

Improvement Plan -Schlumberger

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Summary

Through this paper, you will find information to understand the role of the company Schlumberger inside the oil and gas industry, its vision, mission, and values. Also, understand and identify the strengths, weaknesses, opportunities, and threats that the source to pay team (S2P) has in its day-to-day activities.

You will be able to identify key terms that are critical for increasing efficiency inside an organization, especially throughout its logistic process such as "touchless transactions" and "business to business Integration"

Considering the weaknesses and threats an improvement plan was proposed with the whole purpose of increasing effectiveness and reducing learning time from new employees for the role "Intern Data Analyst"

To conclude, the learning plan was based on the creation of a manual that summarizes all the processes that need to be done for the role of "Intern Data Analyst" and the implementation of metrics to ensure effectiveness.

Introduction

Schlumberger is a French company founded by two brothers, Conrad and Marcel Schlumberger and its purpose is to help customers get oil and gas from the grounds in the most environmentally safe and efficient way possible:

The pioneering attitude of the founders has been the foundation of our success for over 90 years. Today, Schlumberger is the world's leading oilfield service provider, providing the most complete range of services from surface seismic to drilling, formation evaluation, well completion and stimulation services, production optimization, reservoir studies, well construction and project management. (Schlumberger, n.d.-c)

Another one of the keys to success from the company is cultural proximity, having presence in over 80 countries all over the world and a multinational team help understand and give better solutions to the customers.

A general study of the company was done, consulting the most superficial part of it, which includes its vision, mission, values , and geographical location, then it is focused on the procurement systems and especially in the role of “Intern Data Analyst” which is the person in charge of helping users follow the correct process and keep them updated with new vendors in the system and changes. To do this, it was necessary to analyze and discuss the strengths, weaknesses, threats, and opportunities of the role and finally find the direct relationship between efficiency and customer satisfaction.

Therefore, based on the weaknesses and threats, a manual was put together to let the new hires know what the correct process is to follow in the procurement system, how to train users, and solve the most common issues that face throughout the process. To finally conclude the importance of a well-planned and established process and key performance indicators.

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1. The Company

1.1 General Data

Schlumberger was founded in 1926 and is the world's leading oilfield services company. It has operations in Australia, New Zealand, Papua New Guinea, Ecuador, Colombia, Peru, Arab Emirates, Kuwait, and many more other countries. It has eight business lines which include: asset performance solutions, product management, asset consulting services, carbon services for CO2 storage, integrated well construction, drilling asset management services, integrated water solutions and oil and gas training and competency development. Considering this business lines, we can conclude that the company is giving its customers the best and most innovative solutions to extract oil and gas.

1.1.1 Mission, vision, and values

Mission:

“Throughout much of the oil and gas lifecycle in 120 countries, we design, develop, and deliver technology that transforms how work is done. Together, we create amazing technology that unlocks access to energy, for the benefit of all.” (Schlumberger, n.d.-a)

Vision:

Our industry has an important role to play in the global energy transition, and Schlumberger is evolving for that exciting future. Our vision is to define and drive high performance sustainably, sharing the responsibility to act now and to act fast to decarbonize the world's energy system. (Schlumberger, n.d.-a)

Values:

The founders, Conrad and Marcel Schlumberger instilled three core values that still hold true today. Schlumberger (2021) serve as the foundation of the culture and guide everything:

- **People:** Exceptional people join us from around the world because of who we are – and then they make us what we are. Committed to customers, constantly learning and growing, we thrive on the world’s biggest technical challenges, wherever they are found. This is the pulse and spirit of Schlumberger.
- **Technology:** We were founded through invention and we grow, prosper and lead through continuous innovation and a commitment to practical excellence. Today, we are engineering a sustainable future for the energy industry – and helping to create a better world for all.
- **Profits:** Financial strength gives us the independence and resources to make brave calls about the future and drive bold, visionary innovation for the long term. Investment discipline matters: the returns we generate ensure our talent and technology are best in class – and the value we create is widely shared.

1.1.2 Geographic location

Schlumberger has presence in over 80 countries all over the world with strong focus on the customer and regional dynamics, each of the five Basins provides oversight for a set of GeoUnits, identifying opportunities for growth and delivering innovation depending of the necessities an environment.

Colombia is in the “Americas Land” basin, and its corporate purpose is to provide services related to the oil and gas industry. It has 4 work bases located in Barrancabermeja, Villavicencio, Yopal and Cota. This last one is located at Km 1.5 Via Siberia - Cota, Potrero Chico Industrial Park, has a total area of 138,018 m²

Figure 1: Cota Base



Note: Taken from [Photograph], Schlumberger, n.d.-b.

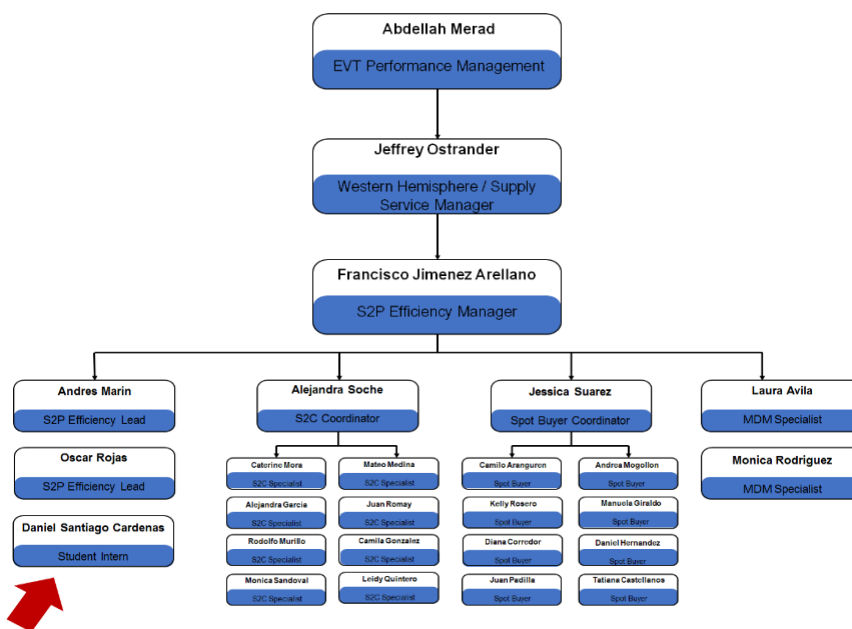
1.1.3 Organizational structure

Figure 2: Schlumberger Executive Organization Chart



Note: Taken from [diagram], Schlumberger, n.d.-c.

Figure 3: S2P Organizational Chart



Note: Self-made using information from Schlumberger

1.1.4 Department in which the internship took place

The internship took place in the source to pay team (S2P) which has the goal to provide solutions and make procurement processes faster at lowest costs possible, by implementing effective strategies and focusing efforts on transactions without human contact.

The team is divided into four professional teams that have their own objectives:

S2P Efficiency Team:

- Maximize source to pay efficiency building end to end solutions
- Improve user's buying journey
- Create voice of customer culture to collect insights that drive decision-making through SSC improvements

S2C:

- Sourcing Guide Improvements
- Build Sourcing Strategy with local GeoUnits
- Catalog Transaction Coverage
- Contract Coverage

Spot Buyers:

- Bidding process between 5K to 100K
- Identify Catalog Opportunities
- Catalog Implementation
- Sourcing Guide Improvements
- High quality customer service

VMD:

- Decrease multi-touch transactions and Eliminate poor quality data
- 100% Accuracy among ERP'S
- Reduce economic losses because of incorrect Bank details

1.1.4. SWOT analysis

Strengths

- Leadership: The S2P efficiency manager is always open to suggestions and the communication flow is effective, “Communication considerably influences the innovation process in every organization. Many other studies have indicated that the heart of numerous problems occurring during innovation processes is in the ineffective or unreliable communication, especially between different functional departments of the organizations involved in the process” (Stacho et al, 2019) We can conclude that that one of the reasons why the S2P efficiency team is always innovating process it's because of the leadership and effective communication of its manager.
- Knowledge: The team is well prepared and knowledgeable when it comes to a new project or facing any kind of issue. Also, the team is very young, and the work environment is great.
- Customer service-oriented: One of the biggest strengths of the S2P efficiency team it's that it treats its customers like people, trying to give solutions and help them as much as possible. “It is known that higher service quality leads to more satisfied customers and higher customer satisfaction leads to customer loyalty.” (Ozatac, Saner, & Sen, 2016). Even though this quote was taken from an article that was focused on the banking sector,

it applies to the S2P team since transactions are part of the daily basis just like working hand in hand with customers.

- **Innovation:** There is an entire team dedicated to improving and making more efficient the entire process in the supplier service center, right now there are many projects that will make transactions much faster and contracts with vendors to have the best supplies with the best prices that you can get in the market.
- **Reporting:** It is very well understood that reporting has a direct co-relation with decrease issues inside an organization, Schlumberger has the mentality of reporting any kind of incident even if it seems small. By keeping track of everything that is happening the company can specifically see where the issues are coming from and how to improve.

Weaknesses

- **Bureaucracy:** There are strict set of rules that need to be followed when you proposed a change inside the organization, this is done to avoid economic losses and avoid breaking company policies.
- **Internal change:** Something that motivates employees to want to join the S2P team is that it can be seen as a trampoline, there is a large number of success stories from people that are and were part of this team, people are motivated inside the team since they expect to move upwards in the organizational hierarchy. On the other hand, it can also be seen as a weakness, training new employees take time and resources, which decreases the efficiency and response time of the team.
- **Amount of time to get necessary access for the position,** since everything has to be approved by specific teams or people, these access can take even weeks to be ready.

- Performance measurement for interns: All teams inside the organization have metrics and goals that need to be followed, but for interns especially “Intern data analytic” it wasn’t the case, there are specific tasks that need to be done, but it doesn’t have a set of KPS like the other teams to know if what is being done is being effective or can be done in a different and better way.
- Procurement system not visually attractive: shopping inside an organization also needs to be an enjoyable experience, but when using companies Enterprise resource planning (ERP) it didn’t feel like this, because it didn’t contain images to make the shopping experience much satisfactory.

Opportunities

- Technological advances: Living in a world that is constantly changing especially in the technology sector gives incredible opportunities, day by day we see improvements in all kinds of systems, and procurement systems are not the exception. Having an Informational technology team (IT Team) inside that company that works and support the S2P is a great opportunity to continue improving.
- Constant feedback: Users give constant feedback by email on what could be done to improve processes.
- Growth in demand: New countries inside the company are moving towards ERP SAP which means there will an opportunity to improve the shopping experience.

Threats

- Dependence with other areas: The S2P team works for hand by hand with other teams inside the organization, and the response time is not always the best which can affect customer satisfaction.
- Systems were not always up to date and it was difficult to communicate with the vendors.
- Vendors didn't have the capability of creating connections necessary to improve the procurement system
- Oil demand decreases projection for future years.

2. Proposal of Improvement Plan Regarding Professional Practices

2.1 Central proposal

The main objective of the S2P Efficiency team is to provide solutions to make procurement processes faster and at the lowest cost possible by implementing effective strategies and focusing efforts on transactions without human contact.

There are three ways users can make a purchase, by using an internal catalog, external catalog, or a special request. Internal catalogs are the ones that you are able to find products without leaving the ERP or procurement system, external catalogs or "punchouts" are catalogs that are available, but you have to access them by hyperlink from the procurement system to the vendor webpage and the last option is a special request, which is basically requesting a buyer (person in charge of making purchases) to do a quotation and finds the item for you. The first two options are the ones that the company wants to encourage users because they are "touchless transactions" there is no human interaction which makes it faster and more efficient.

Although there has been continuous improvement, it is still necessary to work hard on activities that increase the use of external catalogs and add more of them to the procurement system and thus give users more alternatives to improve the shopping experience. It is important for users to know what purchasing options are available and which ones should be taking first into account.

After doing a variety of activities it was easy to identify one of the weaknesses when carrying out professional practices such as "Intern Data Specialist" which is the lack of metrics to measure its work. It is necessary to have measurement parameters for each of the tasks to exert soft pressure and perform better. To solve this situation, it is important to create a manual and measure the impact of the interns with the help of a data analytic tool like Power BI. You will be able to solve problems much faster since you will understand the processes and see the impact of the activities that you are performing.

2.2 Importance, limitation, and scope

During the internship at Schlumberger, you get the opportunity to strengthen hard and soft skills, due to the fair number of responsibilities that will be provided. In the position of "Intern Data Analyst" there are two main objectives which are to give an excellent experience to end-users in their purchasing process and increase transactions without human contact "touchless transactions" which is done through different activities:

- Data Analysis - identifying which vendors have the potential to create a business-to-business or a business-to-customer connection:

“B2C and B2B are two forms of commercial transactions. B2C, which stands for business-to-consumer, is a process for selling products directly to consumers.

B2B, which stands for business-to-business, is a process for selling products or services to other businesses. The business systems that support B2B or B2C communications, transactions, and sales administration differ in complexity, scope, scale, and cost, so it is important that you implement the right system for your customers.” (Linton, 2019)

- Promotions - In an attractive way showing the end-users all the benefits and advantages that they have by implementing purchasing options that don't require human interaction.
- Training - Instructing end-users on how to operate the procurement system and which is the correct process to follow.
- Support in the visual improvement of the acquisition system - Supporting the information technology department in making the procurement system visually more attractive.

Importance:

The learning period when you have a document that has all the information centralized is less than learning something empirically or asking different people that can give you a variety of answers on how to do a process. With the implementation of the manual or guide for the position, the intern can resolve issues almost immediately, even without having some accesses that are necessary for performing the role, images were included for the most frequent issues that the user might have and how to solve them step by step.

Limitation:

Updates of browsers are the first limitation. After an update is done for a browser some issues might disappear, but new ones will be presented, it is necessary for the new intern to update the guide or manual as often as possible since this is an external factor that we are not able to

control. On the other hand, the manual has attached a presentation with what catalog is recommended according to the product category that the user needs, new catalogs might be created, and other ones can be eliminated, this is why it is also important to have this information as updated as possible to avoid confusion among teams and users.

Scope:

Even though the guide is mainly focused on improving the role of “Intern Data Analytic” it will have a direct impact in solving procurement issues and increasing touchless transactions, users will also be benefited because they will receive a much faster response from the person who is giving support and communication flow will be more efficient.

2.3 General objective

Increase the impact and performance at the "Intern Data Analyst" position.

2.3.1 Specific objectives

- Create a manual that facilitates the realization of professional internship.
- Establish metrics to measure the achievement of objectives by the professional practitioner.
- Propose an organizational model that decreases bureaucracy inside the organization.
- Compare end-user satisfaction levels before and after making visual improvements to the procurement system.
- Confirm the direct relationship between the use of external catalogs (Punchouts) and good customer service.
- End-user support - Always giving the best customer service possible to make the end-user feel supported when having any kind of issues.

3. Improvement Plan Content

3.1 Improvement Proposal

The internship started on February 1st and ended June 1st, it was a challenging but rewarding experience, the tasks could be divided into two large groups, data analysis, and direct services with end-users, in which it was possible to identify different challenges and issues while performing the process.

The first issue that was identified was doing rework with other teams, especially the “global categories team” who is in charge of creating new punchout catalogs and communicating with different vendors all over the world. This issue was fixed by having better communication with the team, separating tasks, and understanding how both teams could support each other. As for this issue, each activity that is included in the manual has a section for the team that supports the process, the intern will know who to ask or who needs to approve before doing the activity.

Secondly, it was difficult to measure the progress of the activities that were being done, for example, it wasn't possible to know if end users were opening and reading the promotions that were being sent; and if the training were having a direct impact on the users' experience and utilization of the punchouts. To fix this problem the data was being analyzed differently and training had a different scope, for example, Amazon is one of the punchouts that has the greatest potential since it covers a variety of products that are demanded inside the organization, but instead of promoting just Amazon, it was critical to promote the benefits and how to use the other punchouts, this is why under the updated training material was included and a specification on what is the best way to approach users and have the biggest impact possible.

The entire purpose of the manual is to show the importance of metrics and explain in a very detailed way what are the most effective ways of doing the day-to-day activities. Also, it is important to take into account that the process can always be made more effective and the status quo of the position can be improved.

3.2 Conclusion

Thanks to the creation of the manual for “Intern Data Analyst” the new employees for this position had a better understanding of how each process and activity was done, who to contact if they were having any issues, and the access that they need inside the company to perform such activities in the best way possible.

The manual was already used to do the induction for a new employee and as stated by her it is a great resource when having any kind of issues, specifically because it explained some vocabulary that is difficult to understand for someone that doesn't have a major in informational technology.

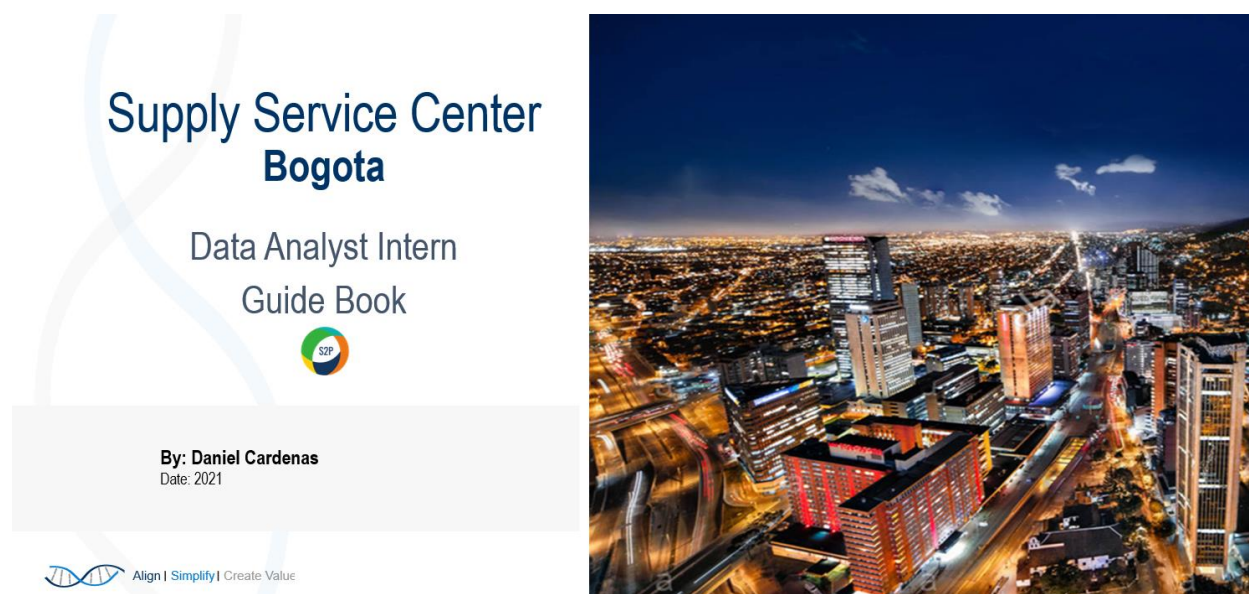
On the other hand, the implementation of Key Performance Indicators of (KPIs) for the position will help the intern measure the progress of the activities and tasks that are being done, how to improve, and where to focus the attention.

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3.4 Attachments

Attachment 1: Data Analyst Intern Guidebook – Cover Page



Note: Self-made using information from Schlumberger

4. Professional Practice Follow-Up

4.1 Summary of activities done

The first part of being a student intern at Schlumberger is the same no matter what department you will be part of it is a whole week of learning about the company, its policies, and know-how, this part is extremely important because it builds company awareness, you are thought to be proud and like the place where you work.

After the first week, you get special training focused on your department. This second week you learn how to solve daily tasks and request necessary accesses. Some of the most important accesses: SWPS (procurement system for some countries like France and Mexico,)

SAP SRM (Procurement system for some countries like the United States and Colombia,) SWPSORAMA, and SAP ECC that help monitor vendors and transactions inside the procurement system.

After having all the required access and completed all training material the second cycle started, this cycle was mainly focused on training and promotions, teaching users how to use the procurement system, what is the correct process to follow and with the promotions showing the benefits and the companies' policies to purchase.

The third cycle was probably the most exciting of all because it was focused on learning how to improve the procurement system, taking into account the information learned in the second cycle, and working together with the IT team. In this cycle, I learned what is necessary to do to incorporate new companies as punchout catalogs and how to communicate in a more effective way. Some of the other activities that were done are, communicating with vendors and knowing if there capable of making a more effective connection that would improve purchasing experience.

The last cycle was focused on data analysis, looking inside our procurement system, and identifying which vendors are not necessary to have, this is very important since it was already identified that there is a direct correlation eliminating ineffective vendors with increasing touchless transactions.

4.1.1 Objectives achievement per month

Figure 4: Activities Chart

Cycle	Starting Date	Activity	Status	Difficulties
Cycle 1 (February 1- February 15)	1/2/2021	Training	Completed	Access to the procurement systems took too long
Cycle 2 (February 15 - March 31)	15/2/2021	New e-commerce and marketplaces Project	In progress	It is not a project that can be completed in a short period of time since it depends in how fast the vendors respond and the implementation from the IT team
	5/3/2021	Promotions for Users in BOG SCC	Completed	None
	5/3/2021	Promotions for Users in Bucharest SCC	Completed	None
	5/3/2021	Promotions for Users in Kuala Lumpur SCC	Completed	None
	8/3/2021	NEW PIG CORPORATION Analysis	Completed	The vendor didn't have enough Pos created to invest money in the creation of a punchout
	16/3/2021	One- Click analysis	Completed	None
	18/3/2021	Red-Wing campaign	Completed	None
	18/3/2021	UK and France Training Option 1	Completed	Different ERP than the used for western hemisphere
	24/3/2021	PSC Analysis and training	Completed	None
	25/3/2021	SQ Stand Up March 2021	Completed	None
Cycle 3 (April 1 - April 30)	1/4/2021	Issue with SAP Cameron Catalogs + Monica Sandoval	Completed	Unexperienced with users and ERP
	5/4/2021	UK and France Training Option 2	Completed	Different ERP than the used for western hemisphere
	5/4/2021	Product Basket Exercise	Completed	It had to be done one by one when trying to compare products
	6/4/2021	Level 2 connection	In progress	Depending on vendors response and IT help

Cycle	Starting Date	Activity	Status	Difficulties
	14/4/2021	USL Spend reallocation analysis	Completed	Needed feedback from buyers and SM
	14/4/2021	France Spend reallocation analysis	Completed	Needed feedback from buyers and SM
	14/4/2021	UK Spend reallocation analysis	Completed	Needed feedback from buyers and SM
	15/4/2021	Grainger Mexico Project	Completed	None
	20/04/2021	SWPS and SAP promotional Banner	Completed	None
	23/4/2021	SRM enhancement Project	Completed	Limitations in SAP SRM to update image
	27/04/2021	HPE Punchout Re-launch	In progress	Confusion between HPE and HP INC
Cycle 4 (May 1 - May 31)	5/5/2021	PSC Supply Inc Project	In progress	Needed approval from SM
	5/5/2021	Card Holders Project	In progress	Not enough people from card holders' team to support the project
	15/5/2021	S2P Promotions	In progress	None
	25/5/2021	Card Holders training	Completed	Questions related to other catalogs where the knowledge was limited
	30/05/2021	Rush Truck Centers Punchout Catalog	Completed	None

Note: Self-made