only with 3 drivers working around nightclubs taking people back home and all of this was without using a mobile application and payment was by cash and all the work done by cofounders to get word from mouth to ear circling.

In 2019, the Heetch service is available in 9 cities in France (Paris, Lille, Lyon, Marseille, Toulouse, Strasbourg, Nantes, Bordeaux and Nice) but also in Belgium (Brussels) and Morocco (Casablanca and Marrakech). In April, Heetch announced its opening in Côte d'Ivoire with the intention of expanding rapidly to other countries in Africa.

On May 9, 2019, the start-up announced a new fundraising of 34 million euros, to develop even faster, especially in French-speaking Africa. In September 2019, Heetch launched in Algeria under the name “HEETCH EL DJAZAIR”.

When it comes added value of Heetch services I don't think I can put it down as teddy the CEO did comparing Uber and Heetch's ride:

For Uber: The passenger orders. He sits on the back seat. Driver and passenger don't speak much. He leaves the car, pay 10€ and that's it.

Heetch: The passenger orders. He sits on the front seat. The driver feels encouraged to discuss so he starts asking about the passenger's day. They speak, listen to music and at the end of the ride, the passenger pays 10€ and leaves.

The main value proposition here is the uniqueness of each ride, boredom is reduced and transportation is more plausible, the user experience must be unique.

So the company had and still has great ambition and it is working on making that a reality, so as Teddy puts it (we believe we can and have to become the “fun, social, human and inclusive” alternative to Uber in Europe, middle East, and Africa By 2022) And as the picture in [Annex B \(Figure 28\)](#) illustrates the expansion plan.

## **2.1 Heetch El Djazaier:**

As the next destination of Africa, Heetch opted for Algeria as a promising market by launching Heetch el Djazaier, “The Maghreb and French-speaking Africa represent wonderful opportunities for Heetch. In fast-growing cities and with reduced public transport infrastructure, we have the opportunity to help improve the mobility of city dwellers. Since we are a European company, we always choose to partner with a local entrepreneur in order to create a local company, better able to understand the market, the culture and the local issues”, explains Teddy Pellerin, President and CEO of Heetch.

Heetch el Djazaier was launched in September 2019, with a press conference at the Sofitel hotel in the presence of the CEO Teddy, as well as the managers.

Ever since Heetch Employs a 100% Algerian team, because it is convinced that they are the more suitable to understand the context of the business and believes in their capacity of innovation.

### **2.1.1 The products and services provided by the organization**

Heetch El Djazaier doesn't have so many products since it is in the market discovery, and it is still not absolutely mature as a company, and to provide the good scaling of business, so the main product proposed by Heetch is the mobile app, providing passengers with a mean of mobility with reasonable prices and good quality of services and this can be considered as a B2C offer as well as The B2B, when companies comes to Heetch to ask for a business offer to assure the transportation of its workers, Heetch tries to propose the best offer possible in the market in a price/quality of service optic, and they provide services of customer relationship management, toward their both costumers which are passengers and drivers, each team handles one type of clients.

### **2.1.2 Organizational Description:**

Heetch el Djazaier is a branch of a mother company located in France, its internal organization is a special one, since it is a startup and due to open minded managers it has successfully made the work place more fun, and keeps employees motivated and keeping a positive internal vibe is an important aspect of the company's organization and management style. And we will be exposing the company in a small technical sheet in Annex G (figure 30)

We should jump to the internal organization and its structure, mainly Heetch el Djazaier has four main basic functions or processes, the operation team and the care team in addition to the human resources as well as the marketing and design Team, all this will be highlighted in detail next:

#### **The operations Team:**

are considered the beating heart of the company, since they exercise the key activity of Heetch, made up of a team specialized in the management of driver operations headed by an operational manager B.Oussama, Their main mission is to carry tasks related to Acquisition of partner drivers, monitoring of drivers and accompany the driver and assist them in their work, This service is made up of two parts the acquisition and retention part , the first is about the ability to acquire more driver partners and the second is about keeping them interested and assisting them by problem resolution, the manager is following the performance of the team on a daily basis to ensure the realization of the set objectives and plan for improvement.

### **The care team:**

are the second most important center in Heetch el Djazaier, by being it is the Heart of customer relationship management, their leader is M.Yamina, the team mainly works on ticket management which is treating feedback of clients through a CRM software, they take charge of passengers & drivers requests as well as managing bad experiences of passengers , and developing plans for experience improvement, They assure the passengers when it is necessary and show them that they are here at their service.

### **The Marketing and Design Team:**

It is very important to know that Heetch el Djazaier is a company which relies on digital execution of tasks so the whole system is modern and ready to receive quarterly improvements, and that's such an important aspect, the initiative is present and a marketing responsible was hired B.Amina and she is working with the graphic designer , her main tasks are to manage the presence of the company on social networks and the various communication channels, by creating creative and adaptable content with the vision of the company and the expectations of the audience, as well as management of social networks, digital marketing companies, creation of advertising posters, e-mailing, promotions and research of new communication axes (influencers-partnerships, etc.) and working on the competitive intelligence.

### **The Administrative Team:**

It is a funny thing since this team is composed of only one person responsible for all the administrative work C.dounia, she is all at once the office manager, its main mission is to ensure coordination between the various teams of the company, the monitoring and preparation of summary reports, human resources management, responsible for employee salaries as well as supervision and information relay in the company, follows the various relations with the partners and interested parties, she is responsible for technical studies, coordinates and leads projects, deals with contracts while ensuring compliance with established objectives, negotiates with suppliers in order to obtain the best price for the company's office equipment, the office manager is also responsible for the company's accounts, the organization of internal and external events and travel reservations.so it is obvious how the company's weighs on her shoulders.

Since we have explained the organization of Heetch el Djazaier and its functions, we present the organizational chart of Heetch el Djazaier in Annex B (Figure 29)

The previous Organizational shows the hierarchical order inside the company, we can already notice the absence of certain casual aspects in a company, but since Heetch is a startup and it has to scale in an economical wise way, the exception is made for them, since they outsource certain functions to focus on their core business success.

### **2.1.3 Heetch Strategic orientation:**

Mission and vision, values are statements from the organization that answer questions about who we are, what do we value, and where we're going, and Heetch has gave its answers by providing what it stands for as an identity and the brand it wants to plant in its costumer's spirits.

So we are going to expose each element at a time by the following order:

#### **Values:**

- **Make it happen:**

It is to be efficient, autonomous and reliable rather than spotless. Decide quickly, admit when you are wrong and move on. Bring discipline, focus on what matters.

What you must avoid is trying to make it happen at all costs. Go too fast or without thinking about others.

- **Play for the team :**

It is to look out for what's best for the company and not yourself. Speak up when needed. No ego or politics. Plan for the future and document what you do, and by steering clear of Forgetting about your own goals, sacrificing your well-being. Protecting your team over the company.

- **Be Kind :**

It is by being Considerate to others' feelings. Treat people with respect independent of their status or disagreement with you. Always assume good intentions in written/oral communications. Embrace diversity.

What supposed to be a red flag is saying "yes" to everything, shut up when something is wrong.

- **Think Different :**

Think outside the box, look for innovation. Not being scared of showing your personality, be authentic. Try to always be different. Do your own thing without thinking what's best for the company.

### **Missions:**

Our society has a lack of trust, which is an inhibitor for mobility we will build the trust with our users by building transparency with them, and valuing their feedbacks. Our role will also be to build trust between passengers and drivers, by creating connections and enjoying trips. Our strength will be our capacity to be efficient in solving issues from end to end, with the ability to adapt to growth this will lead to an affordable mobility, open to all.

- Build a trusted network for an inclusive mobility
- Create a balanced, fair and accessible market for their drivers and passengers.
- Respond to real life issues by offering a human approach to payments
- Make passengers excited to join the family and ensure they feel happy from the moment they download the app until the moment they order their ride.
- Create a new state of mind, where their partners are treated well, so that they feel good and spread the movement!
- Disrupt a consumption habit by building an affordable and pleasant mobility solution.
- Define, defend its interests to obtain sufficient compliance to remain innovative within a limited framework.
- Build a network of trust for inclusive mobility
- Bring a life changing, affordable and safe transport alternative to provide the African population with a human mobility solution.
- Promote Heetch by telling authentic stories that will make users optimistic
- Improve retention with user-friendly and human CRM strategies

### **Vision:**

Heetch has a vision to render the mobility in the world more enjoyable and accessible to everyone.

- Make mobility accessible to everyone.
- The humanization of technology.
- Opening of new towns.

We can find an illustrative figure of those elements in Annex B (figure 31)

## Section 2: Methodological frame and project context

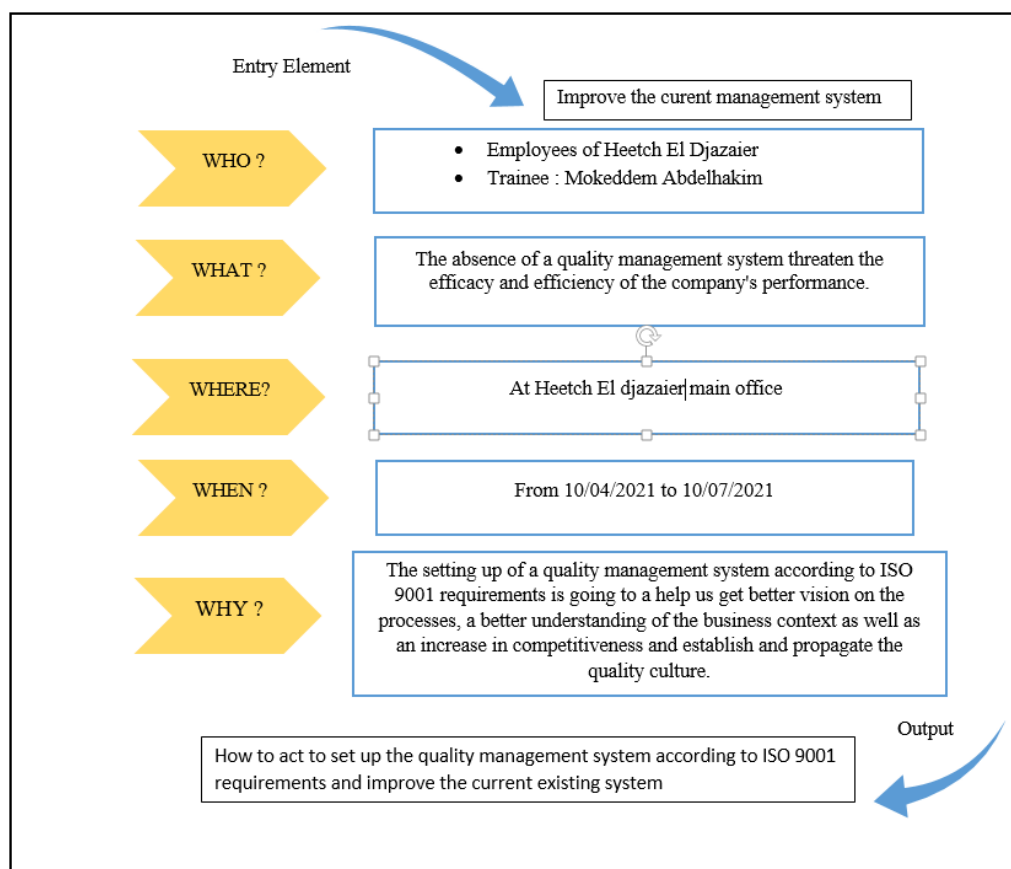
In this section we are going to be exposing the methodological approach that we have chosen to adapt in our project and we will be presenting methods of collecting the data used as well as the processing of the latter. And the second part is going to encompass the project and its context, how it was planned to be executed and risks related to it, in addition to the presentation of the diagnostic tool we are going to use later one in the next chapter.

### 1 Five W's and clarification of the mission

After getting the approval to work on the project from top management it was mandatory to make an adequate plan for the execution, and perimeter of action should be well defined as well as its actors.

In order to be able to understand the ongoing of the project we are going to be specifying a frame for our project and we used the five W's model to discern all the dimensions of the project, and this allowed us to ask systematic questions that help us frame the elements of the project as the next figure shows:

Figure 13 Clarification of the project using Five W's



Source: Elaborated by ourselves

## **2 Methodological approach:**

By depending on the nature of our problematic we have chosen the suitable methodology of research which brings altogether more clarity and understanding of the studied subject. Our study objective is to establish the quality management system according to requirements of the standard ISO 9001 v2015, as well as the identification of the different processes and risks linked to them, we have chosen a qualitative method.

You can find our plan of work in Annexes chapter.

### **2.1 Data collection methods:**

To have a proper reliable research you have to choose adequate tools to collect your data to make your results more relevant, we have chosen three primary methods to collect data: documents, interviews and observation. And we are going to explain each at a time afterwards.

### **2.2 Documentary research:**

We used this method actually, to get more clarity and understanding on the problematic, and try to develop some innovative perceptions and to get a grasp of the context of the business and the subject, we used diversifies sources primarily standards and referential as ISO 9001 V2015, ISO 31000 V2018 as well as the FDX 50-176 which is a products of AFNOR, and articles explaining different aspects of the standards to have an enhanced application of them when time comes, we consulted books, articles and secondarily websites which provided good reliable information's in addition to the enterprise's account of udemy platform which helped me to get different courses in project management and QMS establishment. We also relied on documents bestowed to us by the company in order to derive essential elements for the study as "notion" which is considered as the Library of the company.

### **2.3 Observation:**

In the goal to respond to the principal and secondary questions and to execute certain tasks, we have leaned on observation, more specifically participant observation which is "Participant observation involves the researcher immersed in the day-to-day aspects of people's activities, rituals, and interactions" (Colleen McGrath, 2019)

Because at some point I was doing what a regular employee does ,So it was linked basically to process identification which took a big part of the project regarding how lengthy the

visualization of those work instructions and interaction between processes and the establishment of each sheet process and the process map.

#### **2.4 Interviews:**

To fortify the results of our research we have used another mean which is interviews. Interviews are one of the most famous and utile methods in qualitative research, there exists three types of interviews but we used only two types of them, standardized and semi standardized ones, the first is containing "explicit questions that do not allow room for veering out the topic in question" (Coughlan, 2009) and that is the case for the diagnosis questionnaire which will be found in more details in the annexed section. Semi standardized "offer a more flexible approach to the interview process, so they allow for unanticipated responses and issues to emerge through the use of open ended questioning" (Coughlan, 2009) were also used in the processing identification they, doing several interviews with the process responsible and operators to grasp the picture in its real form, and we used group focus interviews to solve risks related to processes, and get everyone's opinion about the possible risks and brainstorm to get some ideas and evaluate each risk and propose preventive measures.

Therefore, that was a very important method as the previous ones exposed to realize the objective of the research.

### **3 Data processing**

We have collected several types of data using different methods, thus it force us to treat each type with its adequate approach, that's why we chose the quantitative approach to analyses the results of the diagnosis, because we calculated the rate of complacency of the company's respect toward the ISO 9001 requirements by chapter and as a whole and results can be found in the next chapter.

For the rest of the collected data as process flows as well as the internal information concerning the company as well as the brainstorming sessions, we have treated them using a qualitative approach.

### **4 Project risk analysis:**

To have a good project achievement, we have to be aware of its context, that's why sometimes a project is more promising and have multitude of opportunities and other times or at the same time it might have bigger risks, and to get a hold of what those risks are we have to assess their true criticality and effect on the progress and outputs of our project.

That's why we have decided to establish a risk analysis for our project to anticipate and the probable risks and control them in a better way, to prevent as a priority preferably and correct as a second option, and we can define a project risk analysis as" a process that enables the analysis and management of the risks associated with a project. Properly undertaken it will increase the likelihood of successful completion of a project to cost, time and performance objectives." (Catorina Norris, 2018)

Before we got into technicalities we have to know what a risk is.

According to ISO 3100 V 2018 it is an event which have effects of uncertainty on the realization of objectives, it can be positive or negative and can address, create or result in opportunities and threats

And according to the same standard the approach to analysis risks of the project is going to be divided on five steps:

- Identification of processes
- Risk analysis
- Risk evaluation
- Risk Treatment

To clarify the process, we are going to be defining criteria of risks, taking in consideration two variables which are the gravity and occurrence probability to see at what extent they can affect the ongoing of our project by calculating the criticality of each risk ultimately.

And we are going to start by the gravity levels and followed by the occurrence probability:

Table 6 Table of gravity

Gravity	Consequence on the project
G5	Drive to the end of project
G4	Disturbance overall the project course
G3	Disturbance partially on project course
G2	No mastery of the project duration
G1	Little influence on the project

Source: elaborated by ourselves

The previous table classify the gravity of effect that risks can have on the project. And 5 is the highest in gravity and 1 is the lowest.

Table 7 Table of probability of Occurrence

Occurrence	Description
P5	Sure to Occur
P4	Occurs frequently 1 in 10
P3	Very likely to Occur
P2	Occurs rarely
P1	Almost far from occurring

Source: Elaborated by ourselves

This table shows how probability of occurrence is classified and they go from 1 as the lowest to 5 as the highest. And since we are done identifying criteria of risks we are going to expose the risk matrix indicating the risks and their degree of criticality as presented in annex C (Table18 & Table 19)

So once we have our criticality matrix we will explain how to interpret its reading and have a better decision making, so the red section means that the risk is extreme and it must be avoided at all costs and dealt with immediately, the orange section is a high risk and should be avoiding and dealt with immediately and the yellow refers to moderate level of risk and green is the lowest risk in the matrix. Now after all what has been done we can elaborate the list of risks we thought of considering when engaging in our project as shown in

Now that our project risk analysis has been completed, we are more aware of the project's threats in a non-inclusive way, which will open door for avoiding those risks or facing them with more control over the continuity of the project.

### **5 Presentation of the diagnostic tool:**

To assess the current state of the management system we have used a diagnostic tool to test the company's respect to the requirements of the ISO 9001:V2015 standard via their practices going through different chapters and subchapters, and we will be exposing modalities and the concept of this tool and the logic behind using it which we found in Quality blog website and which was developed by the owners of it and Jérémy CICERO is the founder and responsible

for the blog (CICERO, 2021). Though it has been modified by us for usage reasons and to fit our project more.

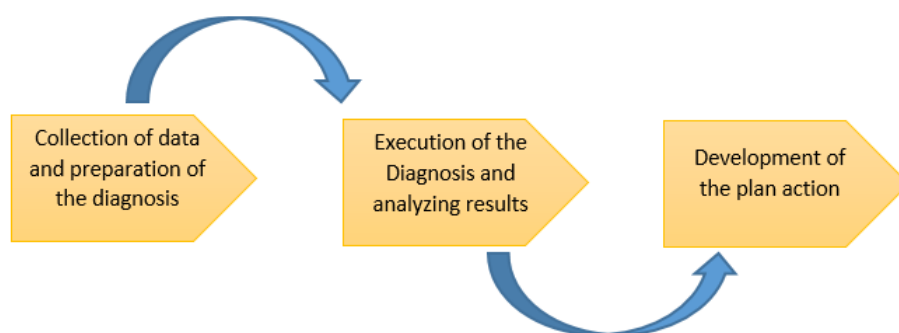
Basically the tool is a checklist presented as a grid in Excel format, containing requirements of the ISO 9001 standard, destined to measure the gap between the reality of what the company is exercising and what the requirements of the ISO 9001: V2015 thus to assess the level of compliance with the requirements since the results are going to be measured and represented by radar diagrams.

We used this tool to grasp what are the most critical shortcomings of the current system and depending on those results it is going to be an important tool for evaluation to highlight the set of improvements to be carried out in order to improve the system functioning and enhance the organization's performance.

The diagnostic field was the organization as a whole on all its levels, different department and processes, even though it may seem like an audit but the latter differs from the former nonetheless they might have some points in common which is to understand the situation better and get a clear vision, but the uncommon thing is that one should be done according to a standard or a reference guide, while diagnosis can be done anyhow if it meets the need to do it.

And the next figure demonstrates how this approach was conducted:

Figure 14 the diagnosis process



Source: Elaborated by ourselves

First and foremost, we are going to expose what each section of the diagnostic tool is and how the evaluation is done. Broadly there exists some dynamic buttons in the excel file to reach results directly after filling out the required cases with relevant data.

The excel file has principally 9 sections, the first is for the diagnostic and the rest is for the results per chapter (from chapter 4 To 10) and global results, mainly all our work is going to be

in the diagnosis section, which is composed of table which has many boxes such as the name of chapter and the question related to it followed by the evaluation box and observation for additional details, as well as the average sub chapter score and the score of each chapter of the standard, which is found in [Annex C](#).

For the evaluation part each question of the checklist is going to be answered by using one of the next answers: Existing, Acceptable, barely existing, non-existing, and excluded.

Each of those responses have a specific score following the same order as the next table shows:

Table 8 Evaluation method of the diagnosis

Evaluation	Score
Existing	100%
Acceptable	66%
barely existing	33%
non-existing	0%
Excluded.	/

Source : elaborated by oursleves

### Conclusion of chapter

To assure that we have valid conclusions we have to clarify the methodology used because it represents the key to results, and after having been able to describe the general context of our project and its main challenges in addition to the tools methods and approaches used, as a consequence the results of the methods used previously allowed us to collect some important data which we will be discussing in the next chapter in depth.

## **Chapter 3: Analysis and discussion of result**

## Introduction

This chapter is going to be the fruit of our work during the last two months, by exposing the obtained results of the diagnosis according to the standard and which will allow us ultimately to suggest a plan of action to fill the gaps and exploit the improvement opportunities. It is of high importance to highlight that the plan action was made for a longer time frame of the internship's time limit , so only prioritized actions has been executed due to the constraint of time and resources of the company as well as their needs.

## Section 1: The diagnosis and plan action

In this part we are going to show the results we harvested by using our auto-evaluation tool already explained relying on the standard 9001 2015 edition.

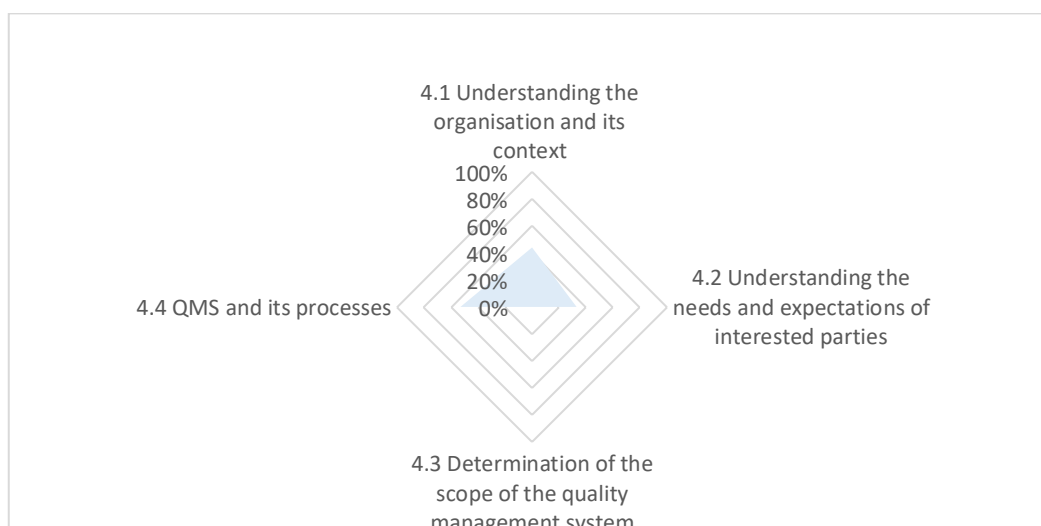
Those results are obtained after using a checklist to reviews the different set of requirements and check if they are respected or not , and in order to have better clarity of vision we divided the results by chapters and as general results and represented them using a radar diagram.

### 1 Results by chapter

#### Chapter 4: Context of the organization

The next Figure shows the results of Chapter 04 of the Company

Figure 15 Radar diagram of chapter 4



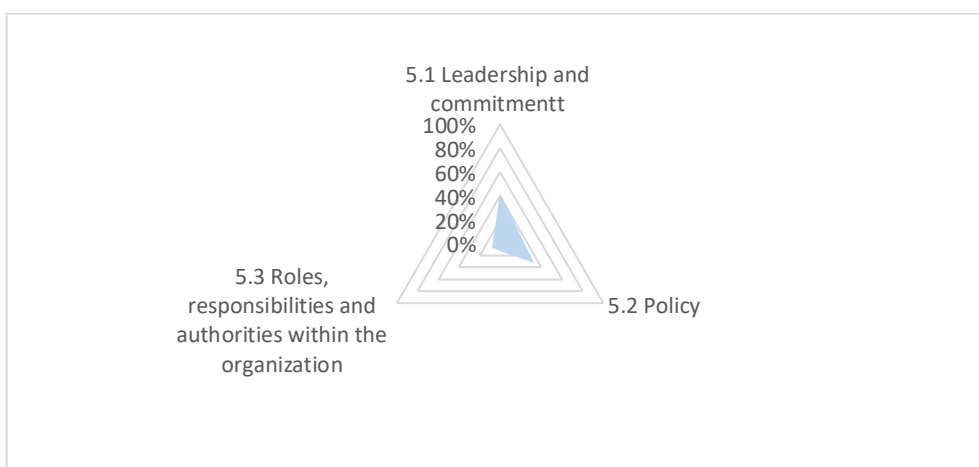
Source: elaborated by ourselves

We can notice that the general compliance rate for this chapter is 33% which is not very satisfying and considered weak, and the main important observation we are going to make about this chapter is the lack of documented information concerning the processes as well as taking into consideration the risks and opportunities linked to these processes which is necessary for the understanding of the context internally according to the reference.

### Chapter 5: Leadership

The next Figure shows the results of Chapter 05 of the Company (Leadership)

Figure 16 Radar diagram of chapter 5



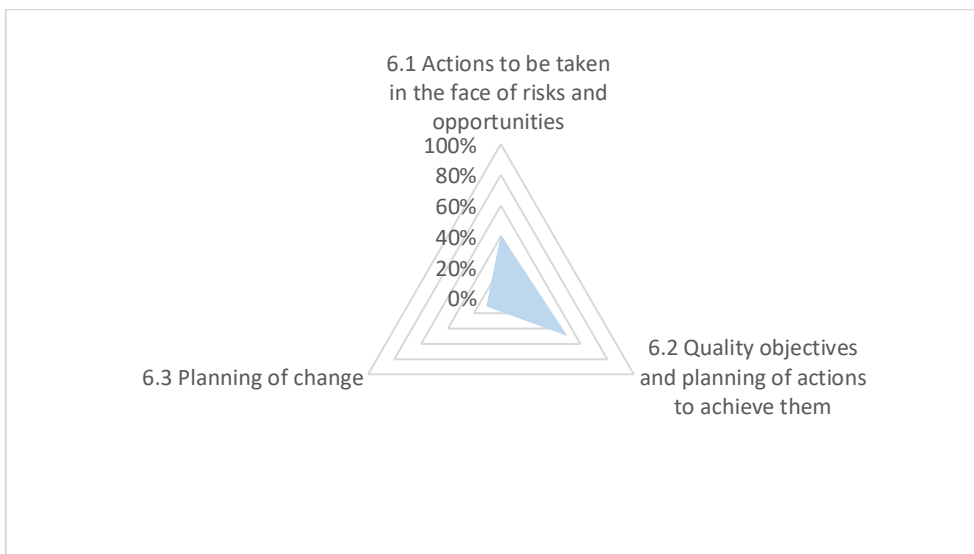
Source : Elaborated by ourselves

The compliance rate of this chapter is 28% this goes back mainly due the lack of the quality management system as a structure, results were low due to lack of promotion of management to use risk and process approach in addition to unclear communication of responsibilities & authorities.

### Chapter 6: Planning

The next Figure shows the results of Chapter 06 (Planning)

Figure 17 Radar diagram of chapter 6



Source: Elaborated by ourselves

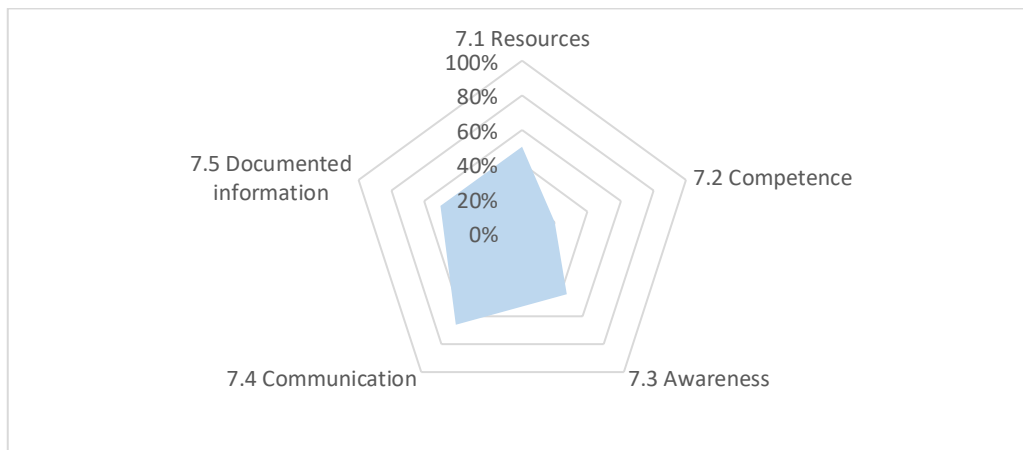
When it comes to chapter 6 which is planning The Company scored a rate of 34% which is below average, this had reasonable number of causes mainly and repeatedly due the absence of the quality management system as a formal structure for those requirements in addition to the absence of documents specifying the actions to be implemented in the face of risks and opportunities. Meanwhile some other actions were noted as respected as the recording of certain aspects as requirement.

**Chapter 7: Support**

The next Figure shows the results of Chapter 07 (Support)

F

Figure 18 Radar diagram of chapter 7



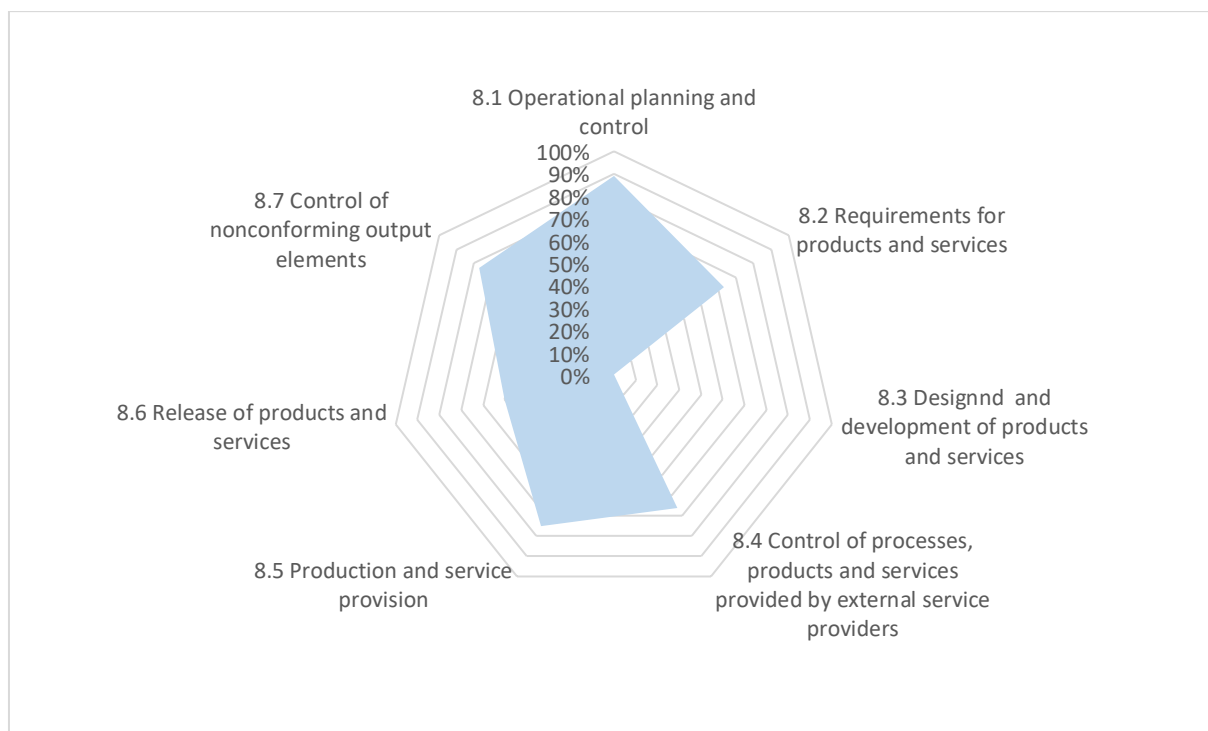
Source : elaborated by ourselves

The compliance rate of this chapter is 46% which is barely below average, this could be explained by the same main reason as earlier (absence of the QMS) as well as the absence of some infrastructures and the lack of measures the effectiveness of actions undertaken toward staff training and career review in addition to some weakness in communicating quality objectives.

## Chapter 8: Operations

The next Figure shows the results of Chapter 08 (Operations)

Figure 19 Radar diagram of chapter 8



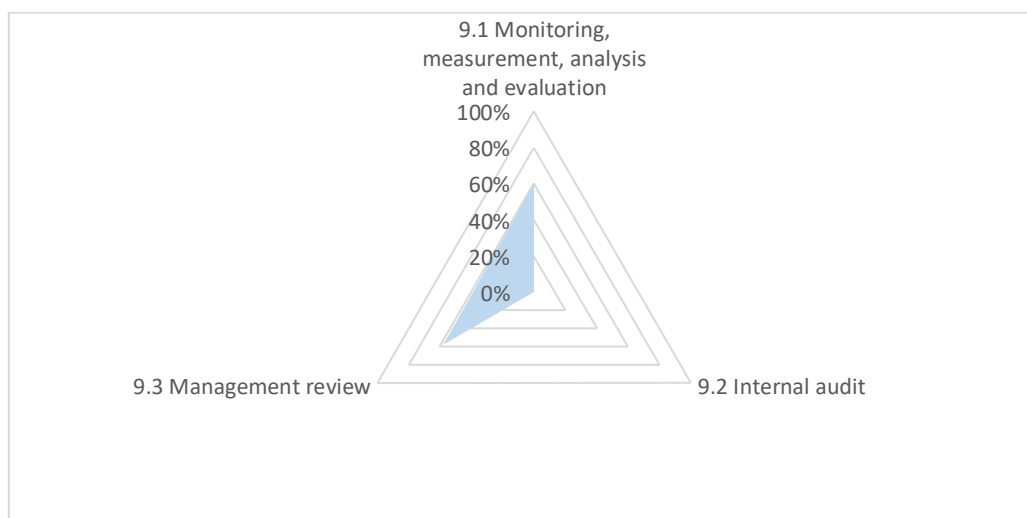
Source : Elaborated by ourselves

This chapter scores a compliance rate of 70% which is the highest compared to other chapters, this is basically owing to the mastery and effort the operations team pours to produce good quality work, yet there are some points of improvement such as the lack of documentation when it comes to critical points in the execution of the operational work, and formalizing tasks more.

## Chapter 9: Performance evaluation

The next Figure shows the results of Chapter 09

Figure 20 Radar diagram of chapter 9



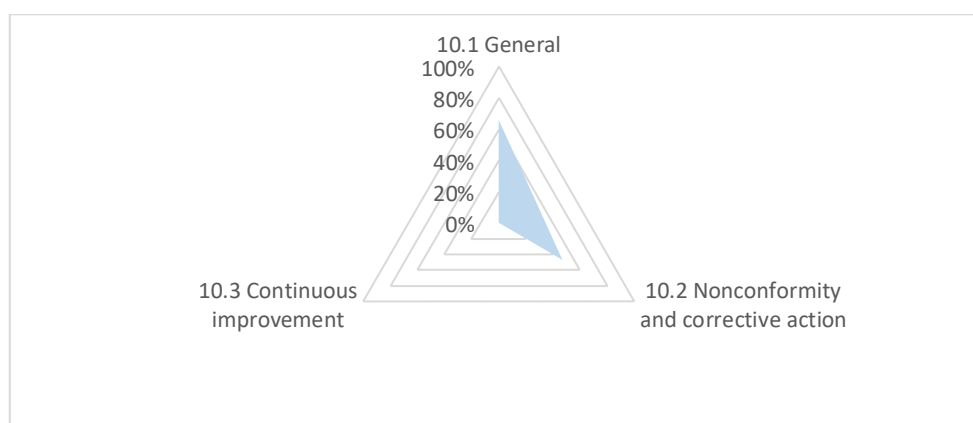
Source : Elaborated by oursleves

This chapter scored a 39% compliance rate by and large as a consequence to the absence of the internal audit notion which manifested itself as the biggest gap in this chapter and which should be unsaturated along with the lack of documentation and recordings when it comes to surveillance reviews.

### Chapter 10: Continuous improvement

The next Figure shows the results of Chapter 10

Figure 21 Radar diagram of chapter 10



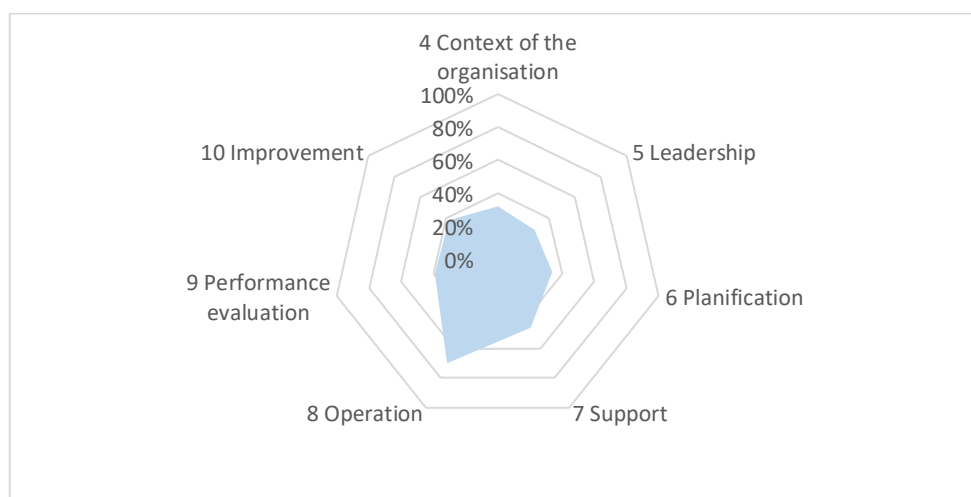
Source : Elaborated by oursleves

This chapter scored a compliance rate of 38% but to my whole objectivity and experience it is unjust to the culture of improvement that the company provide and I would justify that again by the absence of the structure itself which is the QMS and not the practice itself, although some gaps did appear and they are true in the field such as the effectiveness of corrective actions and we noticed that the reaction to non-conformities should be improved overtime.

## 2 Global diagnostic results of the QMS according to the requirements of the 9001 version 2015 standard

As indicated in the next figure, in the overall results of the company it scored 41% of compliance rate compared to the standard's requirements

Figure 22 Diagram radar representing the overall results of the diagnosis



Source : Elaborated by oursleves

This results were not satisfying is the least we can say about it , notwithstanding this shouldn't turn us down and demotivate us , on the contrary we are optimistic about the future and how the proposed plan action is going to help us reduce gaps and improve some of the critical points the company lacks.

## 3 The proposed action plan

Based on the results of the diagnosis that has been exposed earlier the necessity to develop a remedial plan action to deal with the gaps found and improve the performance on different levels depending on the various chapters of the standard.

It is important to emphasize that the proposed plan action was created for medium/long term but we will start executing it as soon as possible, because some actions are more necessary than

others, due to a lot of variables and constraints which are time, orientations and needs of the company as well as the limited time frame we have.

The project was managed by me and the operations manager (O.Benseddik).

We have divided the actions to be executed by chapter, and each chapter has some points to work on depending as always on the standard requirements. It is important to note that the classification was not made about importance in any way.as table in annex P shows.

Table 9 The proposed plan action on the short - medium term

Standard article	Requirement	Gap	Proposed action	Responsible	Time limite
4.1 Understanding of the organization and its context	The organization should determine internal / external issues and implement information monitoring	Understanding of the environment is not formalized and must be completed	<ul style="list-style-type: none"> <li>• Conduct a study (Pastel + Porter) to determine threats and opportunities</li> <li>• Training of process pilots in these kind of analyzes.</li> </ul>	Trainee (M.A)	30 July
4.2 Understanding of the needs and expectations of interested parties	The organization must Identify the interested parties, their requirement and Ensure the monitoring of information relating to these documents	The needs are understood but need to be more structured and formalized.	<ul style="list-style-type: none"> <li>• Identify the interested parties and classify them in a (power/interest ) matrix</li> <li>• Set up a monitoring plan and review of requirements</li> </ul>	Trainee (M.A)	5 August
4.3 Scope of the Quality Management System	The organization must determine the limits and applicability in order to establish the scope	The QMS is being designed	Establish a document clarifying the domain of application of the QMS	Trainee (M.A)	10 July
4.4 The QMS and its Processes	The organization must identify the processes and their elements of proper functioning and ensure the retention of documented information on the proper functioning of these processes as intended.	The processes are not identified and there is no record of this operation	<ul style="list-style-type: none"> <li>• Design a workflow diagram for each activity</li> <li>• Design process sheets and a process map.</li> <li>• Keep the documentation system updated.</li> </ul>	Trainee(M.A)	30 June
4.4 QMS and its processes.	The body must determine and apply the criteria and methods to ensure measurement and monitoring for the control and proper functioning of the processes	Not all processes are evaluated and measured.	Establish meetings with process pilots to see improvement opportunities for each process	Trainee (M.A)	05 september
4.4 QMS and its processes.	The organization must take into account the Risks and Opportunities for each process	Risks and opportunities are identified but need to be improved and formalized	Apply a risk analysis according to ISO 31000 for each process.	Trainee (M.A)	15 July

5.1 Leadership and Commitment	The organization must promote the process approach and the risk-based approach	Risks are identified in an informal way, and the process approach must be improved.	<ul style="list-style-type: none"> <li>Establish the process mapping and clarify the interactions between the different processes</li> <li>Plan training for process pilots on the risk-based approach.</li> </ul>	Trainee (M.A)	10 July
5.1.2 Customer orientation	The organization must be aware of the risks and opportunities that may have an impact on the compliance of products and services	They are identified but are not structured and formally expressed.	Establish a criticality matrix for probable risks and opportunities on products and services.	Trainee (MA)	30 November
5.2 Quality policy	The organization must establish the quality policy in line with the strategic orientations	Quality policy is not established	Establish a document attesting to the company's commitment to quality.	Trainee (M.A)	10 June
5.2.2 Communication of the quality policy	The communication of the quality policy must be well understood and applied within the organization.	Not established and not communicated.	After its establishment, post it in the company's management platform + waiting room + work space and on the website + advertising campaigns	Trainee (M.A)	20 July
6.2.1 Quality objectives and action planning to achieve them	The organization must establish quality objectives, at the relevant functions, levels and processes necessary for the quality management system	Establishing quality objectives after the identification and restructuring of processes	Establish measurable quality objectives for each process and document them.	Trainee (M.A)	30 September
7.3 Awareness	Make employees aware of the quality policy and its objectives and improvement.	Lack of awareness-raising actions on the previous aspects.	Lead presentations and a training schedule on quality aspects.	Trainee (M.A)  Macro processes responsible (B.O)	25 July
7.2 Competence	Carry out actions to acquire the necessary skills and evaluate the effectiveness of these actions.	Lack of a skills assessment procedure	Create a procedure for the evaluation of skills.	Trainee (M.A)  Human resources Responsible (C.D)	30 October

8.1 Operational Planning & Control	Establishment of criteria for processes and product/service acceptance	Product and services are delivered but in a spontaneous way , and there aren't clear criteria for the acceptance or refusal of P/S	Establish acceptance criteria for processes and for products and services.	Trainee (M.A)  Pilote Processus Macro /Micro	20 October
8.4 Control of processes and products and services provided by external providers.	The organization shall ensure that the Products/Services provided by external providers comply with the requirements	Absence of supplier evaluation criteria.	Establish supplier evaluation criteria.	Regional Director	15 october
9.2 Internal Audit	The organization shall conduct internal audits at planned intervals	There is no programming for internal audits, and there is a total absence of the notion of audits internally	Develop an internal Audit Program	Trainee (M.A)	10 September
9.3 Management review	The organization shall plan to carry reviews on several intervals to ensure stability and suitability	The organization is doing management reviews but some aspects of the requirements are missing	Include respect of requirements in the planned next reviews starting from the date mentioned in the last box such as for inputs (information on the performance and effectiveness of the quality management system) and for outputs as any need for changes to the quality management system)	Country Manager and managers	12 October
10.2 Non-conformity and corrective action	The organization shall review the effectiveness of any corrective action	Examination of the corrective actions is done in a spontaneous way of thinking in the review meetings.	Develop a method to measure the effectiveness of corrective actions.	Trainee  Process responsables	20 October

Source : Elaborated by ourselves

## **Section 2: Execution of the plan action**

The second part of this chapter is going to be dedicated to the application of what has been planned in the previous section, the proposed plan of action takes more time than the duration of the internship that is why we have prioritized certain actions to satisfy the requirements of the standard and in the process of implementing the QMS.

We have conducted an analysis concerning the general and competitive environment of Heetch el Djazaier to shed light on the possible opportunities and risks as a response to the understanding of the company's context, we have established an interested party matrix to classify them by order of power and influence, as well as the identification of key processes and other processes and establishment of their documents as well as the cartography of processes, in addition to the risk analysis study on different processes from each family.

Now that we have explained the main actions that were applied, we take each at a time in detail in this chapter.

### **1 Analysis and understanding of the context of Heetch el Djazaier**

The standard has always insisted on understanding and bigger view of business to ensure that multiple aspects are handled by the company's in its whole and try to include it if it is missing, ISO 9000: 2015 refer to understanding the context as a process and the same process determines factors which influence the organization's purpose, objectives and sustainability, and it defines a context of an organization as "the combination of internal and external issues that can have an effect on an organization's approach to determining and achieving its objectives" (ISO 9000, 2015)

The standard ISO 9001:2015 emphasize on the context in the fourth chapter on the importance of the external and internal environment to the company's strategy and desired results, and it should monitor and review continually the information related those issues.

In order to grasp what Heetch el Djazaier context is composed of, we have chosen to determine opportunities and strength externally and weaknesses and forces internally (SWOT) mainly using two types of analysis, the first to understand the general environment using PESTEL

analysis and the second to understand the situation of the market and its mechanics and the results of those analysis gives us automatically the SWOT analysis.

We are going to expose our PESTEL analysis as follows in the next table:

### **1.1 PESTEL Analysis:**

Table 10 pestel Analysis

Six dimension of PESTEL	Components	observation	High lights
Political	<p>Relationship with the government and state</p> <p>Relation with Taxi Drivers Union.</p>	<p>- Ambiguous</p> <p>- Tension</p>	<p>The peer-to-peer transportation is a delicate business to approach it in a market like Algeria , because on one hand it is generating great added value and profit and can used as one of the micro economy lever at some level , since it is barely cost free compared to other businesses , but the government is taking an ambiguous position towards it since there is a hidden clash and tension between the union of taxi drivers since the rise of the VTC market and the government , plus the legal instability and legal vacuum since one ministry is giving the commercial register to companies to exercise their activities as an “e-commerce platform ” but still ignoring the fact that it should be integrated into the transport ministry which creates conflicts now and then by seizing P2P car sharing driver’s licenses and cars because the drivers didn’t hold a taxi permit.</p>
Economic	<p>Algeria’s economy and its indicators.</p> <p>The covid19 impact on economy.</p>	<p>Unstable &amp; unclear / unhealthy</p> <p>Medium effect</p>	<p>Algeria is among the countries that are focusing their efforts in the hydrocarbon sector, which means the absence of an industrial base or even the focus on the services or the tourism sector is a bit absent, therefore the Algerian economy has become a bit static especially with the Covid 19 crisis (2019) mainly the fall in oil prices plunged the Algerian economy into recession , the GDP has contracted with a rate of 15% &amp; a unemployment rate of 11% ; while the budget deficit more than doubled in the last two years with a rate of 8%, &amp; a decline in the exchange rate of the Algerian dinar of 12% , &amp; a rise in the inflation rate of 0.4% in the last two years , on the other hand a slightly rise in the economic freedom indicator with a 3.2% , and a static rate of investment &amp; financial freedom , nevertheless a tax burden fall was noticed in the past two years with 9.7% rate , Capital markets are underdeveloped, and the financial sector remains dominated by public banks</p> <p>COVID-19 containment measures such as restriction on movement and gatherings, compounded by high economic uncertainty, will discourage private consumption and investment.</p> <p>Growth could return as soon as 2021 if vaccines lead to global control of the pandemic, which would revive the global economy. In this scenario, a substantial rebound in real growth, estimated at 3.4% of GDP, would take place in 2021 and continue in 2022. As such, the economic picture is quite harsh to get meddle in it as Heetch has generated unemployment for many citizens and enhancing quality of services in transportation in urban life &amp; after the Covid crisis containment measures it could be an opportunity to contribute to the development of the transportation by its innovative ways by developing transportation services, especially from the fact that there is a lack of efficient mass transport systems in Algeria as a whole to enlarge its market share and refresh the economy.</p>

Sociocultural	<ul style="list-style-type: none"> <li>- Conscious consumption.</li> <li>- Development of public transportation.</li> <li>- Personal transportation.</li> </ul>	<ul style="list-style-type: none"> <li>- Increasing</li> <li>- Absent</li> <li>- Growth</li> </ul>	<p>Algeria 's population has been increasing steadily since 5 years and it has increased with a rate of 3.79% in the last two years , which indicates a certain social stability , from the 48Million habitants , 10 Millions are students from primary to university , which represent 4.8% of the total population which results bigger needs in terms or products and services , in our case the peer-to-peer transportation , and Heetch has provided them with an important number of advantages to free mobility without restriction and helped with the unemployment part</p> <p>Since the emergence of smart phones in Algeria plus the power of social media habits began to differ and we can notice a spread of conscious consumption of services and products which will lead to better life quality , and Heetch persists to in store that culture in the spirit of the Algerian citizen.</p> <p>Taking the public transportation field we can't avoid talking about the metro lines in Algiers which added an extra charge to the road circulation since it its activity is suspended since the Covid 19 crisis and hasn't got back to activity since ,In addition to the rise of motorcycles and bikes as a mean of personal transportation.</p> <p>So the peer to peer transportation is generation facility of mobility with reasonable affordable prices in social life in Algeria and the competition in it is creating more options to the citizen.</p>
Technologic	<ul style="list-style-type: none"> <li>- Capacity of innovation</li> </ul>	<ul style="list-style-type: none"> <li>- Respectable</li> </ul>	<p>Heetch capacity to innovate is immense since it is trying to deliver easy options to its clients and make their life easier by their accurate Localization system to the messaging pop ups between the driver and passenger with its tradability system which allows to generate improvements every time.</p>
Environmental	<ul style="list-style-type: none"> <li>- Resource depletion.</li> </ul>	<ul style="list-style-type: none"> <li>- Preliminary</li> </ul>	<p>Sustainability of the environment has been an important factor to preserve the planet, therefore in the peer to peer transportation the huge amount of traffic congestion and fuel usage represent a black point and all concurrent should be aware of its weight and try to propose new adaptive solutions regarding the environment.</p>
Legal	<ul style="list-style-type: none"> <li>- Labor laws.</li> <li>- Commercial laws.</li> </ul>	<ul style="list-style-type: none"> <li>- Respected</li> </ul>	<p>Heetch has to abide laws regarding a lot of aspects such as traffic and labor laws, and commercial laws or else pay fines, Heetch mainly pays its taxes as every e-commerce activity since it is registered in that category of business in the ministry of commerce, and it respects the laws of labor and give every right to their laws and sometimes more.</p> <p>Nevertheless Heetch and the peer to peer transportation actors have to settle their status versus the ministry of transportation to avoid legal conflicts.</p>

Source: Elaborated based on [www.Statista.com](http://www.Statista.com) and internal information

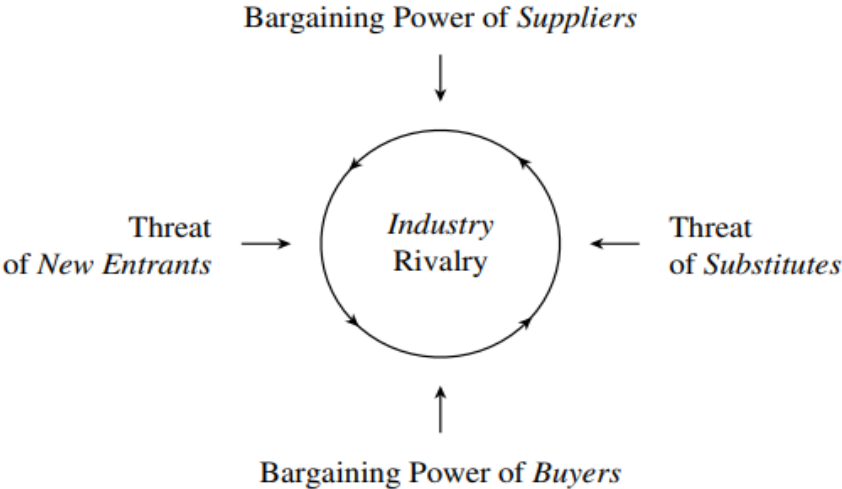
The previous analysis allowed us to understand the macroeconomic variable relevant to an organization in a specific environment & determine factors which may influence how Heetch operates in its general environment and it could be used as a common thread to give us ideas about the potential threats and opportunities Heetch currently or may face in the near future.

The ability to predict is a big asset and seems to be a key for success, assure a leverage in the market thus the survival and growth as a result. Yet the anticipation is far from being easy so Heetch should be on its guard trying to keep updates information about those factors and the way they would interfere with Heetch’s existence.

**1.2 Porter analysis:**

Now we move to the next analysis which is Porter’s five forces, which is a framework that attempts to analyze the level of competition within an industry and business strategy development, it can be represented by the next figure:

Figure 23 figure representing five forces of porter



Source : Based Upon Michael E. Porter’s Work

Understanding the network of potential growth and attractiveness in the Algerian peer to peer transportation business demands the use of Porter’s five forces analysis. Heetch is a growing transportation firm with a commanding presence in Algiers city and its surroundings. Within closely two years of operation, the organization has customer loyalty and clear quality of services. This has ensured its rapid expansion and provision of better ride-sharing services.

However, it faces stiff competition from other smaller competitors (Courssa, Amir, TemTem) to Yassir which is the leader of the market, placing itself as the challenger in the market after Yassir as a leader, reducing and taking every day more market shares to realize the right amount of growth, So there is still Enough growth possibilities for Heetch to explore fully and cover many more areas by their services. And the next five competitive forces jointly determine the intensity of industry competition and profitability.

In contemplation of this model, we present our analysis of the Peer to peer market and Heetch's position relatively to each factor as follows:

### **Bargaining Power of Clients: (Passengers & Drivers)**

Porter emphasizes that Buyers compete with the industry by forcing down prices, bargaining for higher quality or more services, and playing competitors against each other. (Porter Competitive strategy, page 24)

Heetch as a peer to peer Transportation business has 2 types of clients using its software as a service: The first ones are the drivers which are Commission & price sensitive and the passengers which are the larger portion of Costumers and they are Price/Quality of service sensitive. (Elastic demand to products) (Fragmented buyers vs concentrated ones) (Frequency of use)

When it comes to the power of bargaining , we can notice that the peer to peer transportation costumers which are the drivers which are price sensitive from a commission standpoint and price of a ride as well as the quality of services of Heetch, passengers are also price sensitive and they can also demand higher quality of service and since that the switching costs for passengers is very low and their concentration in Algiers is the biggest, resulting in just subscription in a mobile app and changing from one competitor to another, and all this happens at the expense of industry profitability, so the profitability part is less since the buyers have strong bargaining powers , So the least we can say is that passengers have a very powerful Bargaining due also to full information presence about demand and the actual market prices mainly due to social media groups and pages this leads to giving the buyer greater bargaining leverage than when information is poor and this power can lead to lower prices or having to increase costs by adding features, services to differentiate from competitors.

In light of these factors, the Passengers immense power can limit the amount of revenue for the company, hence solidifying it as a strong force. The value proposition for customers: Due to lower transactions and search costs, shorter waiting times and lower costs, the value proposition for customers is compelling. However, this is in comparison to other means of transport. When compared to other ride-hailing companies, there is little differentiation hence the price tends to play a major role.

And according to the latest survey directed towards the drivers when they were asked several questions about different aspect of Heetch, 2000 driver answered and in a response to questions what are the main forces of Heetch that made you approach to work with them, answers were as Annex C(Figure 32).

### **Bargaining power of suppliers:**

Heetch owns no vehicle among its fleets. As such, the company's business is highly dependent on drivers and partners owning their own cars. And by that the drivers have high leverage to impact Heetch's brand image either positively or negatively. In fact, Heetch utilizes its platform as an assets to persons that meet the terms and conditions to be a driver, through their mobile application as a bridge between their availability and the client's demands and need. Car owners are accorded the freedom to choose between the Heetch and its rivals but given that hourly wages (pricing of rides) are similar relatively speaking, and Heetch has the upper hand when it comes to their profitability regarding the commission percentage it is the best choice in the market reducing their negotiation power, thus drivers can't negotiate for gap in wages since they are irrelevant at this level so far. Therefore, it is undeniable that the suppliers have a considerable effect on Heetch's performance. The switching costs aren't that high for Heetch's Drivers, but the contrary can happen with the leader with exclusivity contracts, However since it is easy to joining peer to peer transportation companies as a supplier, it is automatically reducing the bargain power because more supply means more alternatives and ironically it increases value proposition for new joiners, so barriers to entry in the business are low, thus in this case the suppliers have Moderate bargaining power.

### **Threat of new entrance:**

Winners attract others that wish to get a share of their success. Company that makes above Business-average profits will face the risk of new entrants that may either imitate bluntly or come up with similar or better value proposition, so a new entrant will bring more supply and a desire to gain a market share ,which may results in the pricing battles and stiff innovation

campaigns, none the less Heetch should do the required tasks to rise the barriers to entry, since the Peer to peer market isn't satiated yet there is still a possible entry to explore but it is for sure getting smaller everyday passing, because existing companies are on the run to better costs mastery & enhance quality of service and develop new features generated by profitability shaped by experience, usually barriers to entry have six major sources :

On the surface they are low everyone can program a third party mobile app, but is everyone able to start from zero and climb and scale in a short amount of time? Absolutely not.

- Economies of scale: Often economies of scale are cited among the reasons that costs decline with experience so for Heetch it have to decrease costs per unit and rise volume of sales (rides/converted drivers) per period to make new joiners suffer to scale up to that level and prevent them from mastering low prices and have lower profits to reduce their scaling or as best to stop it completely.
- Market profitability: The more the market is generating more profitability than other markets and market leader is gaining so much profits the higher incentives are for new joiners and vice versa. So Heetch should expect a lot of attempt to access the market from new joiners to take a part of the share, and it is necessary to have prepared plan for optimizing operations and cost mastery to maximize profitability (by market analysis, and competitive intelligence)
- Product Differentiation: This means that Heetch established for itself in the spirit of its costumers a different higher brand performance and gained customers loyalty steaming mainly from user experiences or suggestion of others, it is perhaps one of the most important barriers to entry because new entrants must offer a major improvement in creating that performance in order to have the same effects of those already existing in the market and Heetch is assuring to have that.

As we can notice that the threat of new entrances is high since the market's needs aren't fully satisfied and we noticed during the last 3 months that there are other new entrants as (Harbin and Yalla Go) but the mastery of that scaling and realizing profitable results is a hard task for any new comer since the domination of the leader & the challenger is quite obvious.

### **Rivalry with competitors:**

Certainly, not all industries are equal in terms of competition. There are those that are more competitive than others and currently, the existing peer to peer transport companies in the market compete on both suppliers- car drivers as well as customers. Even though the peer to

peer transportation services is kind of new in Algeria it is characterized by severe competition, “According to Sylabs’s article the Algerian market is one of the largest in the MENA region, with more than 70,000 potential rides per day. A market estimated between 80 and 100 million dollars per year” ([sylabs-dz.com/le-rtc-en-algerie-un-marche-de-100-millions-de-dollars](http://sylabs-dz.com/le-rtc-en-algerie-un-marche-de-100-millions-de-dollars))

Heetch has so many competitors and they all use different set of strategies and technics such as price competition, advertising battles, product introductions, and increased customer service or warranties to alter the market into their advantage. Yassir is one of the major competitors of Heetch the companies has almost identical business model and operations with varied domain of activities to an extent. But Not only are the two firms competing for market share but there are also other competitors such as courssa, Temtem and Amir.

The modern business environment requires firms to target a customer base within a given and defined geographical locations to cut on the operation cost, and here the difference of coverage appear since not all firms can cover all the Algerian territory, Heetch is present at the moment in 5 big cities from 59 (knowing that Algiers to be considered the most area with demand), which represents a small territory, but altogether has massive population, since the competitor yassir is covering more than that since it is the market leader and has the advantage as a pioneer to expand more , but that wouldn’t stop other competitors to do the same as Heetch done recently by adding Oran to its area of coverage. (Add market share + quality services + offers B2B+ competitive advantage)

Since we covered the geographical zones, we have to go through prices and how they in the market , the market price is determined by competition merely and it at most times approximate between yassir and Heetch and it is characterized by instability compared to other competitors which has regular or more like fixed prices in a daily time frame. After the prices we have to mention that exit barriers aren’t that high since the products aren’t provided mainly by the company itself,

And the competition isn’t only about offering individual Clients rides in a rapid comfortable way, but also to propose best B2B offers to generate more profits with adequate quality service and suitable competitive prices, since there a lot of companies in need of transportation services for their employees.

Last but not least the market shares since yassir is a leader it has a market share of XX% , and Heetch has gained 30% in just two years of activity which shows that the market growth rate is very high.

So depending on the state of immaturity of the transportation services in Algeria and those remarks from a macro level the peer to peer transportation market is attractive and still hiding so much potential to satisfy the demands, and it doesn't mean that it is an open market without barriers but that the current offer is unable to satiate the requirements in measures of pricing, geographical coverage and quality of services which is dictated by the user experience. And currently we can assess that the competitive advantage that Heetch has is the open ears to its clients and drivers (quality of services) and the regulated pricing according to the client's capacity.

### **Pressure from Substitute products:**

Substitution products according to Porter are Substitute products that deserve the most attention are those which tends in improving their price-performance tradeoff with the industry's product or provided by industries earning high profits.

Substitution products limit the potential returns of an industry by placing a ceiling on the prices firms in the industry can profitably charge. The more attractive the price-performance alternative offered by substitutes, the firmer the lid on industry profits (Porter .Competitive strategy, page 23), and when it comes to the transportation means there is an umbrella of them such as the common transport industry, Taxi services are the closest ones as a potential substitute, as well as the metro in areas covered by this kind of services since it is more comfortable and faster since there is no traffic and cheaper so it have the best price performance rate, thus makes it the most potential substitute. The existence of taxis around all cities in Algeria can make the number of rides downgrade if the prices are much higher than the latter Therefore, their significant presence is enough to limit Heetch from increasing their profits. A constant threat of substitutes is currently medium force in the case of Heetch.

And as a result of this analysis we gathered important data which can be used to strengthen its competitiveness and place itself better in the market toward their customers, and exploit the available opportunities and avoid threats.

**1.3 SWOT analysis:**

As a consequence of those analyses we get our SWOT analysis as the two tables shows in Annex C (Table 22 & Table 23).

**2 Heetch’s Interested parties:**

Interested parties are defined by ISO 9000: 2015 as “a person or an organization that can affect be affected by or perceive itself to be to be affected by a decision or activity” (ISO 9000, 2015), and it is important to go beyond the costumers only and identify and take in consideration all of the other interested parties.



We have followed a method resulting in 3 major actions:





















- 1- Identifying IP
- 2- Classifying them in categories
- 3- Identifying their and expectations
- 4- Assigning how much power they exercise & how much interest they show towards Heetch.
- 5- Classifying them in an interest/power matrix

We have identified then divided the interested parties into internal and external, and we have identified and matched their needs and expectations and assessed how much power they put on Heetch and the degree of their interest in the company, this work was a production of O.Benseddik one of the company’s main managers and myself. We elaborated a figure and a table to describe what was accomplished as illustrated in [Annex C\( Figure 33\)](#).

It is important to explain the section degree of interest and power, each dot represent a level and 5 dots is the higher power/interest and 1 is the lowest, and our matrix is going to be based on this as such:

Table 11 Table classifying interested parties by degree of power and interest

Interested party	Needs and expectations	Degree of power	Degree of interest
1- Employees	<ul style="list-style-type: none"> <li>• Job security</li> <li>• Tangible and intangible rewards</li> <li>• Career development</li> <li>• Good environment of work.</li> <li>• Satisfying wages.</li> <li>• Implication in decision making</li> </ul>		

2- Parent organization	<ul style="list-style-type: none"> <li>• Good management and leadership</li> <li>• Revenues</li> <li>• Good Performance indicators.</li> </ul>		
3- Investors	<ul style="list-style-type: none"> <li>• Good return on investment</li> <li>• Successful management approach.</li> <li>• Better offer for shares.</li> <li>• Consulted in strategic decisions.</li> </ul>		
4- State and local authorities	<ul style="list-style-type: none"> <li>• Consultation in need</li> <li>• Taxes paid</li> <li>• Respect Algerian laws</li> </ul>		
5- Taxi drivers union	<ul style="list-style-type: none"> <li>• Disappearance of Heetch.</li> </ul>		
6- Costumers (Passengers)	<ul style="list-style-type: none"> <li>• Best Quality of service</li> <li>• More personalized offers</li> <li>• Attractive prices</li> </ul>		
7- Costumers (Partners/Drivers)	<ul style="list-style-type: none"> <li>• Great costumer services</li> <li>• Functioning reliable application</li> <li>• Best profitability</li> <li>• Create sustainable relationship</li> </ul>		
8- High education institutions	<ul style="list-style-type: none"> <li>• Provide opportunity to students for practical internship and professional integration</li> <li>• Help finance scientific clubs.</li> </ul>		
9- Business Partners (Service and Product Supplier)	<ul style="list-style-type: none"> <li>• Communicate reciprocally their brands and the partnerships to the big audience.</li> <li>• Attractive business offers.</li> <li>• Create a good relationship on mid-long term</li> </ul>		
10- Social media influencers	<ul style="list-style-type: none"> <li>• Attractive offers</li> <li>• Advantages of working with Heetch.</li> </ul>		
11- Civil Associations	<ul style="list-style-type: none"> <li>• Sponsoring to help their events</li> <li>• Implied in social responsibility of enterprises.</li> </ul>		

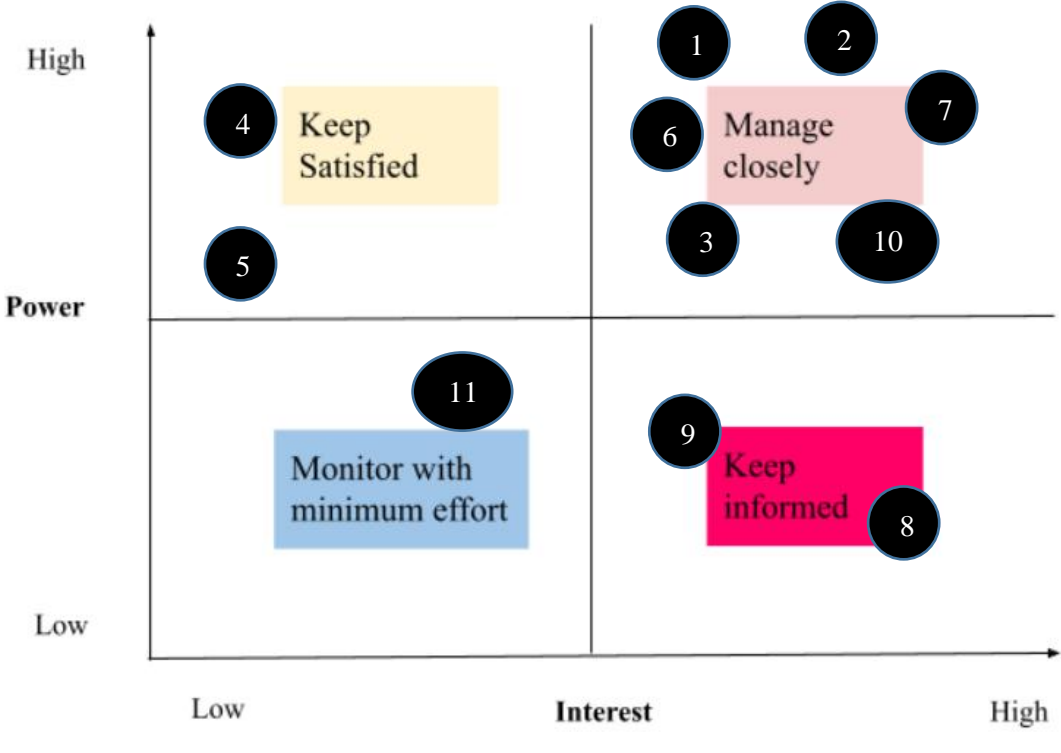
Source: elaborated by ourselves

Since we have presented the ponderation of each interested party in terms of power and interest, those two mean how much each interested party have power and influence on Heetch’s decisions and activities and how much interest they show as well toward the company.

Knowing that in the table from 1 to 3 dots is low and from 4 to 5 is high.

Now we are able to present the matrix and classify those interested parties and assign generic actions towards each one:

Figure 24 Interested parties matrix



Source: Elaborated with ourselves

**3 Determination of the scope of the quality management system.**

The establishment of the quality management system includes the totality if the activities of Heetch since it is small company regarding the number of employees and activities it exercise, Altogether its products and services provided by Heetch el Djazaier.

Yet in the implementation following the ISO 9001:2015 and its chapters, we excluded a section in chapter 8, which is § 8.3 conception and development because Heetch doesn’t provide the

**4 Process Approach:**

As discussed earlier in the first chapter we have explained the principles of the quality management systems according to ISO 9001:2015, among those we have the process approach which means that the organization manages its activities a system of processes, and taking in consideration the interaction between each process and the other, and the management has an important role to promote the process approach.

**4.1 Identification of the processes:**

After several weeks inside Heetch doing observation and participation we have successfully identified all the processes of the company, mainly to raise our understanding of the company’s business processes, and how they operate from the view point of its constituent business processes, then we have classified them into their families as the next table shows:

Table 12 List of processes

Code	Name of the process	Family of the process		
		Management	Realization	Support
ACQ	Acquisition		✓	
RET	Retention		✓	
CRE	Care		✓	
MRK	Marketing		✓	
MAN	Management	✓		
ADM	Administration			✓

Source: Elaborated by ourselves

**4.2 Determination of key processes**

Since we have identified the processes of Heetch, we pursued an evaluation of each one to recognize the key process which are vital to the company’s survival and source of added value, that’s when the norm FDX 50-176 came handy to assess each process on the basis of several criteria’s which will be represented by only one which is importance, because decisions making will take into consideration the priorities when it comes to improvement plans.

The primary criteria are measured on a scale from 1 to three and the importance is the sum of those values, as the next table shows:

Table 13 Table showing analysis of the contribution of each process

Criteria Processes	Contribution to Profits	Contribution to client satisfaction	Fundamental for the sustainability of the organization	Importance
ACQ	3	1	3	7
RET	3	3	2	8
CRE	2	3	2	7
MRK	2	3	2	7
MAN	3	2	2	7
ADM	2	1	3	6

Source: Elaborated by ourselves

We can notice that the Retention processes has the highest score, since it is related to the core business of the company and managing the partners (drivers) through their journey with Heetch and assisting them to reach their goals and assuring them getting the right conditions to achieve their work successfully.

And is it one of the most important process for the company, still the other processes have close score to the latter, and they contribute all to the success of the company in relative terms.

Depending on the brainstorming sessions that we had with the acquisition and retention team, and according to their processes performances, they have an above average level of indicators realization which reflects the acknowledgement of the importance of those processes, yet we couldn't trace the causes of failures to achieve higher rates due to shortage of time and complexity of study, however they shall be investigated later on by a cause and effect study to determine root causes.

#### **4.3 Interactions of processes**

Since we have identified the key and the rest of process, we have to understand how these processes interact with each other, and arguably I don't think there is a better way to grasp and identify those interactions than by doing each task of each process, that's what allowed us to detect them and draw them in a table which will be found in the annex D (Table 24), and as a cartography to better visualize them, with the help of each process responsible and team member I was able to draw a table to demonstrate how each process interacts with each other,

and we elaborated the process map as a result to have more clarity on the organization as a whole.

Process maps help” visualize the main relationships between processes and facilitate a basic understanding of how the company operates” (Jan Mendling, 2014) and it will allow managers to trace back effects and have better planning, and team members to be conscious of how his work contribute to the finality of the organization, and gives better understanding to external and internal parties of how the company is organized.

Processes are divided into 3 families and each contribute with its role in the success of the organization, and Heetch has some processes in each family as explained:

**Management Processes:** Heetch has only one process of this family and it is oriented to manage the company as a whole transcribe strategy and ensuring the good planning and execution of task and continuous improvement of the performance.

**Realization processes:** those processes contribute to the realization of a product or service, from the detection of the customer's need to their satisfaction, simply they are the core business of the organization, and Heetch has four processes in this family Acquisition, retention, Care, and marketing.

**Support Processes:** Those processes contribute to smooth the running of other processes by providing them with the necessary resources, and Heetch has one process which is administration.

We can find the process map presented in [Annex D \(Figure 34\)](#).

#### **4.4 The process Sheets**

We were able by using our understanding of the processes to establish a sheet for each process as an identity record, the purpose of the process sheet is to provide a description of the means planned and judged necessary for the proper functioning of each process (Hans brandenburg, 2006).

We used the model proposed in the previous source and added some little modifications, we elaborated 3 process sheets, one process from each family: Management process (Management family), Acquisition process (Realization family), and Administration process (Support family)

You can find all the process sheets and work instructions established in the annex D.

## **5 Risk analyses application on the processes.**

We live in an ever changing world, and we are forced to deal with our environment which is full of uncertainty which is caused mainly by risk how Heetch would face those risks which threaten its existence every day.

To ensure that we have applied the requirements of the ISO 9001:2015, which emphasized in the last version on risk approach in different parts of each chapter, more specifically (§ 4, § 5, § 6, § 9, § 10) and the notion of risk is not explicitly expressed in chapter 7 and 8.

That's why we were willing to launch a risk management approach at Heetch, following the guidelines of the ISO 31000:2018 standard, which lead us ultimately to follow the next steps:

**Definition of the scope of risk management:** this is important to clarify which part of the organization were touched by this approach, and we can declare that we have applied this approach on 3 processes each from a different family: Management, Acquisition, and Administration.

**Establishment of the context:** we have already dealt with this with our previous environment analysis using pestle and porter, which will help us to understand and put the risk management in current context of Heetch.

**Definition of the risk criteria:** we have defined here the potential risk relative to Heetch's processes and objectives. And those risks should be assessed by estimating the criticality (C) of each risk with attributing frequency of occurrence (F) and gravity (G) on grounds of impact on Heetch's performance and realization of its objectives. And the critically is going to be calculated through this formula: (CRITICALITY= FREQUENCE OF OCCURRENCE\*GRAVITY)

This work was developed with the responsible of concerned processes and their team members, because we believed that everyone can help in identifying and defining those risk.

The rest of the work was established by us and the process responsible as a risk management team.

We present the criteria of gravity and Frequency of occurrence as well the matrix of risk and its representation in [annex E \(Table 26, Table 27, Table 28, and Table 29\)](#).

Now that we have identified the risks and their criteria we are going to be prioritizing the potential risks according to the previous assessment risk matrix.

## Evaluation of risks:

Now risks need to be ranked based on their criticality and their effects, because it allows us to gain a holistic view on the risk exposure on the totality of the company.

We organized meetings with the process responsible to discuss what are the required solutions for those risks, because at this stage it is mandatory to go through the different steps of evaluation by stating all the risks and classifying them by nature, then analyze each risk to understand the link between the risk and different factors within the organization and bring the remedy by various ways such as the elimination or the preventive actions to avoid it or contain it in case of occurrence of any of those risks.

And we are going to demonstrate those steps in the next table:

Table 14 Evaluation of risks

N°	Type of Risk	Risk	Consequences	Process	Origine 5M	Evaluation (Criticality)
1	Infrastructure	Web site inscription shut down or disrupted	Partly disruption of the acquisition process	Acquisition	Manpower Materials	$G(3)*F(3)= C (9)$
2	Infrastructure	Electricity shut downs	Complete disruption of all activities	Acquisition	External	$G(5)*F(2)= C (10)$
3	Infrastructure	Poor performance of third party partners,	Causing no reach to costumers and being unable to assist them	Acquisition	Machines Management	$G(3)*F(5)= C (15)$
4	Social & economical	Turnover	Loss of key employees which has the "savoir faire"	Administration Acquisition	Management Methods Manpower	$G(4)*F(1)= C (4)$
5	Social	Lack of competence in the market of employment	Result In absence of quality employees to recruit	Acquisition Management Administration	External	$G(2)*F(3)= C (6)$
6	Financial	Disruption of payment of commissions of drivers	Causing big credits from drivers towards Heetch.	Methods	External	$G(2)*F(5)= C (15)$
7	Law and political	Disruption of the activity due to legal unconformities	Inflicting arrests due to the nature of the activity.	Acquisition	Management External	$G(4)*F(3)= C (12)$

8	Knowledge	Lack of sufficient knowledge to direct the teams to realize objectives and knowledge to seize opportunities	Manifesting itself in poor performance stats and economical decline.	Acquisition	Management Manpower	$G(3)*F(1)= C (3)$
9	Reputation	Spread of bad rumors about Heetch	Inflicting Heetch's brand image with less customer trust.	Acquisition	External	$G(4)*F(3)= C (12)$
10	Operational	Conflict between passenger and driver	Causing several reoccurring problems depending on the conflict nature and degree	Retention	Methods	$G(3)*F(5)= C (15)$
11	Infrastructure	Disruption of communication tools which make work so slow and ineffective	Disrupting work partially or completely and render it slow and ineffective	Acquisition	Management	$G(3)*F(2)= C (6)$
12	Economical	Decrease in Algerian currency exchange rate thus power of buying and value.	Less consumers due to the price increasing for drivers and passengers.	Acquisition	External	$G(5)*F(2)= C (10)$
13	Piloting	Irrelevant performance indicators	Causes derivation from the goals and wasting time and effort	Management	Management	$G(3)*F(2)= C (6)$
14	Piloting	Strategy communicated badly or understood differently by staff	Incoherence of operational work with strategy	Management	Management	$G(2)*F(2)= C (4)$
15	Piloting	Alienation of process responsible due to over occupation.	Which causes the non-realization of quality objectives	Management	Management	$G(4)*F(3)= C (12)$
16	Political and social	Lockdown and suspension of economic activities.	Low acquisition rates and less rides which means less attractive business.	Acquisition	Eternal	$G(4)*F(3)= C (12)$

Source: Elaborated by ourselves

### Treatment of risks:

After having identified the risks and evaluating each one, we are going to propose some preventive actions to reduce and or eliminate the effects of those risks by specific actions to react facing those risks in the next table:

Table 15 Preventive action toward potential risks

<b>Risk</b>	<b>Preventive action</b>
1	Set a highly qualified maintenance team and execute tests regularly.
2	install an electricity generator inside the headquarters in case of ruptures
3	Set a quality criteria for choosing the third party services providers
4	Create attractive offers and advantages to strengthen loyalty toward the company
5	Elaborate conventions with universities and schools to recruit the best elements as exclusivity and guarantee their integration through internships
6	Establish a method to guarantee that drivers who don't pay get penalties according to time limits.
7	Constitute a union with peer to peer car sharing companies to put pressure on the authorities to clarify rules
8	Plan for training to all members of the organization in different fields according to the needs
9	Perform strong engaging social responsible campaigns to demonstrate the care Heetch has toward the society, environment and social causes.
10	Elimination of probable situations where conflicts might appear by developing payment methods and new firm regulations and assuring their clear effective communication.
11	Create back up lines of communications in case of disruptions.
12	Heetch have barely no control on external factors such as this one.
13	Create the appropriate environment and set of motivations to realize the key performance indicators.
14	Develop a communication strategy through different channels and measuring the effectiveness of the communication
15	Establish a Rotation schedule to allow the employees to focus on their performance and exploit it fully
16	Develop new innovative ways to inscribe new drivers through their platform

Source: elaborated by ourselves

## **6 Establishment of the quality documentary system.**

When it comes to the documentation part, we have identified the documents required by the standard ISO 9001:2015, which work to provide a clear shared framework for all employees on all the organization's levels, and it allows consistency for process management and provides evidence for the achievement of objectives and goals.

Since we have identified the required documents and recordings and complementary ones and as we have earlier the hierarchy of the document system, now we can present the list of documents that we have managed to establish during our internship which are as follows:

- Quality policy.
- Process sheets & process map.
- Scope of quality management system.
- Non conformity sheet.
- Work instructions (flowcharts) for some processes.

Since that Heetch understand that it is living in a digital era, so their documents are suitable for their work nature, and it provides a manifold of advantages as well as : traceability to recent changes, propagation of technology usage and reduction of paper waste and space.

The quality policy represents the general structure of the quality objectives, and help guide the organization to show its customers and shareholders its intention to provide quality products and services, and to realize the set up objectives, while process sheets were established to have more process mastery and to provide traceability of continuous improvement, meanwhile the scope of quality management should be communicated to clarify the scope of the implementation across the organization, furthermore the non-conformity arose because there are complaints about different sides of products and services , and those sheet helps to keep track of the anomalies that goes with products and services and try to study which ones occur more often and try improve and reduce failures and their effects, when work instructions represents the micro activities , and they help to clarify how work is done and to seize improvement opportunities and non-added value actions to be more efficient and effective.

All the documents established can be found in annex E.

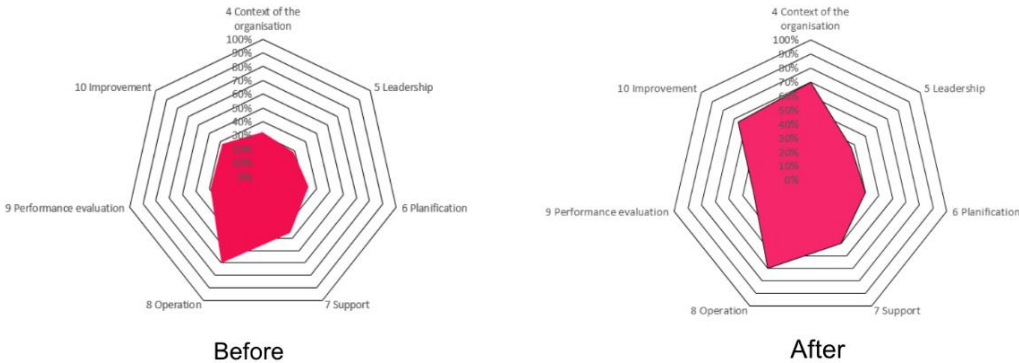
## **7 Results obtained Outlook & recommendations.**

In this chapter we are going to expose the obtained results and discuss them in order to highlight the influence of the implementation on the company.

The final objective of this internship was to contribute to implement a quality management system according to ISO 9001:2015, which was a perfect opportunity for us to apply the theoretical frameworks in reality which we learned during the last two years and participate in a concrete improvement project.

Although the several hurdles which stood in our way as the limited time and resources we had to work with and the sanitary context, and the availability of employees and managers to collaborate due to the length of work of every day in brutally competitive business, we were able to exploit the openness of employees to contribute to the project, and above all we can say that the results of the project were positive and we have witnessed an improvement in the general management system, manifesting itself through another diagnostic at the end of the internship. as obvious in the next figure. The first diagnostic was executed in the period from 14 to 18 April 2021, and the second one in 29 August 2021.

Figure 25 Results of the implementation of ISO 9001:2015 according to auto diagnostic in April and August



Source: Elaborated by ourselves

Yet we get to understand some different aspects during this internship and that we have to adopt the Standard into the organization’s activity and not the other way around and we have to understand the culture of the company and its objectives to know how to approach the subject when the time is appropriate and that communication play a major role in the success of the implementation, yet results aren’t immediate even though we got some fascinating ones during our work in the last months, though bigger impact can be made on the long run, you can find the realized actions from the proposed plan action in the annex R.

We noticed also a radical change of ideas among employees about the process approach concept and their identifications how they were before this project started, but after the implementation employee understood what interactions between processes are, and with the participation in risk analysis it made them anticipate risks and proposing innovative preventive actions in brainstorming sessions, and management showing care to train employees and giving them opportunities to learn and develop their careers at home by providing them with a business account to learn in E-platforms, when it comes to documentary mastery , we notice obtaining a good amount of traceability which guarantees a control of the business processes such as ease of understanding the work instructions for new recruitment to fasten their integration process and assimilation and keep track of the pace of improvement in order to understanding what the business and general context is, and setting up preventive actions affecting some processes.

Evidently relying on our established work we can propose some recommendations to help push the improvement even further, since the company had invested different kind of resources to realize this project, yet it have to continue on this momentum, the company have to focus on quality costs and invest more in quality to get enhanced services infrastructure and partners to get a higher satisfaction of customers, In auditioning to appoint a responsible to manage quality in the company, and plan annual audits to assess the performances of the whole organization in addition to the recommended plan which was not applied fully.

The company's focus is all on continuous improvement, certification on the other hand is not a priority at the moment, and that's due to the company's strategy, maybe it will take place in the future as a need.

Nevertheless, the quality management system has contributed positively to create a structure to base on it continuous improvement actions, by planning for it and applying it as a project, which confirmed what the findings of researches in our literature review and proved their importance to render the company's performances to a higher level.

# **GENERAL CONCLUSION**

The field of transportation represent such a central role in the advancement of each country and Algeria especially, and it plays a vital part in the economic growth since it knows a lack in the infrastructure regarding the concentration of citizens in cities, and since the Algerian economy has known some serious crisis, it needs to be refreshed and that could be done by the help of such startups which invest to develop different sectors and complement the activity sectors which the state can't cover and putting more oxygen into the state's pockets to keep it alive. But transportation has to provide citizens with appropriate quality services to enhance quality of life in Algeria.

In the light of this context we oriented ourselves to focus on such important sector with great potential to contribute to setting up a quality management system according to the standard ISO 9001:2015.

During the project's period we have noticed the intense pace of work in the peer to peer transportation due to intense rivalry, which can be regarded as a limit to the project since most employees had little time to spare aside from their daily responsibilities, that's why specialization should be created and link it to Heetch's brand image, and we thought that the best one is to set up a quality management system to ensure the quality of products services and enhance costumer experience.

We have started the project by documentary research about the subject in discussion to understand it before starting to apply it, and coordinate with my both tutors at Heetch and School about the priorities inside the company and the actions that need to be performed in the elaboration of the thesis.

Our main goal was to respond to the problematic asked in the beginning of this project:" To which extent the contribution of the setting up of a quality management system will help Heetch el Djazaier to develop and enhance their current management system?" and its subsidiary questions :

- How could Heetch master their processes more efficiently and effectively?
- How could Heetch face risks to their core processes?

Luckily we have been able to respond to all three questions, we did on the main question by evaluation the companies respect to requirements of the standard ISO 9001:2015 and the evaluation of the performance before and after, and we were able to answer the secondary ones with the execution of our plan action and establishment of the process sheets and process map

and the interaction of processes matrix and by the risk analysis study according to ISO 31000:2018.

We have successfully been able to achieve some of the milestones we have set for ourselves in the planning of the project:

- Draw the process map
- Establish Process sheets (Management – Acquisition- Administration).
- Establishment of workflow charts of the acquisition process.
- Conducted a study concerning general and business environment (PESTEL, PORTER, SWOT).
- Establish Documents judged to be necessary regarding the key activities of Heetch (Quality Policy, Non-conformity sheet, Scope of the quality management system).
- Conduct a risk analysis study.
- Classification of interested parties in a matrix.

Yet some actions didn't take place due to the constraint of time and resources, although there is the ability to pursuing them after the internship ends.

Now that the basis of the quality management system has been produced, the ground to continue the work is well established, however it is important to highlight that the continuous improvement culture existed before my arrival it just got strengthened that culture with our project.

Finally this experience allowed me to explore the different levels of the organization, and gave me the chance to work in an autonomous way, and with the operations team mostly which helped me to develop my sense of communication, since at some point I had the same responsibilities as a member of the team which permitted me a clear understanding of the processes and the structure of the company.

We hope that this project will serve two very important purposes, the first is that it will be beneficial and contribute to the flourishing of Heetch el Djazaier and they become ultimately a reference in the transportation business, and to be used as a scientific research for future researchers to come.

We honestly think that quality affects the companies and their performances to an immense extent and we wish if they lean more on the standard and references of quality management to obtain a satisfying performances and excel on the national as well as the international level.

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# Annexes

## Annex A: Quality management systems

- Rationale and benefits behind the existence of quality management principles

Table 16 Table Explaining the benefits and reasons of existence of the principles of quality management

Principle	Rationale	Benefits
1- Costumer focus	It is basically to meet current costumer's expectation and exceed them in the future. Sustained success is when a company focuses on the current and potential needs of its clients to assure an impression of confidence in the spirit of their costumers toward the company's brand image.	<ul style="list-style-type: none"> <li>- Improved customer loyalty</li> <li>- Increased market share</li> <li>- Increased customer satisfaction</li> </ul>
2- Leadership	Creation of unity of purpose and direction & engagement of people enable an organization to align its strategies, policies, processes and resources to achieve its objectives	<ul style="list-style-type: none"> <li>- Increased efficiency and effectiveness</li> <li>- Quality objectives met.</li> <li>- Improved communications</li> </ul>
3- Engagement of people	The engagement reflects a sense of belonging to the organization thus delivering good products and services and proposed high value.	<ul style="list-style-type: none"> <li>- Enhanced exercised activities.</li> <li>- Better employee's satisfaction.</li> <li>- Increase motivation to achieve quality objectives.</li> </ul>
4- Process Approach	The comprehension of how the processes of a company interact and function as a system.  Process approach means that those processes are interrelated and their understanding how results are generated help to optimize those processes and their performances.	<ul style="list-style-type: none"> <li>- Optimized performance through effective process management, efficient use of resources, and reduced cross-functional barriers.</li> <li>- Enhanced ability to focus effort on key processes and opportunities for improvement</li> <li>- Control the outputs and consider the risks of each process.</li> </ul>
5- Improvement	Establish a culture of improvement can be an important step toward progress, Successful organizations are permanently focused on improving, by maintain current levels of performance and seeking new opportunities and avoiding more risks.	<ul style="list-style-type: none"> <li>- Improved process performance, organizational capabilities and customer satisfaction</li> <li>- Enhanced ability to anticipate and react to internal and external risks and opportunities</li> <li>- Enhanced focus on root-cause investigation and determination, followed by prevention and corrective actions</li> </ul>

6- Evidence base decision making	Decision making is a crucial process due to level of uncertainty, that's why it is mandatory to lower the subjectivity level and involve objectivity with cause and effect investigation and potential unintended consequences. So Facts, evidence and data analysis lead to greater objectivity and confidence in decision making.	<ul style="list-style-type: none"> <li>- Improved decision-making processes</li> <li>- Improved operational effectiveness and efficiency</li> <li>- Increased ability to demonstrate the effectiveness of past decisions.</li> </ul>
7- Relationship management.	Any company has to deal with its interested parties, and it is an important aspect, because they influence the companies relatively speaking, and to guarantee the sustainable success it is important to manage that relationship to optimize their performance.	<ul style="list-style-type: none"> <li>- Common understanding of goals and values among interested parties</li> <li>- Increased capability to create value for interested parties by sharing resources and competence</li> <li>- A performant supply chain to respond to all the challenges.</li> </ul>

Source: Elaborated by ourselves

- The structure of the standard ISO 9001:2015

Figure 26 Structure of the ISO 9001:2015 standard



Source: Elaborated by ourselves

## Annex B: Heetch and the P2P Market

- A comparative study of the main actors of peer to peer transportation

Table 17 Description of main actors of The P2P Services in the Algerian market

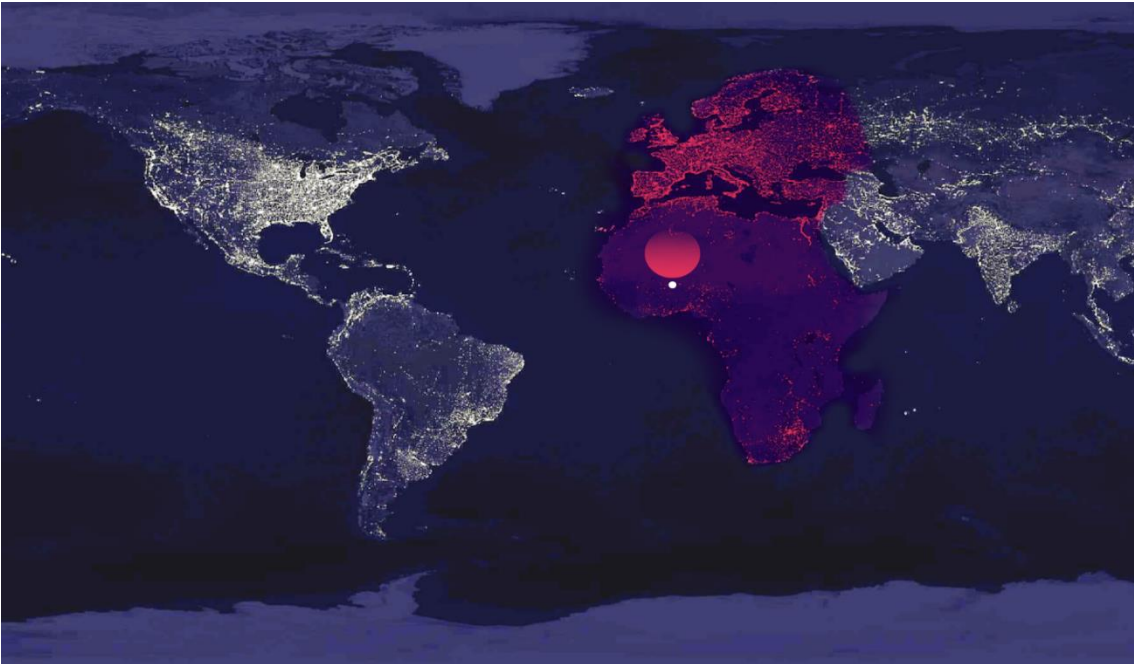
P2P Company	Description
Yassir	<ul style="list-style-type: none"> <li>• Leader and pioneer of the Market (since 2017)</li> <li>• Algerian company currently present in 24 cities.</li> <li>• Today it has more than 2 million users and 40,000 partners.</li> <li>• Has other domains of activity such as the Yassir express and Yassir food.</li> <li>• Competitive prices (Flexibility).</li> </ul>
Courssa	<ul style="list-style-type: none"> <li>• Launched in 2018</li> <li>• Active in 4 cities</li> <li>• Stable prices.</li> </ul>
TemTem	<ul style="list-style-type: none"> <li>• Launched in 2018</li> <li>• Has diversification of activity (marketplace)</li> <li>• Has a base of more than 200,000 customers</li> <li>• Achieved Algeria's largest fundraising of 4M\$ (Temtem, 2021)</li> </ul>
Careem	<ul style="list-style-type: none"> <li>• Entered Algerian market in 2018 but bought later on by Uber , though still functioning under its own name</li> <li>• Originally operative and well known in the Middle East.</li> <li>• A good follower.</li> </ul>

	<ul style="list-style-type: none"> <li>• Based in Dubai, it is available in 53 cities in the Middle East, Asia and Africa</li> </ul>
Heetch	<ul style="list-style-type: none"> <li>• A French start up turning into a multinational company, created in 2012 it entered Algerian market in 2019</li> <li>• Available in 5 cities</li> <li>• Competitive prices ( Flexible)</li> <li>• A strong Challenger.</li> </ul>

Source: Elaborated by ourselves on our research and internal information

- A picture representing Heetch ambitions

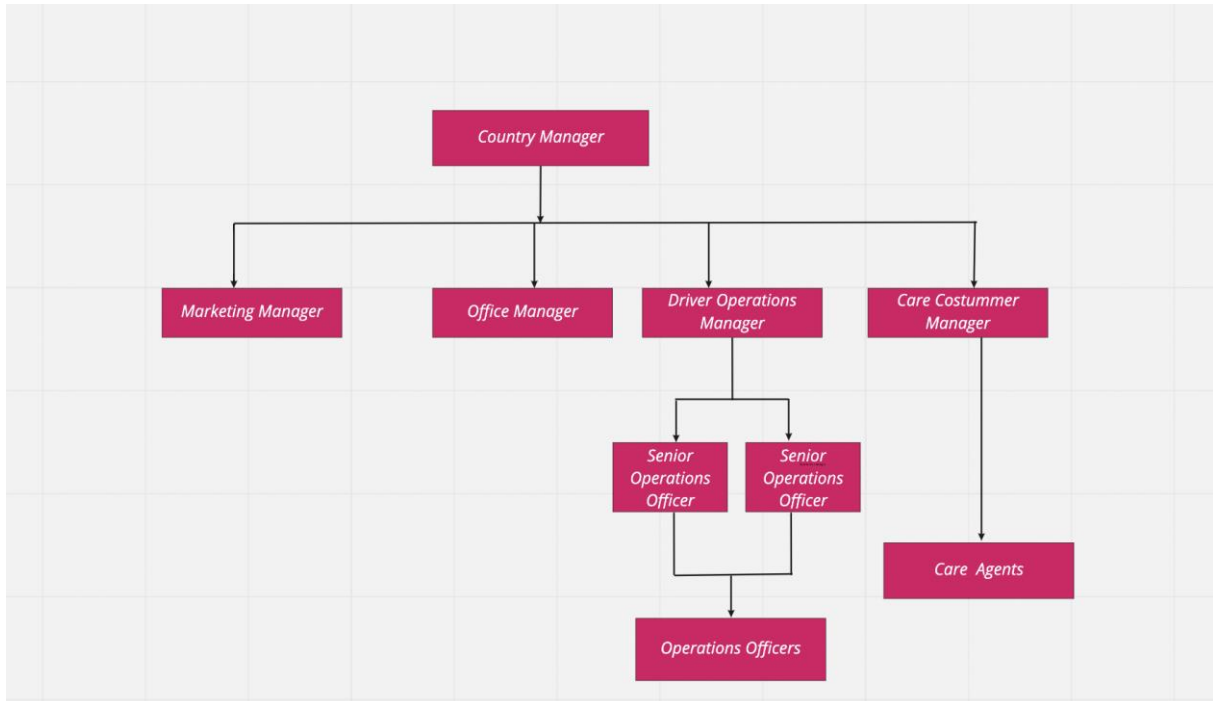
Figure 27 Map Representing Heetch presence and ambition in the future



Source: internal source

- The organizational chart of Heetch el Djazaier


Figure 28 Heetch EL Djazaier Organizational Chart



Source: internal information

- The technical company sheet

Figure 29 Technical Sheet of Heetch EL Djazaier

<p><b>Logo of the company:</b></p> 
<p><b>Company Name:</b> Heetch El Djazair</p>
<p><b>Creation date:</b> 2019</p>
<p><b>Country Manager:</b> Hocine Ettayeb</p>
<p><b>Legal status:</b> Company with limited liability</p>
<p><b>Number of employees:</b> 26</p>
<p><b>The Head office:</b> Domaine Semmar, Group 1122, Section 1, Birkhadem</p>
<p><b>Phone Number:</b> 0559469259</p>
<p><b>Email:</b> <a href="mailto:algerie@heetch.com">algerie@heetch.com</a></p>

Source: internal information

- An image illustrating Heetch's Values

Figure 30 Heetch Values



Source: Internal Database



## Annex C: The Project

- Matrix of risk of the project application

Table 18 Risk matrix

G5	5	10	15	20	25
G4	4	8	12	16	20
G3	3	6	9	12	15
G2	2	4	6	8	10
G1	1	2	3	4	5
	P1	P2	P3	P4	P5

Source: Elaborated by ourselves

- The Evaluation of the risks which might influence the project

Table 19 Evaluation of risks table

Risk	G	P	C	Alternatives
Problematic not found	G4	P3	High	Consult the company's tutor to get a grasp of what his needs may be and checking what recent researches has been about in the sphere of my subject.
Difficulty to collect information	G4	P3	High	Browse the physical and E-libraries to get hold of every source for information.
The return of covid crisis and the lockdowns	G5	P3	Extreme	Advance as fast as possible in the practical part of the thesis, and leave the theoretical work as a second priority.
Noncompliance with what has been already planned	G2	P4	Moderate	Schedule another plan more practical with achievable deadlines.
pursue the project without a well-defined clear methodology of work	G3	P2	Weak	Elaborate an adequate pragmatic work plan according to a specific well defined methodology to guarantee its success.
Resistance of change toward the standard (ISO9001:V2015) implementation	G4	P5	Extreme	Prepare informal introductions to the subject of the project, to prepare them psychologically and elaborate some presentations for them to shed light on what will be done.
Insufficiency of knowledge in application	G4	G3	Moderate	Make more effort to read the necessary documentation which grants the understanding the subject of research, and ask for help from professionals and consultants.

Lack of communication with my tutors	G3	G3	Moderate	Plan for weekly meetings with my tutors to establish each milestone and realizable goals during the whole period of my internship
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Source: Elaborated by ourselves

- The diagnostic tool and presentation of the overall results in details

Table 20 The Auto diagnostic of Heetch

Evaluated Organisme :			Heetch El Djazayer				
Evaluators			Mokeddem Abdelhakim				
Date of evaluation			14-18 April 2021				
Chapter	Article	Questions	Evaluation	Observation	Score	Average Of sub chapters	Score of the Chapter
4- Context of the organisation	4.1 Understanding the organisation and its context	Are the internal and external issues relating to the company identified?	Acceptable		66%	44%	32%
		Is information relating to these internal and external issues monitored?	Acceptable		66%		
		Is information relating to these internal and external issues monitored?	Non existant		0%		
	4.2 Understanding the needs and expectations of interested parties	Are relevant interested parties identified?	Barely Existant		33%	33%	
		Are the interessted parties requirements identified?	Barely Existant		33%		
		Are the interessted parties requirements monitored and reviewed?	Barely Existant		33%		
		Is the scope of the QMS determined?	Non existant		0%		

	4.3 Determination of the scope of the quality management system	Is the scope available in documented form?	Non existant		0%	
	4.4 QMS and its processes	Have the processes been identified?	Barely Existant		33%	
Has the input and output data for these processes been identified?		Acceptable		66%		
Have the sequences and interactions of these processes been identified?		Barely Existant		33%		
Have the criteria and methods for ensuring the effectiveness of these processes been determined?		Acceptable		66%		
Are the resources necessary for these processes identified and available?		Existant		100%		
Have responsibilities been defined?		Acceptable		66%		
The risks and opportunities linked to these processes have been taken into account, are appropriate actions planned?		Acceptable		66%		
Are these processes evaluated, measured and analyzed?		Acceptable		66%		

		Actions are taken if the processes do not produce the expected results?	Barely Existant		33%		
		Is information about these processes documented?	Non existant		0%		
5- Leadership	5.1 Leadership and commitment	Management assumes and demonstrates its responsibility and commitment to the effectiveness of the QMS?	Non existant		0%	42%	28%
		Are the quality policy and objectives established and formalized?	Barely Existant		33%		
		Does management promote the process approach and the risk-based approach?	Barely Existant		33%		
		Does management ensure the availability of the necessary resources for the QMS?	Non existant		0%		
		Does management communicate the importance of having an effective system and complying with requirements and encouraging people to contribute to its effectiveness?	Barely Existant		33%		
		Does management ensure that the QMS achieves the expected results?	Non existant		0%		
		Does management promote improvement?	Acceptable		66%		
		Does management support other people with relevant roles in the system, in order to demonstrate their responsibilities?	Acceptable		66%		

		Does management demonstrate its commitment to customer engagement?	Acceptable		66%	
		Are customer requirements identified and met?	Existant		100%	
		Are the risks and opportunities affecting the compliance of products and services identified and addressed?	Acceptable		66%	
	5.2 Policy	Is the quality policy adapted to the purpose of the organization?	Barely Existant		33%	33%
		Is the policy established, reviewed and updated regularly by management?	Barely Existant		33%	
		Does the quality policy take into account regulatory, legal and customer requirements?	Acceptable		66%	
		Does the quality policy define a framework for quality objectives?	Barely Existant		33%	
		Does the quality policy include a commitment to meet requirements and continuously improve the effectiveness of the QMS?	Non existant		0%	
		Is the quality policy communicated within the organization?	Barely Existant		33%	
			Barely Existant		33%	

		Is the quality policy made available to interested parties?					
	5.3 Roles, responsibilities and authorities within the organization	Are the responsibilities and authorities of all individuals in your organization clearly formalized and communicated within the organization?	Barely Existant		33%	8%	
		Has a manager been appointed by management to report on QMS performance and improvement opportunities to management?	Non existant		0%		
		Has a manager been appointed by top management to raise awareness of customer requirements and promote customer focus throughout the organization?	Non existant		0%		
		Has a manager been appointed by management to monitor the QMS?	Non existant		0%		
6- Planification	6.1 Actions to be taken in the face of risks and opportunities	Are the risks and opportunities for your organization identified?	Acceptable		66%	41%	34%
		Does QMS planning take risks and opportunities into account?	Non existant		0%		
		Are actions taken to address the risks and opportunities?	Barely Existant		33%		
		Is the effectiveness of these actions measured?	Acceptable		66%		
	6.2 Quality objectives and planning of actions to achieve them	Are your quality objectives in line with the organization's quality policy?	Barely Existant		33%	50%	
		Are your quality objectives adapted to the purpose of the organization?	Acceptable		66%		

		Are your quality objectives measurable?	Barely Existant		33%		
		Do your objectives take into account the applicable requirements?	Acceptable		66%		
		Are your quality objectives communicated and kept up to date as necessary?	Barely Existant		33%		
		Have the modalities (pilot, necessary resources, person in charge, deadline, evaluation of results) for monitoring the achievement of objectives been defined?	Acceptable		66%		
	6.3 Planning of changes	Are changes to the QMS planned?	Non existant		0%	11%	
		The objective of any modification is taken into account as well as all possible related consequences?	Barely Existant		33%		
		Do the changes to the QMS take into account the availability of resources and the allocation of responsibilities?	Non existant		0%		
7 - Ressources	7.1 Resources	Does management ensure the availability of the necessary resources for the QMS, its continuous improvement and increased customer satisfaction?	Barely Existant		33%	50%	46%
		Do the necessary resources take into account the constraints of existing internal resources?	Acceptable		66%		
		Are the resources to be obtained externally identified?	Acceptable		66%		

		Are the human resources necessary for the implementation of the QMS identified and implemented?	Non existant		0%		
		Has management determined and provided the infrastructure and support services necessary to obtain product / service compliance?	Existant		100%		
		Does management maintain these infrastructures?	Acceptable		66%		
		Is the working environment necessary to achieve product compliance managed and monitored by management? (physical, environmental, ergonomic, psychological conditions, etc.)	Acceptable		66%		
		Are the necessary resources identified and provided to ensure reliable monitoring and measurement results of the products / services ?	Barely Existant		33%		
		Documented information regarding the adequacy of resources for monitoring and measurement maintained?	Acceptable		66%		
		Are your measuring instruments calibrated, identified and protected?	Excluded		/		
		When such standards do not exist, do you keep in the form of documented information the reference used for calibration or verification?	Excluded		/		
		When an instrument is found to be defective, do you determine if the validity of previous measurement results has been compromised and take appropriate corrective action, if necessary?	Excluded		/		
			Non existant		0%		

		Is the knowledge necessary to implement its processes and obtain product conformity determined?					
7.2 Competence		Does management identify the necessary skills of personnel whose work affects the QMS?	Non existant			20%	
		Does management anticipate the training needs of staff members whose work affects the QMS? (acquisition of necessary skills)	Non existant		0%		
		Has an indicator been put in place to assess / measure the effectiveness of actions undertaken in the field of skills management, awareness raising, training?	Barely existant		0%		
		Does management ensure that staff are aware of the relevance and importance of their activities and how they contribute to the achievement of quality objectives?	Acceptable		33%		
		Do you write and keep records describing the skills of your staff? (initial and professional training, know-how, experience)	Non existant		66%		
			Acceptable		0%		
			Non existant		66%		
7.3 Awareness		Is the staff aware of the quality policy and its objectives?	Non existant		66%	44%	
		Are staff aware of the importance of their contribution to the effectiveness of the QMS, including improving its performance?	Acceptable		0%		
		Do you make sure that staff are aware of the relevance, the importance of their activities, the implications of nonconformities?	Acceptable		66%		
7.4 Communication					66%	66%	

	7.5 Documented information	Are internal and external communication needs determined, are their modalities defined?							
		Does your QMS include the documented information required by the standard and what you deemed necessary?	Non existant		0%	50%			
		Is the documented information available, identifiable, suitable for the intended use and protected?	Barely Existant		33%				
		Is the documentary information approved?	Acceptable		66%				
		Are activities implemented to control documented information (distribution, access, storage, conservation, etc.)?	Acceptable		66%				
		Is documented information of external origin identified?	Acceptable		66%				
		Is documented information stored as evidence of compliance protected from unintentional alteration?			66%				
		8-Operations	8.1 Operational planning and control	Are the processes necessary for the realization of the product developed and planned?	Existant				100%
Does the planning and realization of the products take into account the requirements of the products / services?	Existant				100%				
Have the product / service acceptance criteria defined? Have the resources necessary to achieve the product / service been planned?	Existant				100%				

		Is documented information retained to ensure that processes have been carried out as intended and to demonstrate compliance of products and services with applicable requirements?	Acceptable		66%	
		Are the modifications planned?	Existant		100%	
		Are unplanned modifications analyzed, are actions taken to limit any negative effects?	Acceptable		66%	
	8.2 Requirements for products and services	Have the specific customer requirements for emergency actions been determined by the organization?	Acceptable		66%	63%
		Do you take steps to maintain the conformity of the service and its components from completion to delivery to the intended destination? (take care of the client's property)	Acceptable		66%	
		Do you communicate with the customer on feedbacks and complaints?	Existant		100%	
		Customer requirements, whether or not formulated (necessary for use), as well as regulatory and legal requirements, have been determined by the organization?	Existant		100%	
		Are reviews of product / service requirements carried out regularly?	Acceptable		66%	
		Does the organization ensure that the discrepancies between the requirements of a contract or an order and those previously expressed have been resolved?	Acceptable		66%	
			Barely existant		33%	

		Is there documented information proving the results of the product reviews and the resulting actions?					
		Is there documented information to prove that any new product / service requirement is documented?	Barely existant		33%		
		If product and service requirements change, do you ensure that the corresponding documented information is amended and that relevant personnel are informed?	Barely existant		33%		
8.3 Design and nd development of products and services		Is the design and development of the product / service planned?	Excluded		/	/	
		Have the stages of design and development, as well as the review and validation activities been determined?	Excluded		/		
		Are the interfaces between the people involved in Design and Development managed? (responsibilities and authorities) Are internal and external resource requirements determined?	Excluded		/		
		Are the inputs for the product / service requirements identified and records kept?	Excluded		/		
		"Do input items include: - functional and performance requirements - information of previous similar designs - legal and regulatory requirements - applicable standards or internal rule of art - consequences of a potential failure "	Excluded		/		
		The expected results of the activities of the design and development process are mastered and reviews are carried out to assess the ability to achieve these results?	Excluded		/		

		Do you check for compliance and / or measure the gaps between the output elements and the input requirements of C&D?	Excluded		/	
		Are validation activities implemented to ensure that the products or services meet the expected requirements before its implementation?	Excluded		/	
		When the results are not achieved at the time of reviews, verification and validation, actions are implemented?	Excluded		/	
		Documented information relating to the proper functioning of the design and development process is kept?	Excluded		/	
		Are the changes checked and validated before implementation? Is information about these changes kept?	Excluded		/	
	8.4 Control of processes, products and services provided by external service providers	Criteria are established for the evaluation, selection, performance monitoring and reassessment of external providers? Is this information kept in documented form?	Barely existant		33%	66%
		Are the risks of the impact of outsourcing processes, products and services taken into account?	Acceptable		66%	
		Are means defined to verify that the product / service provided meets your requirements?	Acceptable		66%	
		Is the conformity of products and services provided by external service providers verified?	Acceptable		66%	
			Existant		100%	

		Do you communicate your requirements to providers? (elements to be provided, skills, means of control, verification to be carried out)					
8.5 Production and service provision		Are production and service provision activities planned and implemented under controlled conditions for the implementation of post-delivery service activities?	Existant		100%	75%	
		Do you monitor the ability of the process of preparing expected services, the outputs of which cannot be verified by monitoring or a posteriori measurement, to achieve the planned results?	Barely existant		33%		
		Are the output elements identified throughout the production? Is this identification mastered; as well as the related recordings?	Acceptable		66%		
		Do you take steps to preserve the property of the client or external provider when it is under your control?	Existant		100%		
8.6 Release of products and services		The release of products and services to the customer is carried out only if the execution is satisfactory to the planned arrangements; unless approved by a competent authority or by the customer?	Barely existant		33%	50%	
		Is the documented release information kept?	Acceptable		66%		
8.7 Control of nonconforming output elements		Are the outputs of the processes / products / services which do not meet the requirements identified and controlled in order to prevent their use?	Acceptable		66%	77%	
		Are actions being taken to deal with these non-conforming elements (correction, isolation, customer info, dispensation, etc.)?	Existant		100%		
			Acceptable		66%		

		Is the documented information regarding the non-compliance and the actions taken kept?					
9-Performance evaluation	9.1 Monitoring, measurement, analysis and evaluation	Are monitoring activities defined and implemented?	Barely existant		33%	60%	39%
		Are the results of this monitoring analyzed and evaluated?	Acceptable		66%		
		Is documented information kept as evidence of monitoring results?	Acceptable		66%		
		Do you monitor the customer's perception of the level of satisfaction of these requirements?	Existant		100%		
		Is the monitoring of this perception planned, are methods defined?	Barely existant		33%		
	9.2 Internal audit	Are audits planned at regular intervals?	Non existant		0%		
		The audit criteria and the scope are defined; are the selected auditors impartial and objective about the audited process?	Non existant		0%		
		Are the results of audits communicated to management and actions taken?	Non existant		0%		
		Is documented information kept as evidence of the implementation of the audit program and audit results?	Non existant		0%		
	9.3 Management review		Acceptable		66%	58%	

		Are your management reviews planned and carried out? Does it take into account all the elements listed in the standard?					
		Do your management reviews take into account all the elements listed in the standard?	Acceptable		66%		
		Following the management review, are decisions and actions relating to improvement opportunities and possible changes taken?	Acceptable		66%		
		Is the documented information from management reviews kept?	Barely existant		33%		
10-Improvement	10.1 General	Are actions being taken to meet customer requirements and increase their satisfaction?	Acceptable		66%	66%	
	10.2 Nonconformity and corrective action	Do you react to the appearance of a non-conformity or a customer complaint? (control, correction, measurement of consequences)	Acceptable		66%	47%	38%
		Are non-conformities / customer complaints analyzed and evaluated?	Acceptable		66%		
		Do you take corrective actions to eliminate the causes of the nonconformities detected in order to prevent their recurrence?	Acceptable		66%		
		Is the effectiveness of corrective actions measured?	Barely existant		33%		
		Documented information is kept as proof of non-conformities and actions taken.	Acceptable		66%		

		Will you update the risks and opportunities identified during planning if necessary?	Barely existant		33%		
		Do you change your QMS if necessary?	Non existant		0%		
	10.3 Continuous improvement	Are you keen on continuously improving the efficiency of your QMS?	Non Existant		0%		

Table 21 Source : Elaborated by ourselves

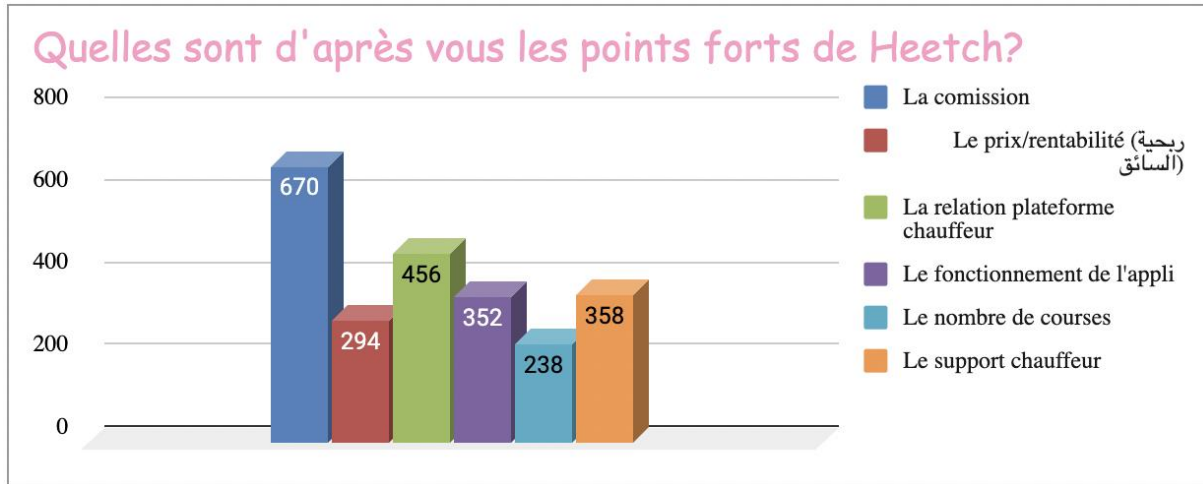
- The planning of the project :

Planning of the project													Progress
Activities	April		May		June		July		August				
<b>Preparation</b>	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	Accomplished ✓
Preliminary Visit the company													Accomplished ✓
Determination of the subject of research													Accomplished ✓
Research about the subject													Accomplished ✓
Literature review													Accomplished ✓
<b>Launch</b>	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	Accomplished ✓
Execution of the autodiagnostic													Accomplished ✓
<b>Planification</b>	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	Accomplished ✓
Developpement of a plan for the Thesis													Accomplished ✓
Elaboration of the plan action for the implementation													Accomplished ✓
Identification of the key Processes													Accomplished ✓
Risk analysis of the project													Accomplished ✓
<b>Realisation</b>	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	In progress Δ
Conception of the SMQ													Accomplished ✓
Analysis of the contexte of the company ( Pestel+porter)													Accomplished ✓
Elaboration of the interested party matrix													Accomplished ✓
Elaboration of the process sheets													Accomplished ✓
Contribution of key processes													Accomplished ✓
The process Map and process interaction matrix													Accomplished ✓
Risk analysis on processes ( 3 processes)													Accomplished ✓
Establishement and communication of the quality policy													Accomplished ✓
Establishement of non-conformity sheet (Document)													Accomplished ✓
Establishement of the scope of the QMS (Document)													Accomplished ✓
Establishement of Workflow charts (Work instructions)													Accomplished ✓
<b>Verification</b>	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	Accomplished ✓
Execute a final diagnostic													Accomplished ✓
<b>Improvement</b>	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	In progress Δ
Elaborate another plan to improve what has been done													Accomplished ✓
<b>Finalization of the internship</b>	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half	Accomplished ✓
Redaction of the thesis													Accomplished ✓
Dissertation													Not yet 🚫

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Assisting Tutor 1	Chibani Ratiba
Assisting Tutor 2	Mohamed Ferroukhi
From April to August 2021	
Company	<b>HEETCH</b>

- Results of a survey done by Heetch directed to their drivers concerning the strengths of the company.

Figure 31 Success factors for Heetch according to their partners (drivers)



Source: Internal Information

- Tables of Strength and weakness and opportunities and Threats showing the results of our context analysis :

Table 22 Strength and weaknesses

Internally	
Strength	Weaknesses
The lowest attractive prices in the market for drivers and passengers	No categorization of cars offered to clients( a costume offer)
Good reputation among drivers and passengers	Narrow parking lot to receive all drivers
Fast reliable customer services for drivers and passengers	Operators need training on quality management
Diversity of communication channels with clients	Medium activity on social media
Estimated time of waiting is low compared to other competitors	New to the market compared to main competitors
The pre-existence of continuous improvement culture	Absence of certification
The possession of practical tools and software	Great dependence on the mother company.
Small range of products	Absence of a quality management responsible.
Digitalization is ever present in Heetch	Insufficiency in career management of employees

Source : Elaborated by ourselves

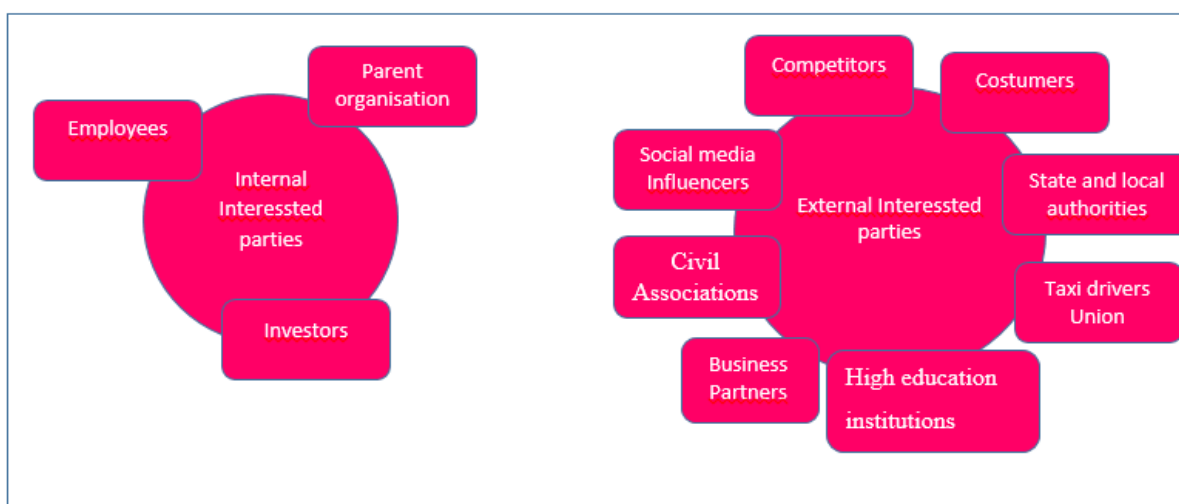
Table 23 Threats and opportunities Table

Externally	
Threats	Opportunities
Legal instability and political situation	Market in constant growth
Facility of new entrants into the market	Growth opportunity into other Algerian states
Low negotiating power with clients	Potential to develop a competitive advantage
Taxi drivers' unions strikes	Rise the quality of customer services
The sanitary situation in the country due to the pandemic	Diversification of activities to avoid losses
The economic crisis.	

Source : Elaborated by ourselves

- Interested parties exposed :

Figure 32 The Interested parties











Source: Elaborated by oursleves

- The State of actions after the ending of the project :

Table 24 State of actions after the end of the project

	Proposed Actions	Status
Understanding of the organization and its context	<ul style="list-style-type: none"> <li>Conduct a study (Pastel + Porter) to determine threats and opportunities</li> </ul>	Realized ✓

	<ul style="list-style-type: none"> <li>• Training of process pilots in these kind of analyzes</li> </ul>	In progress ⚠
Understanding of the needs and expectations of interested parties	<ul style="list-style-type: none"> <li>• Identify the interested parties and classify them in a (power/interest ) matrix</li> </ul>	Realized ✓
	<ul style="list-style-type: none"> <li>• Set up a monitoring plan and review of requirements</li> </ul>	Not yet ☹
Scope of the Quality Management System	<ul style="list-style-type: none"> <li>• Establish a document clarifying the domain of application of the QMS</li> </ul>	Realized ✓
QMS and its processes.	<ul style="list-style-type: none"> <li>• Design a workflow diagram for each activity</li> </ul>	Realized ✓
	<ul style="list-style-type: none"> <li>• Design process sheets and a process map.</li> </ul>	Realized ✓
	<ul style="list-style-type: none"> <li>• Keep the documentation system updated.</li> </ul>	Realized ✓
	<ul style="list-style-type: none"> <li>• Establish meetings with process pilots to see improvement opportunities for each process</li> </ul>	Not yet ☹
	<ul style="list-style-type: none"> <li>• Apply a risk analysis according to ISO 31000 for each process.</li> </ul>	Realized ✓
Leadership and Commitment	<ul style="list-style-type: none"> <li>• Establish the process mapping and clarify the interactions between the different processes</li> </ul>	Realized ✓
	<ul style="list-style-type: none"> <li>• Plan training for process pilots on the risk-based approach.</li> </ul>	Not yet ☹
Customer orientation	Establish a criticality matrix for probable risks and opportunities on products and services.	Not yet ☹
Quality policy	Establish a document attesting to the company's commitment to quality.	Realized ✓
Communication of the quality policy	After its establishment, post it in the company's management platform + waiting room + work space and on the website + advertising campaigns	Realized ✓

Quality objectives and action planning to achieve them	Establish measurable quality objectives for each process and document them.	In progress 
Awareness	Lead presentations and a training schedule on quality aspects.	In progress 
Competence	Create a procedure for the evaluation of skills.	Not yet 
Operational Planning & Control	Establish acceptance criteria for processes and for products and services.	Not yet 
Control of processes and products and services provided by external providers.	Establish supplier evaluation criteria.	Not yet 
Internal Audit	Develop an internal Audit Program	In progress 
Management review	Apply requirements of the standard in the next reviews.	In progress 
Non-conformity and corrective action	Develop a method to measure the effectiveness of corrective actions.	In progress 

Source : Elaborated by ourselves

## Annex D: Processes

- The matrix of interaction of different processes at Heetch El Djazaier



Table 25 Interaction of processes Matrix

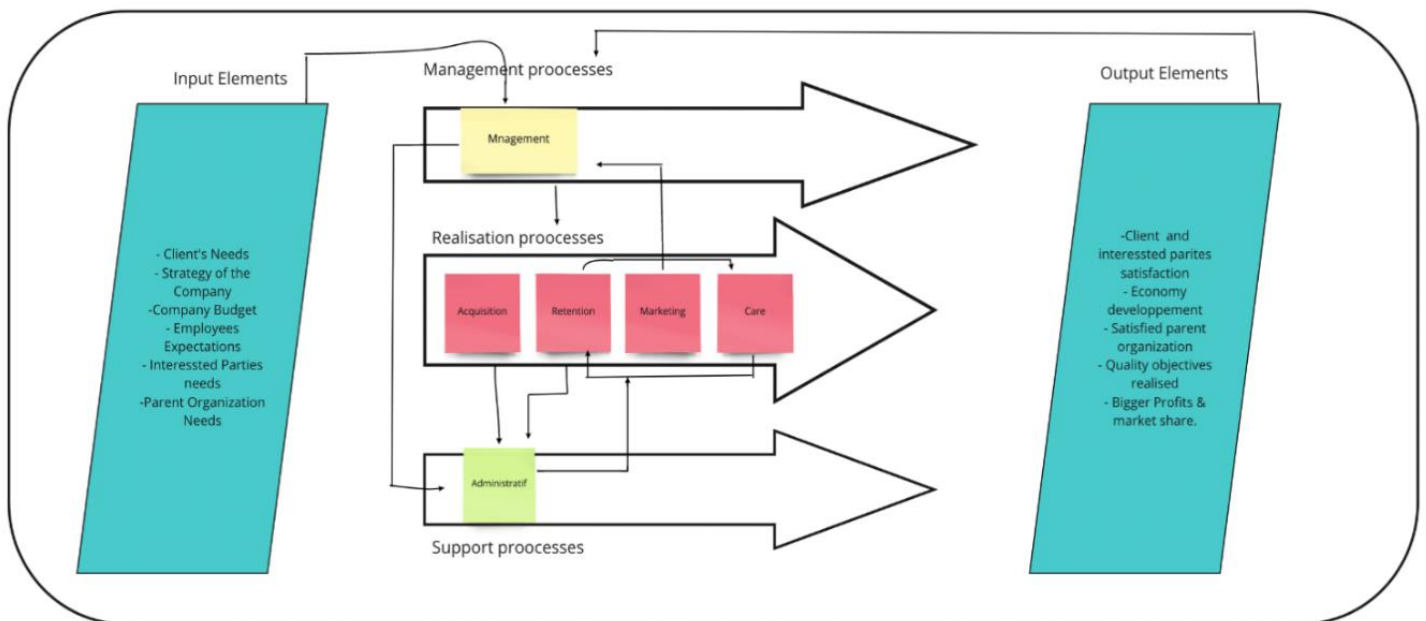
PROCESS	MAN	MARK	CRE	ACQ	RET	ADM
MAN		Budget Process review results Needs and quality objectives Marketing strategy	Quality Objectives Strategy towards passengers Needs of improvement based on process review results.	Quality Objectives Indicators to be realized Needs of improvement according to process review results.	Quality Objectives Performance Indicators to be realized Needs of improvement according to process review results.	Needs in resources New plans of hiring and training Performance indicators to be realized.
MARK	Operational marketing plans Obtained results Budget needs		Retention strategy Communication plans toward passengers		Communicatio n plans toward Drivers	Necessary legal documentary work
CRE	Results & the needs of the process.	Feedback of recurrent problems for passengers			Provide decision tree as a common bridge between the two processes	Necessary legal documentary work

					Refund of drivers file	
ACQ	Results & the needs of the process.				Information about the drivers	
RET	Results & needs of the process.		Decision tree and refunds of clients			Refund of clients
ADM	Results of the process and their needs.				Handled the legalities and payment issues.	

Source : Elaborated By ourselves

- The process Map illustrated :

Figure 33 The process map



Source : Elaborated by ourselves

- Management process Sheet :

<b>HEETCH</b>	<b>Process Sheet</b>	Date : 23/07/2021
	<b>Management</b>	Reference : MAN.PI 1.0

<b>Process Objective</b>
Assure the good planification sustainability and growth of the company as well as drawing the biggest lines to follow and guiding the rest of processes to obtain the desired results

<b>Family of the process</b>
Management

<b>Process Responsible</b>
Ettayeb Hocine

<b>Internal actors of process</b>	Country manager
<b>Clients of the process</b>	All the processes

Suppliers	Inputs	Outputs	Clients
Acquisition	Process review	Improvement plans	Acquisition
Care	Process review and performance	Improvement plans and new quality objectives	Care
Management	business review	New policy communication	all processes
Adminstration	Needs to realize quality objectives	Coordination plans	Administration

<b>Documents, Procedures, Recording</b>
The weekly reports, Business performance sheets, Process performances sheets

<b>Corrective action attesting continuous improvement</b>
Planification of better actions to improve what's existing

<b>Required resources</b>
Qualified managers to analyse the results and develop innovative Solutions

<b>Process Indicators</b>	Confidential , Process Perfs
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Performance key indicators	Objective	Frequency of surveillance	Recording
Process Perfs	Obtain desired results	Monthly	Data base
Confidential			

- Administration Process Sheet :

<b>HEETCH!</b>	<b>Process Sheet</b>	Date : 20/07/2021
	<b>Adminstration</b>	Reference : SUP.ADM 1.0

<b>Process Objective</b>
Assure the good proceedings of the supportive activities to the processes and maintaining them

<b>Family of the process</b>
Support

<b>Process Responsible</b>
Chaalal Dounia

<b>Internal actors of process</b>	Administration responsible
<b>Clients of the process</b>	All the processes

Suppliers	Inputs	Outputs	Clients
Acquisition	Bills management	Regulated financial balance	Retention
Management	Quality objectives	satisfactory results & realized Kpi's	Management
Management	Infrastructures needs	Reports on purchases and logistics	Acquisition
Management	Humand ressources needs	Plans of recruitment	Care

<b>Documents, Procedures, Recording</b>
Employees Contracts , B2B Contracts , Bank Reciepts , transactions sheets, Employees Dashboard follow up

<b>Corrective action attesting continuous improvement</b>
Results after weekly Meetings reviewing the performance

<b>Required resources</b>		
<b>Material Resources</b>	<b>Human resources</b>	<b>Financial resources</b>
Desks , PC, Reliable internet connection	Assitant	Budget for financing Special events, parties, cover the office infrastructure

<b>Process Indicators</b>	Success rate of carrer developpement, conform transactions, Number of business partnerships,
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Performance key indicators	Objective	Frequency of surveillance	Recording
Success rate of carrer Dev	X biannual	biannual	G-Doc
Conform Transactions	X Weekly	Weekly	G-Doc
N° Business partnerships	X Monthly	Monthly	G-Doc
Individual Performance	X Monthly	Monthly	G-Doc
Collective Performance	X Monthly	Monthly	G-Doc

- Acquisition Process Sheet :

<b>HEETCH.</b>	<b>Process Sheet</b>	Date : 15/07/2021
	<b>Acquisition</b>	Reference : OPS.APS 1.0

<b>Process Objective</b>
Acquire more quality drivers to maintain the availability of product in the marketplace

<b>Family of the process</b>
Realisation

<b>Process Responsible</b>
Ben Si Said mourir

<b>Internal actors of process</b>	Junior Acquisition officers ( Front office operators, end back office operators).
<b>Clients of the process</b>	Head Management Responsible, Head of Operations officer, Care Agents, Marketing responsible, Quality improvement responsible.

Suppliers	Inputs	Outputs	Clients
Marketing	Quality Policy	New activated drivers	The Operation team
Management	Quality Objectives	Feedback from drivers	Management
Retention	Drivers requirements	Better sign up process	Care process
Care	Process review	Preventive action	Legal procedures

Activities of the processes



Documents, Procedures, Recording
Forest database recordings. Heetch Admin.Contract. Mission order.

Corrective action attesting continuous improvement
Recording everyday states of performances and daily meeting and brainstorming sessions to look for root problems and propose possible solutions

Required resources		
Material Resources	Human resources	Financial resources
Desks, Hardwares,pc portables, good internet connection,Headphones	Front and end desk Operators.	Budget of leads

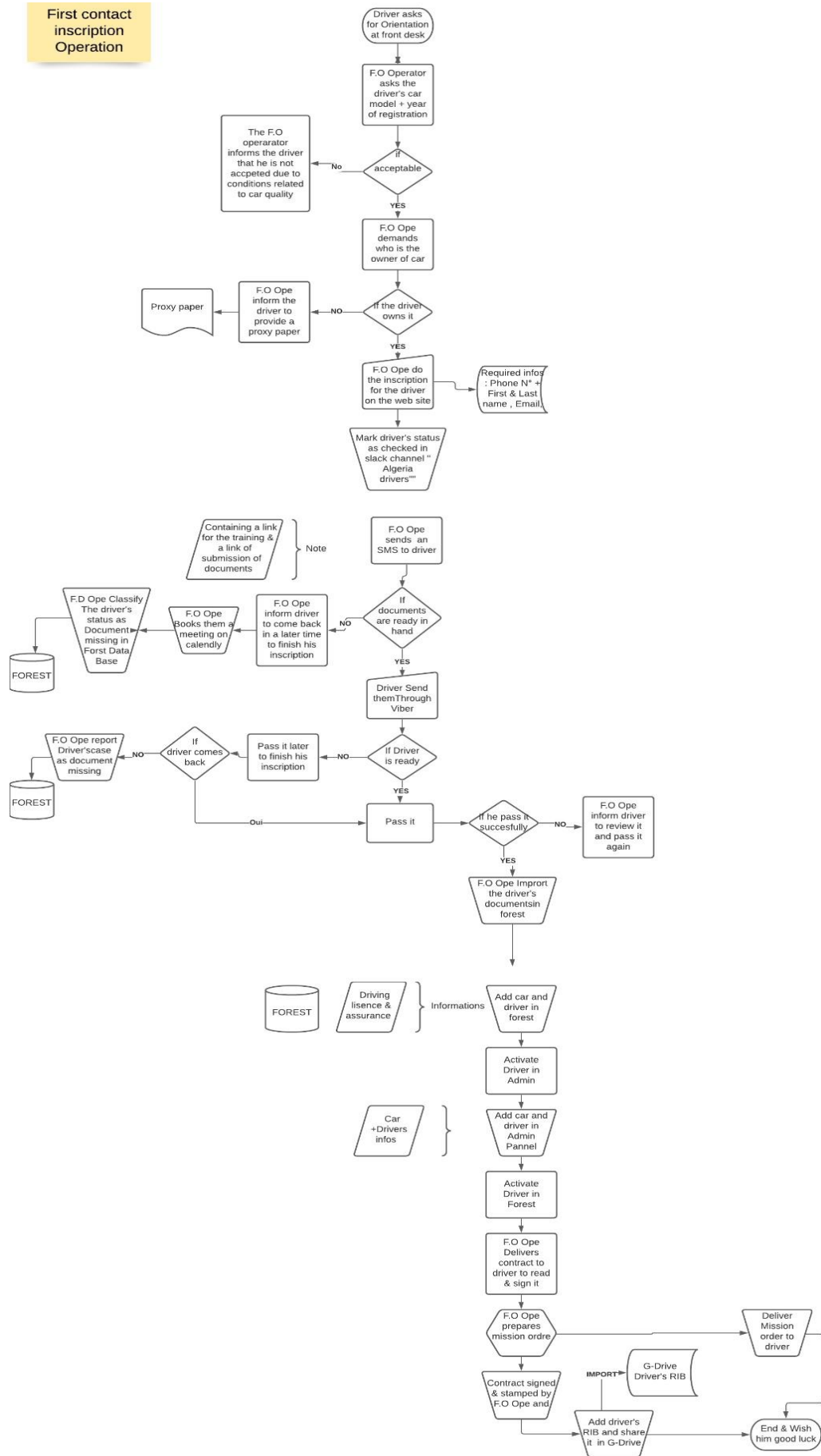
Process Indicators	Activation Number,Document missing, Missed meetings, Created leads ,Sing up ,Meeting booked Rejected.
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Performance key indicators	Objective	Frequency of surveillance	Recording
Activated Drivers	X Daily	Daily	G-Doc
Created	X Monthly	Daily	G-Doc
Meeting Booked	X Per day	Daily	G-Doc

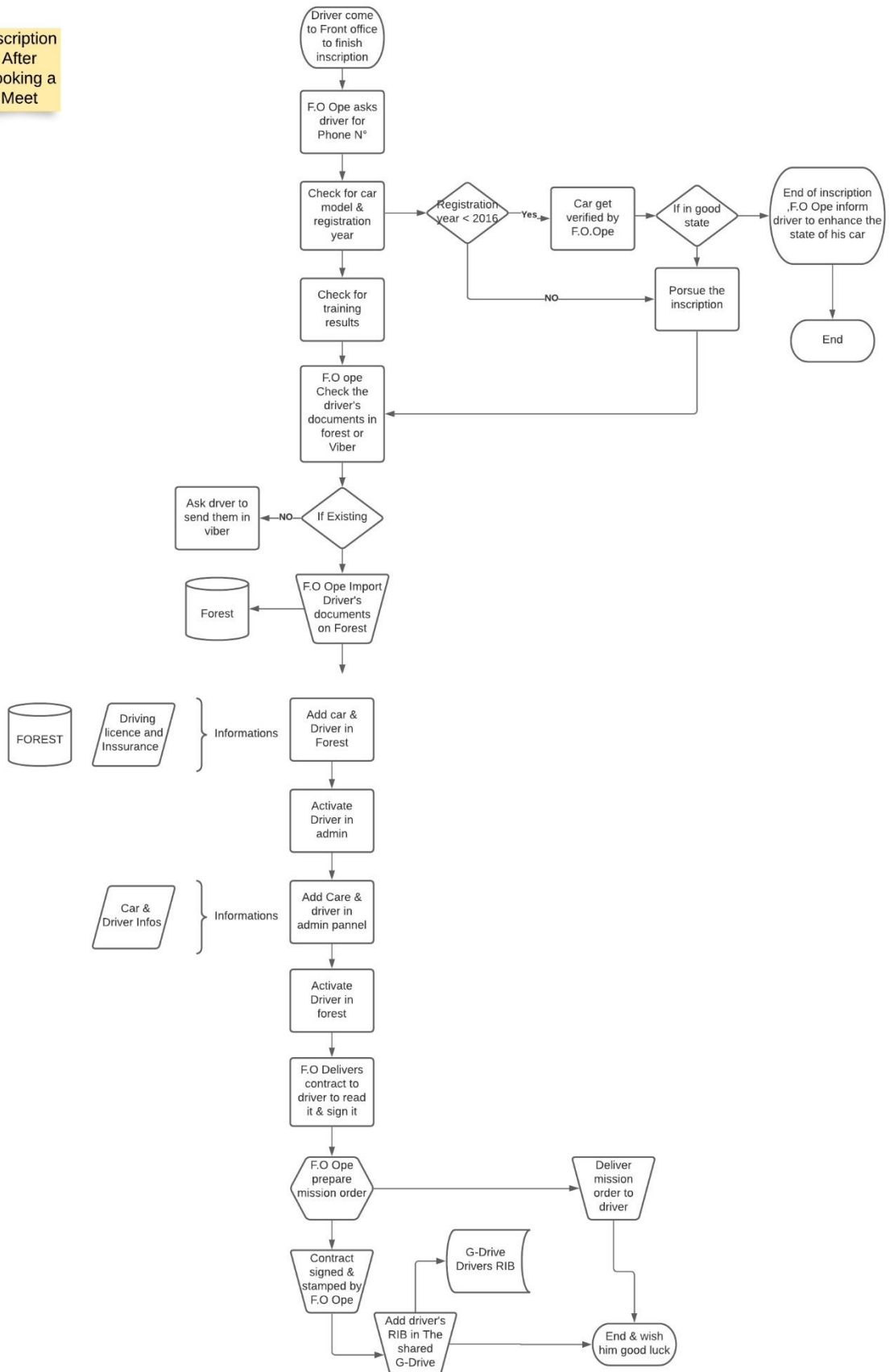
Surveillance indicators	Frequency of surveillance	Recording
Document missing	Daily	G-Doc
Sign up	Daily	G-Doc
Missed meetings	Daily	G-Doc

- Work instructions of the acquisition process :

**First contact inscription Operation**

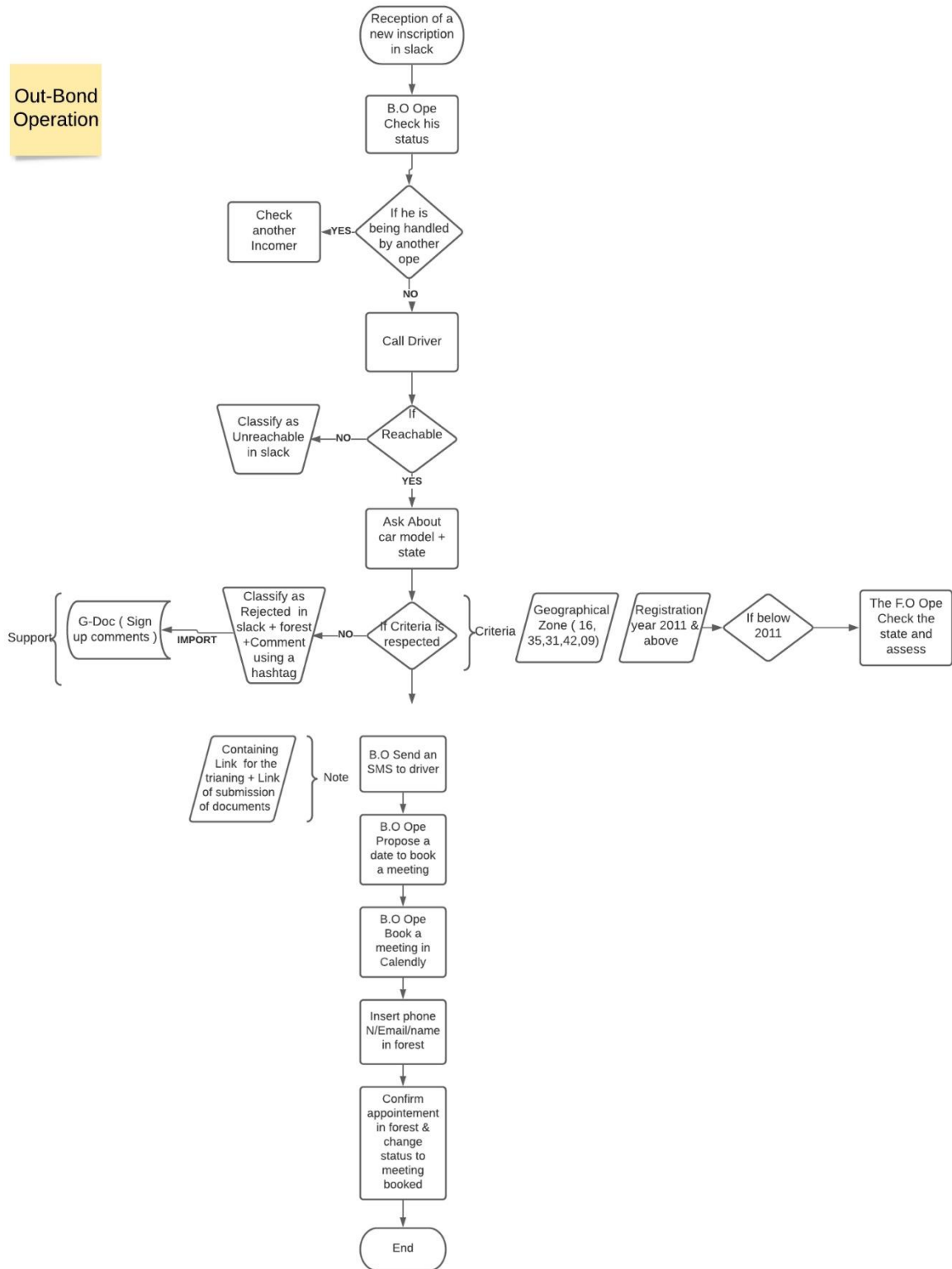


Inscription  
After  
Booking a  
Meet

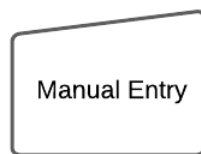
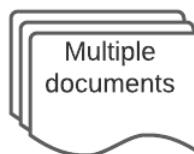
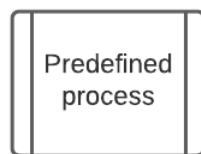
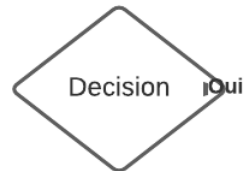
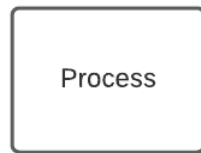




Out-Bond Operation



- Code of The flowcharts :



## Annex E: Risk Analysis

- Tables representing degrees of gravity and frequency of occurrence

Table 26 Degree of Gravity table

Scale of gravity	Impact on the employees	Impact on the infrastructure	Impact on the product
G1 ( Minor)	Negligible incidents and effect	Weak disturbance on the activities.	Minimal effect on the product functioning.
G2 (significant)	Significant effect and no major consequences, demands to be treated.	Partial stop of activities with moderate impact	Significant errors that may disable the function temporarily and partially.
G3 (severe)	Incidents causing temporary disabilities. Dealt with as soon as possible;	Disturbing incident overall the activity intervention as soon as possible.	Disturbing bugs in the functioning (slows per example), need to be fixed as soon as possible.
G4 (Critical)	Incident causing serious damage should be dealt with urgently.	Acute effect on the activity, repairable on long term.	Major disturbance on the product functionality, should be repaired urgently.
G5 (Catastrophic)	Incidents causing permanents disabilities and Irreversible effects.	Irreparable effect on the activity, which can lead to cessation of activity.	Dangerous disturbance, which may lead to complete stop of functionality of the product.

Source : Elaborated by ourselves

Table 27 Criteria of frequency of occurrence

Frequency of occurrence	Description
F1 (Highly Rare)	Almost never occurred in Heetch
F2 (Improbable)	Less probable, occurred few rare times in Heetch
F3 (Occasional)	Occurred before on certain occasions in Heetch
F4 (frequent)	Occurred several times before in Heetch
F5 (highly frequent)	Occurs repeatedly

Source: Elaborated By Ourselves

- Tables representing Matrix of risks and its interpretation

Table 28 Matrix of risks

G5	5	10	15	20	25
G4	4	8	12	16	20
G3	3	6	9	12	15
G2	2	4	6	8	10
G1	1	2	3	4	5
	F1	F2	F3	F4	F5

Source: Elaborated By ourselves

Table 29 Interpretation of risks

Min	Max	Criticality level	Interpretation
15	25	C1	Extreme risk
10	12	C2	High risk
5	9	C3	Moderate risk
1	4	C4	Low risk

Source: Elaborated by ourselves

## Annex E: Internal Documents

- Non conformity Sheet :

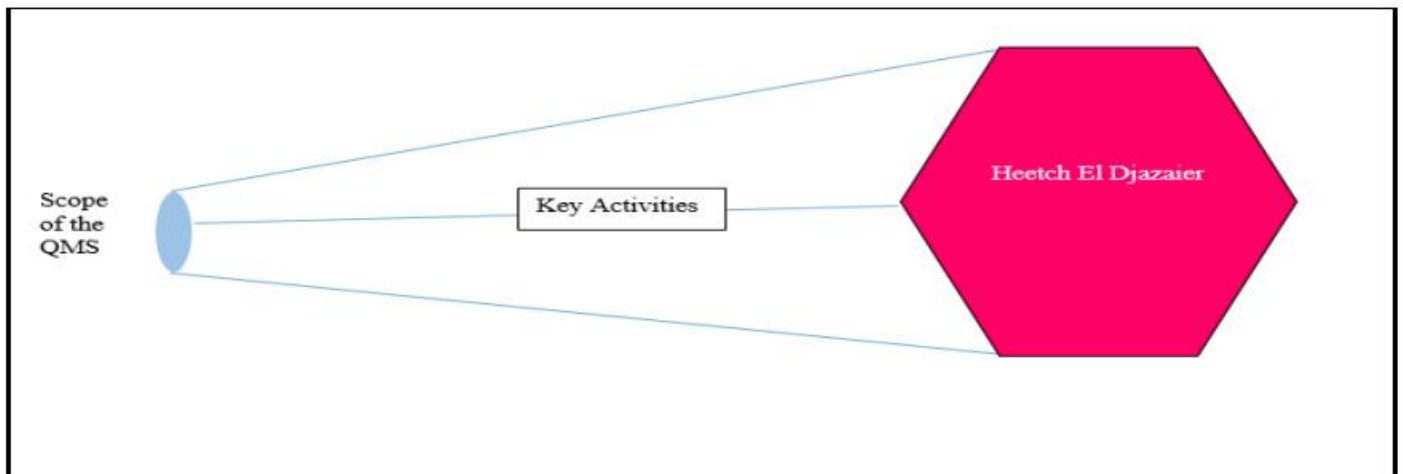
<b>HEETCH.</b>	<b>Non Conformity Sheet</b>	<b>Reference : V.B</b>
<b>Ticket Number:</b>		
<b>Raised by:</b>		
<b>Raised on :</b>		
<b>Type of non-conformity :</b>		
<b>Degree of non-conformity :</b>		
<b>Closed by :</b>		
<b>Closed on :</b>		
Description of the non-conformity		
Assigned Action		
Verification		
State of the N.C		
Root Cause analysis		

- The scope of the quality management system :

<b>HEETCH!</b>	<b>Scope of The QMS</b>	<b>Elaboration date</b> : 20/07/2021
	<b>Elaborated By</b> : M.Abdelhakim	<b>Reference</b> : S V 1.0

Purpose : The purpose of this Documents is to describe the scope of the quality management system and its applicability inside the company.

Core : The scope of the quality management in Heetch el Djazaier Including all the products and services provided by the company and in addition to internal organisation & infrastructure and most importantly the services provided by third parties related to core business activities.



- Heetch El Djazaier Quality policy :

**HEETCH**

## Politique qualité Heetch

Dans l'objectif d'améliorer la satisfaction des attentes de ses clients et parties intéressés et une meilleure maîtrise de ses opérations, Heetch Algérie s'engage à implémenter un système de management de la qualité, une opportunité qui permet d'avoir une variété d'avantage et de la valeur pour l'entreprises et ses collaborateurs en offrant des services de qualité pour ses clients en s'améliorant continuellement le système de management de la qualité en se conformant aux normes et aux codes de pratiques en vigueur.

Dans cette optique Heetch Algérie réitère son engagement à :

- Satisfaire les besoins des clients internes et externes ainsi que les parties intéressés.
- Améliorer le délai de traitement des demandes clients.
- Améliorer les conditions de mobilité.
- Maîtriser les risques.
- Valoriser le capital humain et l'améliorer continuellement.
- Améliorer le niveau de compétence de ses collaborateurs.

Pour garantir la réussite de cette mise en place et la réalisation des objectifs planifiés et assurer le maintien et l'amélioration continue de ce système. Nous nous engageons à mettre en place les ressources nécessaires.

Mr Le Directeur Général

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