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Master's degree in Entrepreneurship and Project Management

***"Sales performance measurement by the Key
Performance Indicators (KPI) method"***
Case study: Ceram Décor - BATNA

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ABSTRACT

Performance Measurement has always exerted considerable influence on the actions of companies, whereas found the first milestone to other necessary procedures such as diagnostic and predictive analysis.

The study identifies the state of sales performance in Ceram Decor using the quantitative method

and implement related qualitative and quantitative indicators to our setting goals, in order to determine the significance of performance measurement to a company, a department, an activity in general, and to the case study of Ceram décor in particular, with the aid of dashboard in order to facilitate decision-making.

Key words:

Performance measurement, Sales performance, Key performance indicators, descriptive analytics, Dashboard.

RESUME

La mesure de la performance est toujours un exercice qui a une influence sur les actions des entreprises, cette dernière est la base d'autres procédures telles que le diagnostic ou l'analyse prédictive.

Cette étude identifie l'état de la performance commerciale de Céram Décor, tout en utilisant des indicateurs qualitatifs et quantitatifs pertinents a nos objectifs spécifiques et ainsi déterminer la performance commerciale a l'aide d'un tableau de bord pour faciliter la prise de décision.

Mots clés :

Mesure de la performance, performance commerciale, indicateurs clés de la performance, analyse descriptive, tableau de bord.

ملخص

لطالما مارس قياس الأداء تأثيرًا كبيرًا على إجراءات الشركات، في حين يعتبر منعطف للإجراءات الضرورية الأخرى مثل التحليل التشخيصي والتنبؤي.

تحدد الدراسة حالة أداء المبيعات لشركة سيرام ديكور باستخدام الطريقة الكمية وتنفيذ المؤشرات النوعية والكمية ذات الصلة بأهدافنا المحددة، من أجل تحديد أهمية قياس الأداء لشركة أو قسم أو نشاط بشكل عام وبالنسبة لحالة ديكور سيرام على وجه الخصوص بمساعدة لوحة القيادة لتسهيل اتخاذ القرار.

الكلمات المفتاحية: قياس الأداء، أداء المبيعات، مؤشرات الأساسية للأداء، التحليلات الوصفية، لوحة معلومات.

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LIST OF ABBREVIATIONS

CSAT: customer satisfaction

KPI: key performance indicators

PMS: performance measurement system

SD: sales department

SMART: Specific, measurable, attainable, relevant, and time-bound

SPM: sales performance management

SWOT: strengths, weakness, opportunities, et threats

GENERAL INTRODUCTION

More international and local organizations recognize the importance of measuring and evolving their performance to help them create a defined strategy, and make sure they are doing the right activities to achieve them (Jessee, 2015). Performance measurement is an important technique in the field of management that is used to evaluate the achievement of organizational and operational goals. Putting in place performance measurement can be a useful tool for keeping track of company's success. It gives an essential information about what's going on currently, as well as a starting point for defining goals that will help to implement a growth strategy (Métropolitain, 2016). As a result of the rise of today's highly competitive business environment, these changes have demanded the development of new performance measures in order to maintain continual improvement. Furthermore, as criticism of excessive reliance on financial performance indicators have grown, non-financial performance measures including as quality and customer satisfaction have received more attention (Bogicevic & Violeta, 2016).

These insights push us to pose the research question:

“What is the state of sales performance in the Ceram Decor company?”

To answer this question, sub-questions are asked and used to form hypotheses.

- What are the different Indicators of Performance to measure Performance?
- Among many approaches to measure sales performance, to what extent does non-financial and financial information help more to understand the state of the company??

The objectives of this study are:

- Determine realistically the achievement of setting goals of the company by focusing on related Key performance Indicators.
- Identify the activities that would be considered the key performance indicators for their organization. These specific activities should be highly correlated to the company's objectives of the year.
- Demonstrate the importance of financial and non-financial performance indicators by providing a description of the importance of performance measures categories to long- and short-term organizational success and their use in performance measurement and evaluation purposes.

Thus, interpreting the results obtained the chosen method is Quantitative using tools as sales reports to collect Data using Excel and create Dashboard.

The dissertation starts with chapter one that contains two sections which are literature review that contains an overview on Performance Measurement followed by sight on Key Performance Indicators, its types, Usage, and Aims, in last title is Review of the Major Reference Models, and a conceptual framework where we mention definitions about Sales Performance and Key Performance Indicators, In chapter two we discussed the methodology of the research and the used tools as sales reports, ending our research with an empirical case study where we measure sales performance in sales department which is related to all previous chapters . The work enhances previous research and provides a case study about sales performance measurement in Algerian Company to be used in future research as well as several insights that interest in Sales Performance, Key Performance Indicators studies.

CHAPTER I:
LITERATURE REVIEW AND
CONCEPTUAL FRAMEWORK

Section one: Literature review

In this subchapter, a review was done on previous research related to sales performance measurement in particular in addition to providing a general view on key performance indicators with an inclusion of the descriptive analysis.

1. Performance Measurement

In its most basic form, measuring performance is evaluating business results in order to firstly determine the efficacy of a company's strategy and the efficiency of its operational operations, secondly to make adjustments to solve shortfalls and other issues.

Companies evaluate their performance based on a variety of methodologies and criteria.

In many businesses, however, performance measurement requires an examination the outcomes of major business activities as measured by specified performance metrics (also known as metrics). There are several metrics that may be used to measure each company activity ([Mentor, 2009, p. 19](#))

A scheme based on the systematic approach was used to review the Performance Measurement field. Keyword searches were used to find publications published between 1980 and 2010 in specific management databases using specified search terms such as "performance measurement," "performance indicators" "performance management" "management control," and "strategic control" in Business Source Premier, Web of Knowledge, Emerald Insight, Scopus and Science Direct. A number of publications publish a high number of papers in the subject of performance and many of them addressing a wide variety of managerial issues from a performance measurement perspective. These include the International Journal of Business Performance Management, International Journal of Operations and Production Management, International Journal of Management Reviews, Sloan Management Review, Harvard Business Review, The Accounting Review, as well as other leading general management journals.

In conducting the review, our objective was to build a picture of how performance measurement literature was developing. Thus, we specifically looked for broad themes and research problems that were being addressed rather than identifying specific solutions, models and frameworks ([Bititci, Patrizia , Viktor, & Sai , June 2012, p. 9](#)).

1.1 Performance Measurement System

Currently, performances of institutions are facing many challenges due to fast environmental changes (Lazim, Sorooshian, & Azlinna Azizan, 2015). This could result a significant problem and, in the worst-case, the company's failure. Today this situation has resulted in a number of performance measurement needs of the organizations. Measurement has been identified as a critical component in improving corporate performance. As a result, some aspects of this conversation have been taken into account in order to maintain consistency in performance measurement (Sorooshian, Asraf, & Nor Mahirah, 2015).

A performance measurement system includes many steps from the data to collect, analyze, report and, to finally use to make business decisions (Franceschini, Maurizio, & Domenico, 2019, p.133). According to (Sorooshian, Asraf, & Nor Mahirah, 2015, p. 123) Performance measurement refers to the process of determining the efficiency, efficacy, and productivity of previous actions. Performance measurement can be defined as an assessment of an organization's management and the value it provides to stakeholders and/or its clients. Since the early phases of globalization, PMC has had to deal with a lot of changes, which has resulted an introduction to more products. Quality control, motion control, and other advanced techniques to a productive management Studying for a longer period of time, reducing the diversity of options, and so on. Here, productivity gains were frequently made at the expense of customer/employee/stakeholder satisfaction, with a strong focus on financial performance (Bititci, Patrizia, Viktor, & Sai, June 2012, p. 9). However, the focus on performance has shifted from a financial to a non-financial perspective. Companies have stressed the growing necessity to control production business processes since the middle of the 1980s (Paolo, Flavio, & Luca, 2010, p. 4)

PMS has been and continues to be a significant concern for academics. More studies on performance are needed, and the goal of this study is to fill the gap in literature review in the domain of PMSs (Sorooshian, Asraf, & Nor Mahirah, 2015).

1.2 Sales Performance Measurement

Monitoring your team's performance, assessing KPIs, and identifying ways to enhance sales are all part of sales performance. It's easier than it used to be, because software can automate

a lot of the monitoring, but it still requires judgment. Knowing when your salesmen are making mistakes and when there is nothing, they could have done to complete the deal is part of good management.

Companies put a lot of money into their sales teams. Unsurprisingly, sales teams are held to a high standard for delivering results - but they can't do it alone. Successful sales performance planning necessitates the collaboration and support of cross-functional teams that are all working toward the same objectives.

1.3 Financial and non-financial performance measures

Accounting is important in assessing a company's success, especially through the preparation and presentation of financial accounts. Accounting attempts to use these final outputs to offer information to the correct people, in the right quantity, in a timely manner, in an appropriate form, and at an acceptable cost, as a kind of reporter and editor of a company's business life. Authors frequently emphasize the completeness of financial accounts since they provide both quantitative and qualitative data. Financial statements provide a sufficient foundation for understanding a company's financial status and assessing its past and future success.

The importance of these accounting instruments is evident in the fact that the analytical interpretation of the data contained within allows for the identification and monitoring of the company's essential financial performance indicators.

There is no one definition of "financial performance" in the relevant literature in business economics, management, or accounting. Because there is no universally acknowledged definition, differing perspectives on this key part of a company's overall economic condition have emerged in theory and practice, which can be divided into two categories:

- a.** financial performance in the strict sense and broad one.
- b.** financial performance in the broad sense.

The evaluation of a company's financial success is focused primarily on metrics that directly reflect the company's outcomes, according to a narrow concept. As a result, performance evaluation in the narrow sense is primarily based on profitability metrics (Fraser & Aileen, 2013).

As a result, it's no surprise that profit is one of the most prevalent metrics of financial performance in the limited sense. According to a larger understanding of financial

performance, this complicated category should be evaluated using criteria derived from financial statement information as well as other relevant accounting data. Regardless of whether financial performance is measured in a narrow or broad sense, data from the statement of financial position, income statement, and cash flow statement are the primary sources of information used to assess it. (Franceschini, Maurizio, & Domenico, 2019)

Even those who advocate for a more limited definition of financial performance use data from both the income statement and the statement of financial position to measure global profitability indicators. To put it another way, they believe that profitability flow information becomes more valuable only when it is aligned with the available resources. Basic financial statements cannot be viewed as substitutes for, but rather as supplementary information sources in the evaluation process, according to proponents of a broader definition of financial performance.

They correctly state that financial performance indicators (partial indicators of profitability) determined solely on the basis of the income statement are per se irrelevant if not accompanied by indicators identified on the basis of the balance sheet and cash flow statement, citing the unbreakable bonds between the two statements (indicators of liquidity, solvency, and partly activity). Even a liquidity study based on balance sheet data can only reveal certain incomplete signals of actual liquidity, which is why this analytical approach is only utilized as a preliminary, rigorous examination procedure.

Despite the access and facilities that financial criteria provide, it is vital to bring out their weaknesses and incompleteness when analyzing a company's success. First and foremost, financial statements are a retrospective reflection of the company's commercial and financial life on a specific day or during a specific time, allowing for the identification of historically oriented financial performance measurements. As previously said, financial statements can be a maze, making it difficult to understand their content. As a result, a lot of information in financial statements can be confusing and unsettling, calling into question the accuracy of their use. When evaluating a company's success, the intricacies of accounting standards, which are frequently susceptible to change, as well as the managers' discretion to numerically create financial statements, pose a challenge. (Okwir, Sai, Matias, & Jannis, 2018)

Moreover, according to (Fraser & Aileen, 2013), Some key information needed to evaluate a company's success is not included in financial statements, others is difficult to locate, and many is impossible to quantify. As a result, it's no surprise that the importance of employing non-financial variables to evaluate firm performance has gotten a lot of attention in recent years.

According to a (Association, 1975) Information stated in non-monetary units and ratios is referred to as non-financial performance measures. These measures, on the other hand, are not new. At the turn of the twentieth century, Du Pont and General Motors set the foundation for nonfinancial performance measurements. In the 1950s, General Electric, for example, used non-financial performance indicators. As a result, numerous academic scholars argued for non-financial performance measures to be included in management accounting reports.

Non-financial performance measures have lately been presented as a means of circumventing the limits of financial performance measures, according to other researchers. Other studies have discovered that few organizations rely solely on financial performance measures. Non-financial performance measures were added to the list of measures for all participating companies. Their research concentrated on international corporations based in the United States, the United Kingdom, and Germany. Furthermore, Frigo and Krumwiede observed in 1999 that non-financial performance measures were becoming increasingly prevalent in performance assessment systems and that they should be employed more widely.

Researchers previously conducted a survey of management accounting methods in 260 UK industrial firms. One of the findings verified the value of non-financial performance indicators, such as customer satisfaction, product quality, delivery, and supplier dependability. In addition, according to studies conducted on over 3000 organizations in Europe and North America, intangible assets such as quality, innovation, customers, and people are the most powerful drivers of competitive accomplishment. (Bhatti, Hassan, & Z. Razaq, 2014)

There have been numerous debates about whether non-financial performance measurements should be used as leading indicators of financial performance. Improvements in non-financial areas such as customer satisfaction, quality, and innovation, according to Ittner and

Larcker, will have an impact on future financial performance. Only 28% of vice presidents of quality at major US corporations could link their customer satisfaction indicators to accounting returns, and only 27% to stock returns, according to a poll.

Another study conducted in 77 Swedish enterprises to look into the relationship between non-financial metrics and financial performance. After controlling for prior returns and the time trend, they discovered that increased customer satisfaction leads to a larger return on investment. Wouters and colleagues found in a 1999 empirical benchmarking study that it is able to identify the non-financial performance measures that are most clearly connected with financial performance.

In 2001, Nagar and Rajan did a study to look at the consequences of financial and operational quality measurements. They discovered that both financial and non-financial quality criteria are related to future sales in a considerable way. Ittner, Larcker, and Meyer recently discovered little evidence that the weights assigned to non-financial metrics were related to their capacity to predict financial performance.

Non-financial performance measures, according to academic research, are useful for predicting future financial performance. Furthermore, some argue that non-financial measurements are stronger indicators of a company's long-term performance and help managers track the company's progress toward strategic goals the relationship between performance measurements has been studied in management accounting. This research has supported the premise that non-financial performance measures might be indicators of current or future financial performance.

However, research into the relationship between non-financial metrics and future financial performance has produced inconsistent results. Furthermore, the aforementioned research does not give any evidence of diminishing or negative returns when non-financial indicators are included there was little evidence of a potential time lag between leading and lagging metrics. As a result, the relationship between nonfinancial performance measurements and the fulfillment of profit enhancement and organizational objectives must be addressed. The premise that financial and non-financial performance measurements have a cause-and-effect connection is also crucial since it permits non-financial performance measures to be utilized to forecast future financial performance.

In response to the discussion about the benefits and costs of using financial versus non-financial performance indicators, there was little evidence of a potential time lag between leading and lagging metrics. As a result, the relationship between nonfinancial performance measurements and the fulfillment of profit enhancement and organizational objectives must be addressed.

The premise that financial and non-financial performance measurements have a cause-and-effect connection is also crucial since it permits non-financial performance measures to be utilized to forecast future financial performance. In response to the discussion about the benefits and costs of using financial versus non-financial performance indicators, the importance of strategic performance measuring systems in management accounting research has recently piqued interest.

Strategic performance measurement is defined as a methodology that translates company strategies into deliverable results, according to Conference Board research. Strategic performance measurement systems are distinguished by the fact that they are designed to give managers with financial and non-financial measurements from many viewpoints that, when combined, provide a means of converting strategy into a coherent set of performance indicators. As a result, many organizations are complementing financial performance measurements with a variety of non-financial performance indicators that are thought to provide more information about strategic success. (Frost, 2000)

1.4 Key Performance Indicator and the problems of its implementation

Organizations utilize the phenomena performance measurement to guarantee that they are on the correct track, accomplishing targets in terms of corporate goals and objectives. Performance measurements are used to assess and manage a company's entire operations. They are also used to assess and compare the performance of various industry companies, factories, departments, teams, and individuals. As a result, the identification of performance indicators that allow for thorough specification of process performance is the starting point for performance measurement. Many writers have proposed a variety of indicator categories for various performance measurement methodologies. To determine the organizational performance, there are two primary types of indicators:

- The financial or cost-based measurements of performance are one.
- The non-financial or non-cost-based measures of performance are the other.

Financial costs, quality, timeliness, delivery reliability, and flexibility are all widely regarded indices of organizational performance. However, based on their case study research, some scholars have defined additional markers.

Customer satisfaction, quality, delivery reliability, employee factors, productivity, financial performance, safety, and environmental / social performance were identified as indicators of business performance utilized by many firms.

Customer satisfaction, employee satisfaction, environment/community, financial, internal process performance, and learning and growth are all performance assessment viewpoints outlined by Parmenter. Other researchers have discovered that different organizations employ different performance metrics, such as breaking down the total business into processes to measure the organization's performance. And the majority of companies assess their success by assigning indicators to specific processes. [Rolstads](#) has discovered that an organization's performance measurement is crucial. It is a complicated interrelation of effectiveness, efficiency, quality, productivity, work-life quality, innovation, and profitability. Each business must develop performance indicators and, as a result, performance measures and statistics that are strategically relevant to its position in order to be successful. ([Bhatti, Hassan, & Z. Razaq, 2014](#))

It is impossible to say how many KPIs a firm should have because the choice of which ones are important is unique to each organization and its strategy. However, based on our experience, most sorts of businesses will need between four and ten measures. ([Guide to key performance indicators Communicating the measures that matter; cooper](#))

Brown's quote the potential issues in the development of a performance measuring system: "The most common fault made by businesses is measuring too many factors. The next most typical one is taking too few measurements." The following are the most typical issues:

- Amassing sufficient or insufficient amount of data. As a result, data may be neglected or misused.
- We're concentrating on short-term indicators. Most businesses only collect financial and operational data, oblivious to the importance of longer-term indicators.
- Obtaining data that is inconsistent, contradictory, and unneeded.
- Indicators are not associated to the organization's strategic and objectives.
- For Inadequate balancing of the organization's performances.
- There has to be a balance in measuring the performance. Measuring progress too

frequently might lead to wasted effort and costs with little or no added benefit. On the other hand, failing to measure may lead to potential problems being missed until it is too late to intervene. (Samsonowa, 2012)

2. A Review of the Major Reference Models

Measurement is, in fact, becoming a new discipline for managers, as well as a new aspect of their job. For some, it will necessitate the acquisition of new skills and knowledge. For example, you've certainly witnessed multidimensional performance measurements from Balanced Scorecards, Enterprise Resource Planning, customer measures, Activity Based Costing, Process Management, and other methodologies, as well as sophisticated financial indicators like Economic Value Added. (Frost, 2000)

It's easier to follow a good reference model while establishing a performance measurement system, especially if you're doing it for the first time. Several popular approaches are described in the scientific literature; the subsections that follow provide a brief overview of a few of them. (Franceschini, Maurizio, & Domenico, 2019, p. 144)

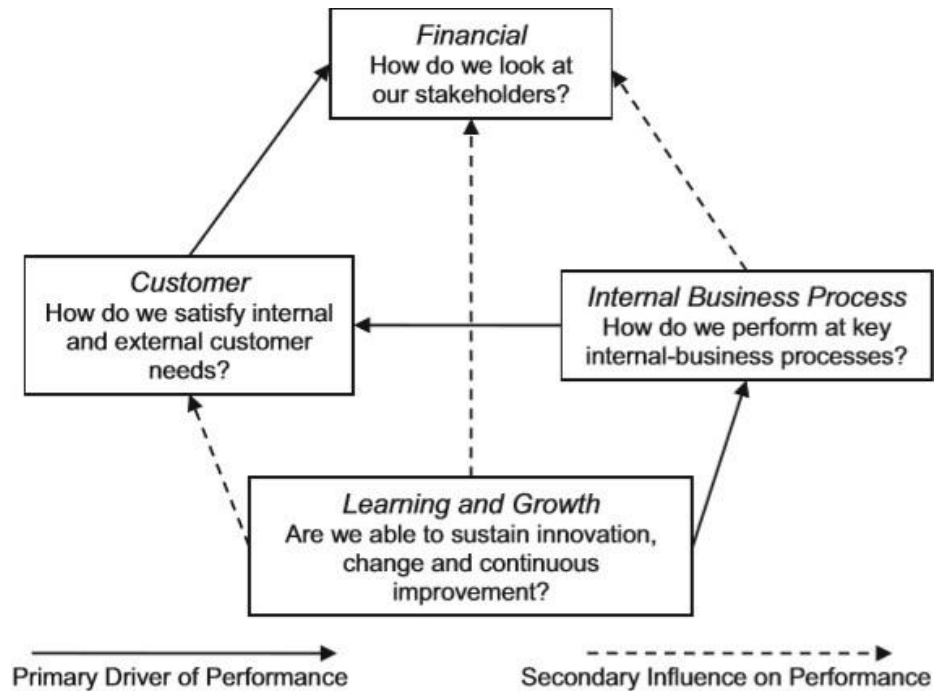
2.1 The “Balanced Scorecard” Method

The new measurements are multidimensional, looking at numerous distinct areas of business at the same time, whereas conventional business metrics concentrated on a single perspective, financial. They represent the realism and complexity of business issues, As a result, rather than being one-dimensional, the new measures are multidimensional. They make an effort to address all of the important aspects of implementing strategy and boosting performance. (Franceschini, Maurizio, & Domenico, 2019)

The Balanced Scorecard is an excellent illustration of how the new measurements should be implemented. Drs. Robert Kaplan and David Norton, the creators of the Balanced Scorecard concept, deserve a lot of credit for the new thinking in performance measures. Kaplan and Norton investigated patterns in performance measures at major companies and released the Balanced Scorecard, one of the first models to organize the new breed of data into a logical structure. (Frost, 2000)

Figure 01: The four dimensions of the Balanced Scorecard model

(Kaplan and Norton 1992)



Source: (Franceschini, Maurizio, & Domenico, 2019)

2.2 The “Critical Few” method

Managing too many indicators has a number of disadvantages, including losing sight of their significance, diverting management's attention away from the most important success indicators. As a result, the number of indicators should be kept as low as feasible while maintaining the comprehensiveness of representation.

The act of simplifying and "distilling" a huge number of performance indicators into a "critical few" should be considered part of the performance assessment process itself, since it can help people better comprehend strategic goals. Internal and external criteria, as well as financial and non-financial ones, must be balanced while selecting a crucial few sets of performance indicators. Although there is no “magical” number of critical-few indicators, some guidelines recommend that each organizational level should include between 3 and 15 indications.

The Critical Few frameworks, like the Balanced Scorecard, has numerous strategically focused business dimensions, each with its own set of performance targets and indicators. It is obvious that taking into account all of them would be difficult, if not impossible. The

Critical Few techniques allow you to reduce the number of indicators while maintaining their quality. (Franceschini, Maurizio, & Domenico, 2019)

2.3 Performance Dashboard

A performance dash board is a useful tool that summarizes a process's performance state. Several firms in Europe have created a dashboard of key performance indicators that summarize the most important variables for success. After all, the dashboard doesn't have many standards: the most important ones are "fuel level," "water level," and "emergency lights." This is exactly what a good organization's "driver" should be doing. A well-balanced set of performance indicators acts as dashboard standards; the mission is the destination.

Each standard is an agglomerated indication that sums up the performance of a specific element of the process of interest. The temperature standard, for example, may reflect customer happiness and aggregate many sub-indicators like "number of customer complaints," "company reputation," and so on. For example, the Balanced Scorecard might be displayed as a performance dashboard.

Creating a "good" dashboard is critical to avoid indications being insufficient, dispersed, and insufficiently reflective of the organization's various areas and responsibilities. When defining the data to be collected, it's important to grasp the objective of the representation and the indicators' information capacity. Different dashboards representing different parts of the organization can be built to simplify the design. Each dashboard should be "modular," allowing for the breakdown and specialization of pertinent data as needed. (Franceschini, Maurizio, & Domenico, 2019, p. 147)

None of these models can tell you exactly what to measure because they require information about your company and sector. They give you good hints on how to group your metrics after you figure out what they should be when they're at their best. With that thought in mind, we decided to use the Performance dashboard as a model in our work. Because Dashboards are visual representations of the company organization's real-time performance. They increase the value of your data by allowing every member of your team to get insights that will help them execute their jobs properly.

Section two: Conceptual framework

This chapter finds that there are a small number of articles providing that can be considered to have provide a solid foundation about the most important concepts of our study.

1. Sales Performance

“Commercial performance is based on meeting the objectives set by the company and is measured through absolute quantitative indicators such as turnover” [Marchesnay and Fourcade \(1997\)](#).

It should be noted that commercial performance is undoubtedly a substantial element in the overall performance of the company for various and varied reasons

1.1 Definition

According to American marketers Association’s definition: *“the planning, direction, and control of the personnel, selling activities of a business unit including recruiting, selecting, training, assigning, rating, supervising, paying, motivating, as all these tasks apply to the personnel sales-force”*

1.2 Organizational goals and Goal Setting

The characteristics of a "goal" were defined by [the German Schwantag in 1951](#), and they included a reference to the future, attribution of a positive valence, identification of a state, event, process, and result.

Hamel’s definition: *“A goal is an envisaged and intended future state, an anticipated vision of the impact of actions”*.

In organizations, a number of people work on different activities at the same time, each with a slightly distinct set of interests. A tool is necessary to bind the interests and direct them in a strategic direction for the whole company. A method for achieving this alignment, as well as collaboratively agreed-upon goals, such as management by objectives. ([Samsonowa, 2012, p. 26](#))

Goal setting, according to [Specht and Beckmann](#), is *“a systematic reduction of complexity that can be realized on the one hand by initial decomposition of the goal followed by subsequent structuring in a goal system and, on the other hand, by iterative involvement of goal creation in the problem-solving process.”*

1.3 Objectives of measuring Sales Performance

Any business will devote time and resources to determining the appropriate KPIs in order to Achieve:

- Increases productivity by revealing your company's bottlenecks.
- Optimizes sales efforts by indicating which techniques are most effective.
- By identifying underserved areas, it creates new opportunities.
- Improves accountability, allowing you to remain compliant in your field.
- Assists you in developing training programs that will improve employee performance.
- Both employees and customers are happier and more productive of this. ([Sales Performance Metrics: The Ultimate Guide For Boosting Your Sales Analytics, 2021](#))

2. Key Performance Indicators (KPIs)

Most firms work on the basis of performance management to determine if they are on the right track or not. Organizations must be aware of performance indicators in order to manage their performance. The impact of key performance indicators (KPIs) on overall organizational performance is examined in this research. ([Bhatti, Hassan, & Z. Razaq, 2014](#))

2.1 Definition

According to KPI organization Key Performance Indicators “(KPIs) are the critical (key) indicators of progress toward an intended result. KPIs provides a focus for strategic and operational improvement, create an analytical basis for decision making and help focus attention on what matters most”.

“Key performance indicators represent a set of measures focusing on those aspects of organizational performance that are the most critical for the current and future success of the organization” ([Samsonowa, 2012, p. 31](#)). Key performance indicators are a set of performance indicators, which have been selected by management teams that can reflect the important metrics that are interesting according to the organizational business unit ([Samsonowa, 2012, p. 32](#))

Oxford’s dictionary defines KPI as: “A *quantifiable measure used to evaluate the success of an organization, employee, etc. in meeting objectives for performance.*”

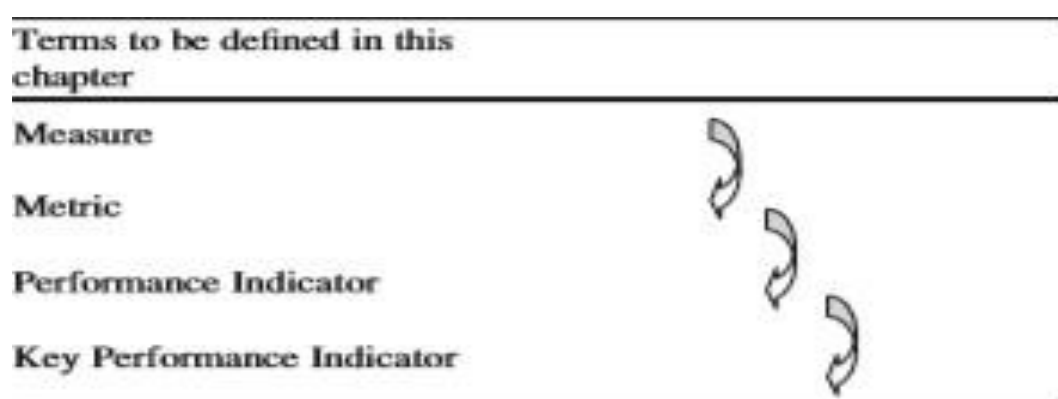
2.2 Key Performance Indicators and Metrics

Performance Measurement uses a range of definitions to describe metrics used to evaluate

goal achievement in companies. The main distinction between “metric” and “measure” is that a metric contains additional information about the referent, whereas a measure is a value that can be quantified.

The basic terms of indicators are shown in figure below. It states that a metric places a measure in context, establishes a reference unit, and specifies a unit of measurement. A performance indicator is a metric that is used to measure how well a business unit is performing. Management selects key performance indicators as representative and significant performance measurements in a certain business case. A single constituent of this group of indicators is a key performance indicator. (Samsonowa, 2012, p. 27)

Figure 1: Key terms in performance measurement



Source: (Samsonowa, 2012)

2.3 Types of Key Performance Indicators

Understanding the various types of KPIs will help you get a complete and well-rounded picture of the entire business landscape. We sometimes miss anecdotal feedback if we only focus on numbers (quantitative). In short, knowing how to classify your KPIs can help you gain a more in-depth understanding of your company's performance. There are a number of KPIs that may be used to evaluate your company's performance or progress. The following are examples of KPIs:

- **Quantitative Indicators**

The simplest straightforward KPIs are quantitative indicators. In other words, they are exclusively measured by a number. Quantitative indicators are divided into two categories: continuous and discrete.

Continuous quantitative indicators can have any value over a range and can include metrics such as Miles Traveled for a mobile service. Complaints, accident figures, and other discrete quantitative measures are whole numbers.

- **Qualitative Indicators**

Numbers aren't used to measure qualitative indicators. A qualitative KPI is usually a feature of a process or a business decision. An employee satisfaction survey is a popular qualitative indicator that firms utilize on a regular basis. While part of the survey data is quantitative. Qualitative indicators tend to lay a greater emphasis on feelings or experiences, as well as the intangible value we place on them.

- **Leading Indicators**

Leading indicators are used to predict the outcome of a process modification and to corroborate long-term data patterns. Leading indicators look ahead to what might happen, such as when a new product or service is introduced. Forecasting these indicators might help you make better decisions about market developments and client expectations. They aren't sufficient markers of success on their own.

- **Lagging Indicators**

Lagging indicators are used to measure outcomes after an action has occurred in order to assess the success or failure of the activity. They're frequently used to assess past performance or to assess the impact of a company action. Businesses might use lagging indicators to see if their decisions helped them achieve the desired result.

- **Input Indicators**

Input indicators are used to calculate the resources required for a project or business activity. They're essential for measuring resource efficiency in large projects with a lot of moving pieces, but they're also helpful in smaller initiatives. Staff time, cash on hand, and required equipment are all examples of input indicators.

- **Process Indicators**

Process indicators are used to assess a process's performance and, hopefully, facilitate any necessary modifications. KPIs focusing on customer support tickets are a frequent process indicator for support teams.

- **Output Indicators**

The success or failure of a process or a commercial activity is measured using output indicators. One of the most commonly utilized KPIs is output indicators. Revenues, profitability, and new client acquisition are examples of output KPIs.

- **Practical Indicators**

Practical indicators take existing company processes into account and investigate the consequences of those processes on the business. As a result, many practical indicators might be exclusive to your business or work processes.

- **Directional Indicators**

Directional indicators measure a company's unique patterns. Time on Site is an example of a directional statistic that many service providers use. This metric is used to track how much time technicians spend on-site diagnosing and correcting issues. Broad directional indicators can be used to assess your company's position in relation to competitors in your industry.

- **Actionable Indicators**

Measure and reflect a company's enthusiasm and performance in executing business changes via actionable indicators. Changes in corporate operations, company culture, or political action are all possibilities. These measurements are used to assess a company's ability to implement desired changes within a given time frame.

- **Financial Indicators**

Economic stability, growth, and business viability are all measured by financial indicators. Gross profit margin, net profit, aging accounts receivable, and asset ratios are some of the most frequent financial KPIs. Financial indicators provide simple insight into a company's financial health, but they must be used in conjunction with the other KPI categories discussed in this article to create a complete picture. (Adams, 2015)

2.4 Aims and Use of Performance Indicators

The large range of indicators is one source of difficulty when it comes to indicators. Indicators can be used to assess outcome performance as well as anticipate future outcomes. is intended to improve one's chances of reaching a specific goal.

The focus on identifying and using indicators to anticipate outcomes is relatively new. When the goal is to avoid problems from occurring rather than to solve them, predictive indicators are useful. Operational, predictive, and result indicators are often more appealing to operations managers and personnel. (Franceschini, Maurizio, & Domenico, 2019, p. 10)

CHAPTER 2:
METHODOLOGY OF RESEARCH

In this chapter, we will present in the first section the methodology used in our case study in order to address the research question and clarify how we proceeded in our part of theoretical analysis to understand the process in which we measure sales performance using key performance indicators to gather descriptive data. Then in the second section we will present the host firm “Ceram Décor” in which we carried out our internship.

Section 1: Research methodology

In this phase we will show the research method used as well as all the tools used to carry out our study.

A well-structured study must be built on a good basis, however it must follow a certain approach to achieve its objective of obtaining credible results, for our study to be so, we will have to choose an approach adapted to the theme we have chosen.

1. The epistemology

The epistemology is the first phase of a research work, the latter consists of two types of paradigms.

- a constructivist paradigm
- a positivist paradigm.

In our study, we followed the positivism paradigm, monitoring your team's performance, assessing KPIs, and identifying ways to enhance sales are all part of sales performance. It's easier than it used to be, because software can automate a lot of the monitoring, but it still requires judgment. Knowing when your salesmen are making mistakes and when there's nothing, they could have done to complete the deal is part of good management.

Companies put a lot of money into their sales teams. Unsurprisingly, sales teams are held to a high standard for delivering results - but they can't do it alone. Successful sales performance planning necessitates the collaboration and support of cross-functional teams that are all working toward the same objectives" *which consists of a body of knowledge relating to the human experience of the studied project which compares the known experience in the field*" [GAVARD-PERRET \(2012\)](#).

In other words, the researcher who selects positivism type is an effort to minimize view of researcher and interpretation was conducted through operationalization of all the variables to be used in the formulas.

2. The research method

Our research problem is a major topic that isn't considered new from a theoretical standpoint, but its practical application is undervalued. Another argument in support of this strategy is that managers who consider performance measurement would give them tremendous help to provide the greatest results for their companies.

As a consequence, and in order to establish a logical link and some consistency between the goal, the subject, and the research paradigm, and in order to realize our research, we have based on a quantitative approach.

As quantitative study design “Allows for a broader study, involving a greater number of subjects, and enhancing the generalization of the results” (Research Guides: Organizing Your Social Sciences Research Paper: Quantitative Methods, 2010). We are dealing in this research with performance of sale department which leads directly to number, statistics, and matrices.

In our study we used descriptive Analysis, according to (Waliman, 2011, P.10) “*Descriptive Analysis deals with describing a phenomena that how we think something is. It attempts to examine the situations in order to describe the norm*”.

“*Descriptive Analysis describes what exists and tries to pave the ground for finding new facts. It includes gathering of data related to, products, people, individuals, events and situations and then organize, tabulates, depicts and describe the outcome*” (Travers R., 1978).

“This approach is applied to describe variables rather than test predicted relationship between variables. Its main objective is description, it does not make predictions and does not determine cause and effect “(Jamie, n.d).

“Descriptive Research are often done before an experiment, exploratory or inferential research to know what specific things to manipulate and include in experiment” (Bickman, L., & Rog, D.J., 1998).

3. Hypotheses

To answer the previously mentioned research question, a set of hypotheses were prepared-
- Is The sales performance overperformance?

By the use of Key performance indicators, the measurement of the sales performance in SD might shows the performance exceeds the setting goals.

- Is The sales performance achieving goal setting?

By the use of Key performance indicators, the measurement of the sales performance in SD might shows the performance corresponds with the setting goals.

- Is The sales performance underperformance?

By the use of Key performance indicators, the measurement of the sales performance in SD might shows the performance less than the setting goals. (Samsonowa, 2012)

4. Data collection tools

In the quantitative method, there are several data collection methods available; yet, the study in our case relies mostly on sales reports, quantitative observation, and documentary research.

4.1 Sales reports

The company doesn't use any kind of monthly reports, except for a software without needed information to track the performance, so we created an adopted model with our targets, and the objectives of the company. According to American Marketing Association, *AMA Dictionary* « A sales report is submitted by salespeople to inform management about what is happening in the field. Most managers expect salespeople to report competitive activities, reactions of customers to company policies and products, as well as any other information management should know. In addition, sales reports can provide records for performance. Sales reports often include such information as the number of calls made, orders taken, miles traveled, days worked, new prospects called on, and new accounts sold.”

4.2 Quantitative Observation

The University of South Alabama has termed Quantitative Observation as “Standardized Observation” and it is mostly used in scientific research as it produces statistically observed information.

Quantitative observation is an objective collection of data which is primarily focused on numbers and values, it suggests “associated to, of or depicted in terms of a quantity”. Results of quantitative observation are derived using statistical and numerical analysis methods. It implies observation of any entity that can be associated with a numeric value such as volume, scale etc.

4.3 Documentation

For a complete understanding of the subject of the research, we carried out bibliographical research based mainly on the online libraries. The sources were diverse: books, dissertations and scientific articles which helped us to understand and to apply it in the field.

In addition, websites and online such as: Google Scholar, PDF Driver et ResearchGate, scientific theses related to the performance measurement and especially Data analysis that was hard to find books about it, as well as the optimization of these have been used to further enrich our work.

From a practical point of view, the firm provided us with all the documents necessary to carry out this study, such as the company catalogues, and internal documents.

5. Business Analysis Techniques

The analysis is for a specific period of time just before the beginning of this project. As many as techniques we decided to work with SWOT and PESTEL ones because they are more familiar.

- **SWOT Analysis**

According to [BABOK guide](#) “SWOT can be performed at any scale from the enterprise as a whole to a division, a business unit, a project, or even an individual. By performing SWOT in a disciplined way, stakeholders can have a clearer understanding of the impact of an existing set of conditions on a future set of conditions.

The aim of this analysis is:

- Identify the best possible options to meet an organization’s needs, develop criteria for evaluating project success based on a given set of requirements.
- Understand the situation of the company.

6. Tools to Analyze the data

In order to analyze the data, there are many softwares and tools to use, we choose Excel to prepare data, and calculate it. Excel spreadsheet will organize raw data into a readable format that makes it easier to extract quantitative results.

- **Dashboard**

KPI dashboards are best considered from an operational and strategic analysis. An operational dashboard allows you to check the day-to-day outputs of your project to make sure everything is running smoothly, the key performance indicator dashboard gives decision makers quick access to the critical indicators or data of sales department to make decision according to, and helps them decide whether they are on track or not.

Section 2: Presentation of the organization

This section gives a general overview of Ceram Decor, with a focus on the company's commercial strategy.

1. Groupe CERAM DECOR

SARL Ceram Decor created in March 2011, and started its activities in January 2016. The company has a production capacity of 35,000 m², located in the industrial zone of *Tazoult*, Batna.

Ceram decor products are the result of an ingenious combination of: in-depth research, highly developed technology, a design, and development space for innovation. Ceram decor is one of the leaders in the ceramic industry in Algeria, with a wide selection of products as attractive as each other, ranging from the most classic to the most trending, which was a major advantage leads to the extension of this product on the national market. In fact, the quality of the raw Materials and the Product itself will eliminate the importation of similar products. In addition, exporting is one of the objectives of this pillar of the industry, to see the organizational chart look (ANNEX A).

1.1 Vision of CERAM DECOR

To be the leader in Algeria's ceramic market.

1.2 Mission of CERAM DECOR

Adding value to their products and providing elegance and refinement to any customer that seeks it.

2. Sales Department

Sales department of Ceram Decor is where we completed our internship.

SD plays a very important role in the company, and considered the pillar of Ceram Decor, with a staff contains: two sales representative, two community managers, four sales managers, and clients service which in turn consists of two agents.

The SD's activities are mainly focused on the following objectives:

- Increasing sales and profit.
- Increasing customer satisfaction.
- Ensure the product's reputation.
- Enhancing the sales of products on the national level.

CHAPTER 3:
RESULTS AND DISCUSSION

A presentation of research results is made here. First, we proceed with data reliability and validity analysis, then the analysis using descriptive statistics, bivariate analysis, and linear regression. To measure commercial efficiency from a quantitative point of view, companies use quantified and qualified commercial indicators that determine the performance and the productivity of a department.

Section 1: Presentation of Results

As we discussed in the conceptual framework, there are numerous approaches to measuring sales performance, we will use in our case the performance dashboard method, after we identify our goals and line them with five KPIs which are appropriate for our situation, before beginning the measurement, every person in the sales department must be informed of the procedure. As a result, the presentation was based on a descriptive data analysis to describe the department's current situation.

1. Identify current KPIs and the measurement system in the company

The company does not really have a system for sales performance measurement. It does use some metrics, however, here and there not in deliberate method, to measure performance in certain sales functions. In order to capture all the situation first, I conducted informal meeting with department responsible and sales manager in 14 June 2021 in CERAM DECOR. The worksheet that I used to decide the SMART goals and gather KPIs information during the meeting is shown in Table 1, with SWOT analysis to understand the whole situation of the company, and sales department in particular and help to decide the next goals. However, the results were not presented due to the order of the company.

1.1 Identify SMART goals of our department

SMART goals are specific objectives that we aim to achieve over a specific time period. To set them up for success, a manager and their direct report should carefully establish these goals." These five characteristics should be present in every SMART objective to ensure that it is achievable and beneficial to the employee and the company in general.

1.1.1 Customer Churn Rate

Customer churn is one of the most important metrics to evaluate business. Customer churn is the percentage of customers that stopped using your company's product or service during a certain time frame.

Many sales teams devote time to identifying new leads and converting them into customers. Lowering your client churn rate, on the other hand, is critical. According to statistics, onboarding a new customer is 25 times more expensive than keeping an existing one.

SMART goal:

“Lower our customer churn rate from 6% to 4% in trimester by identifying at-risk customers”.

1.1.2 Customer Satisfaction

Customer satisfaction measures how successfully you, as a product or service provider, meet your customers' requirements and expectations. This applies to all interactions before, during, and after the sale. Cambridge Dictionary defines customer satisfaction: “A measure of how happy customers feel when they do business with a company.”

SMART goal:

“Increase average scores in our customer satisfaction survey by the end of trimester, specifically on sales-related issues, by spending more time to answering customers ‘questions related to sales issues’”.

1.1.3 Profit

Profit is an absolute number derived by the amount of income or revenue generated in excess of a company's costs or expenses. It shows on a company's income statement and is calculated as total revenue fewer than total expenses ($TI=TR-TE$). The goal of any business, regardless of its size or scope, or the industry in which it works, is to generate a profit.

SMART goal:

“Increase overall profit in the trimester by 3%. This will be achieved by increasing the revenue”

Revenue (income). This is the money your business earns. Usually this is from selling products and services, but it can also include income from things like investments and renting out assets.

1.2 Select the suitable KPIs for our measurement

We chose the necessary KPIs based on our objectives, and after analyzing the state of the

company and our objectives, we conducted 5 KPIs as shown in the table 1.

1.2.1 Useful Analysis

The approach is action-oriented and straightforward to comprehend. Unlike an overly complex system that would almost likely be abandoned, the indicators are clearly tied to activity performance, prompting the organization to keep tracking them on a regular basis.

1.2.2 The KPIs of our performance Measurement

This table gives an overlook about the selected KPIs with details.

Table 1: Detailed table of the selected KPIs

SMART Goal	Performance Indicator	Description	Formula
Lower Customer Churn	Customer Churn Rate	customer churn is customer retention rate	Total customers churned this time period / Total customers at the start of this time period = Customer Churn Rate
Increase Customer Satisfaction	Customer satisfaction score (CSAT)	Customers' thoughts or attitudes regarding a product, a company, or a service provided by it. When a customer's demands or expectations are met, satisfaction is achieved.	Based on survey
	Monthly sales	Monthly sales revenue shows the revenue that a company expects to receive monthly from customers by providing a products or service	Sales revenue = the number of products or services sold * the price per unit
Profit	Sales by region	Sales by region basically, shows you how well a product performs in a certain Area	Total number of sales in region N
	The Ten hot products	those products with the largest growth in orders period over period	Excel Formula

Source: made by me

1.3 Evaluation of the Suggested Key Performance Indicators

To know whether our current performance metrics are appropriate to see our current performance KPI, we could have them audited by an expert, but an employee can do a similar job, by comparing what we are aiming to do with what we are actually do. (Frost, 2000, p. 18) According to (Frost, 2000, p. 18) we take a look at all of our metrics and assign a score to each one:

1= No value on this goal

2 = Some help on this goal 3 = Quite help on this goal

4 = Extremely valuable on this goal

We have nine questions about our KPI (see Annex C) after we calculate if a score of less than 18 indicates that your measurements aren't up to standard. If your total is 18-27, your metrics have a lot of worth, but there's still opportunity for development. Totals greater than 27 indicate that your stats are among the best. We evaluate our KPIs with the sales department's responsible, we conduct the following results:

Table 2: Evaluation table of the selected KPIs

The selected KPIs	Score	Comment
Customer Churn Rate	29	The KPI is among the best
Customer satisfaction score (CSAT)	22	The KPI has a solid value but also room for improvement.
Monthly sales revenue	26	The KPI has a solid value but also room for improvement.
Sales by region	22	The KPI has a solid value but also room for improvement.
The Ten hot products	20	The KPI has a solid value but also room for improvement.

Source: made by me

1.4 Prepare KPI Dictionary

For each suggested KPI, we have a KPI dictionary as shown below. It provides a clear definition of each KPI for every employee involved in the performance measurement. The information in each dictionary, includes KPI Name, Frequency of Measurement, Report To, Data Collector, Unit Type, Polarity, Require Data and Source, and target. This set of

dictionaries can make sure all employees understand what the company is measuring and keep everyone in the same page.

Table 3: KPI dictionary (Customer churn rate)

KPI name: Customer Churn Rate	Frequency of Measurement: Monthly
Data Collector: Sales Agent	Reported to : SD Saff , Responsible of SD
Unit type : Percentage	Polarity: Low value is good
Target : Understand the state of clients 'relation in SD	Require Data and Source: Number of new and lost customers each month from data

Table 4: KPI dictionary (Customer satisfaction score)

KPI name : Customer satisfaction score (CSAT)	Frequency of Measurement: Monthly
Data Collector : Sales Agent	Reported to : SD Saff , Responsible of SD
Unit type : Number	Polarity: High value is good
Target : Understand elements that need to evaluate in SD	Require Data and Source: clients answers from survey

Table 5: KPI dictionary (Monthly sales revenue)

KPI name : Monthly sales revenue	Frequency of Measurement: Monthly
Data Collector : Sales Agent	Reported to : SD Saff , Responsible of SD
Unit type : Percentage	Polarity: High value is good
Target : increase monthly sales revenue	Require Data and Source: Revenue by client

Table 6: KPI dictionary (Sales by region)

KPI name : Sales by region	Frequency of Measurement: Monthly
Data Collector : Sales Agent	Reported to : SD Saff , Responsible of SD
Unit type : Percentage	Polarity: high value is good
Target : understand the state of sales in each region	Require Data and Source: Number of sales in each region.

Table 7 : KPI dictionary (the top ten hot products)

KPI name : The top Ten hot products	Frequency of Measurement: Monthly
Data Collector : Sales Agent	Reported to : SD Saff , Responsible of SD
Unit type : Number	Polarity: /
Target : Select our best products, and increase its production.	Require Data and Source: Number of new and lost customers each month

Source : made by me

1.5 Measure our KPIs

We take data from the company data base to monitor and measure our KPIs after we have informed all of the employees about the new KPI: Customer churn rate, customer satisfaction score (CSAT), monthly sales revenue, sales by region, and the top ten most popular products to obtain a clear picture of sales operations, we use a combination of quantitative and qualitative KPIs.

1.5.1 Measure Customer churn rate

The company has its exclusive suppliers in only few places according to strict conditions, thus losing one is enormous impediment to accomplish our objectives, that is why it was more than necessary to reduce the number. Customer turnover rate was a useful tool for assessing the situation and developing a very well strategy.

“Increase overall profit in the trimester by 3%. This will be achieved by increasing the revenue”

Figure 2: Customer churn rate

FORMULA	April	May	June
Existing Customers	33	33	29
lost Customers	6	3	5
New Customers	3	1	1
Churn rate	8.30%	5%	12%

Source: made by me

According to table presents Customer churn rate, we notice our rate was in April 8.3 %, and decrease from April to May by 3.30%, which get to 5%, and increase by 7% to reach 12% in June.

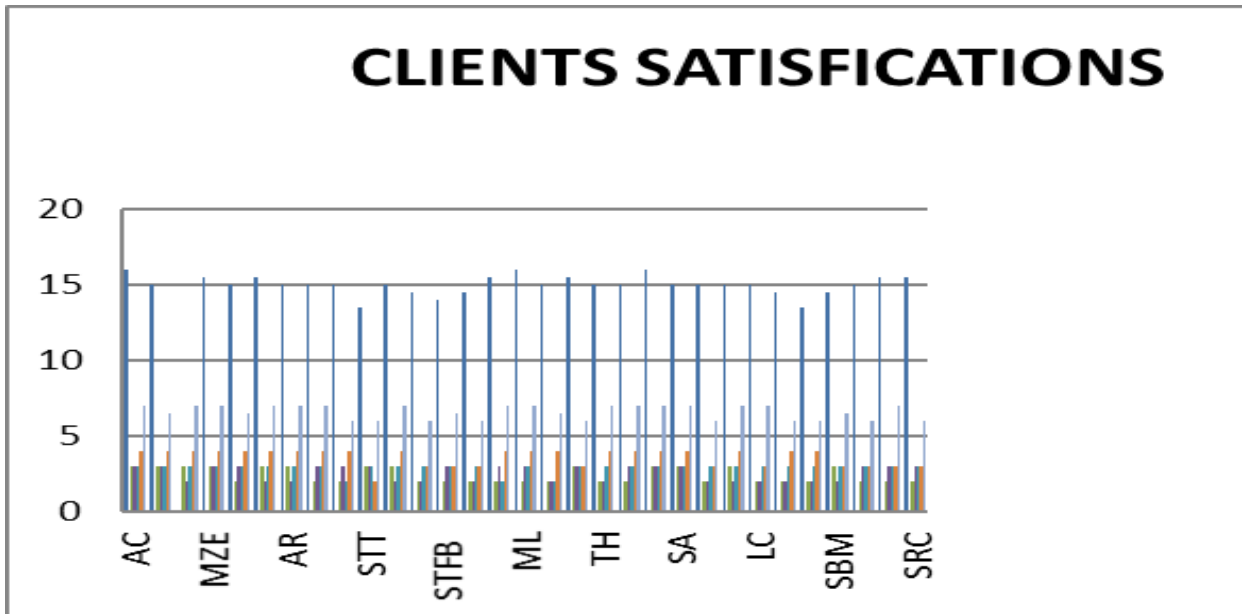
Interpretation

Our customer turnover rate in the trimester was between 8% and 12%, which is a large number for any company. Losing existing clients will cost the company additional money, as suppliers choose to discontinue dealing with the company due to unavailability of goods and delivery plan.

1.5.2 Measure Clients satisfaction

In order to measure to what extent our products and services meet the expectations of customers, we prepare a survey agreed on by ISO committee, take into consideration key questions to understand in general how much our customers were happy which are :our commercial services, dealing with claims, Marketing activity ,and other criteria concerning our product.

Figure 3: Customer satisfaction



Source: made by me

The average rate of service efficacy is between 13 and 16, as shown in our graph, which combines the data of three months into one to make interpretation easier.

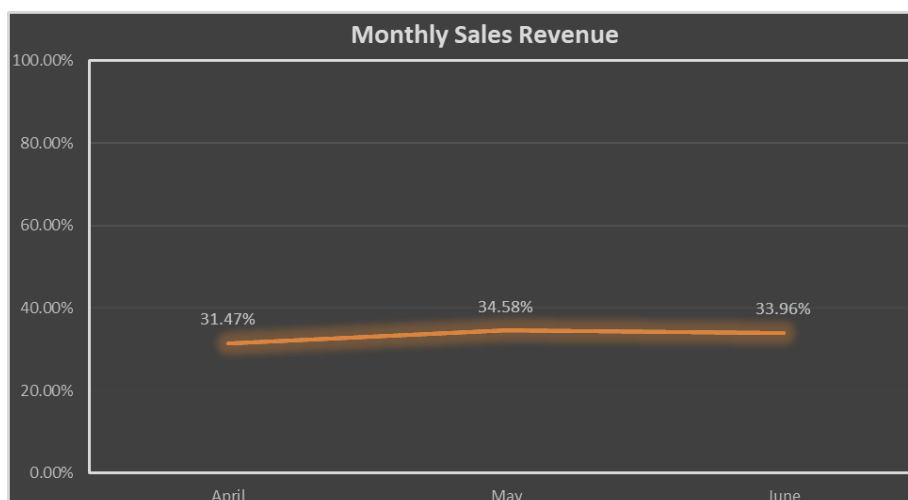
Only on social media (Facebook and Instagram), the average rate of marketing activity is between 6 and 7. For the product itself, the average rate of availability is between 3 and 2, quality is between 3 and 2, diversity is between 4 and 2, and quantity is between 3 and 2.

Interpretation

The suppliers complete the survey based on their extensive experience with the company and direct contact with the end consumers. Our strong aspects, according to the results, are the variety of our products (on the market), as well as the quality. The company has a weak marketing activity since they lack a marketing strategy, and the weakest aspect was product availability due to a large imbalance between demand and production.

1.5.3 Measure Monthly sales revenue

Understanding how much profit we make from our business will provide us with valuable information about our current situation, which we can compare to our main goal.

Figure 4: Monthly sales revenue in trimester

Source: made by me

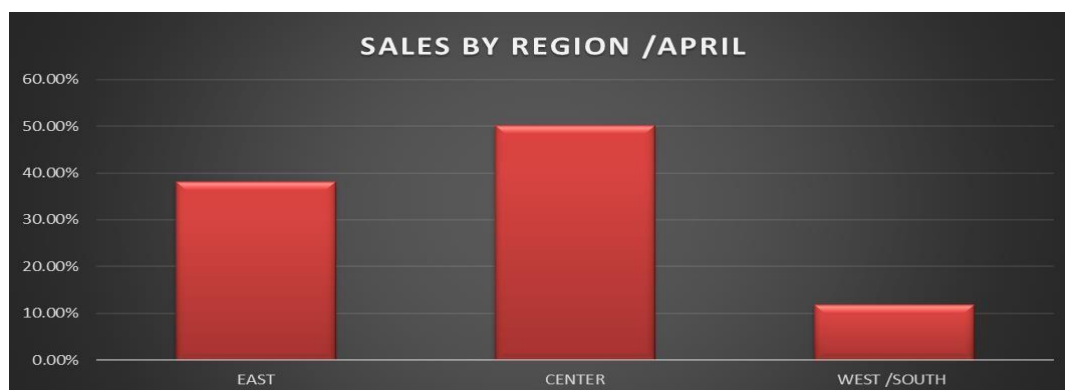
Monthly sales revenue is depicted in figure 5. We calculate three-month sales revenue. According to our calculations, sales revenue is 31.47 percent in April. It increases by 3.1 percent to 34.58 percent, while sales income is 33.96 percent in June, indicating a 0.62 percent reduction.

Interpretation

According to a trimester's figure, sales revenue increased by 3.1 percent (almost half of our goal) due to more active suppliers and the addition of three new ones. Because of the new strategy, sales income decreased by 0.62 percent the next month, because of trying new strategy.

1.5.4 Measure Sales by region

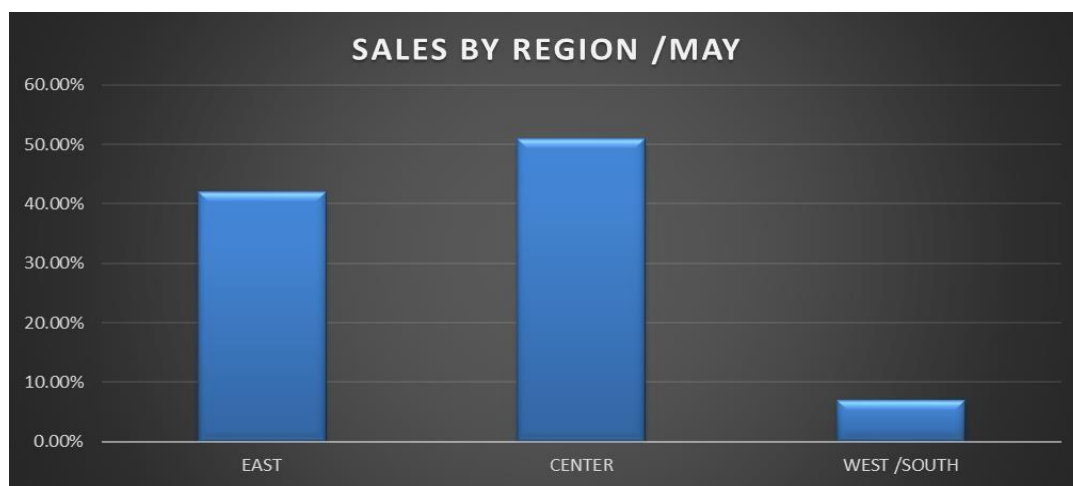
To determine how well a product performs in a certain area. To be able to readily figure out where we can focus more on sales, we can look at sales by region KPI. to help the team in optimize our targets for more qualified or high-purchase-instance regions.

Figure 5: sales by region in April

Source: made by me

Our sales by region in April are represented by the graph 6, which shows our three regions: East, Center, West and South. As was shown, sales in the east reach 38.10 percent, 50.10 percent in the Center, and 11.80 percent in the west and south. As we can see, the Center has the highest revenue.

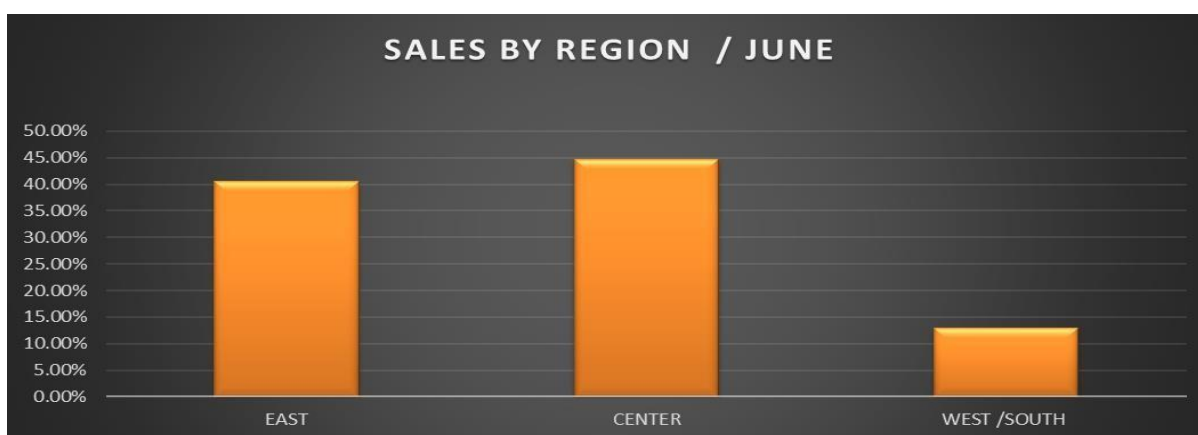
Figure 6: Sales by region in may



Source: made by me

Our sales by region in May are represented by the graph 7. As was shown, sales in the east reach 42.01 percent, 51.03 percent in the Center, and 6.96 percent in the west and south. As we can see, the Center has the highest revenue.

Figure 7: Sales by region in June



Source: made by me

Our sales by region in May are represented by the graph 8. As was shown, sales in the east reach 40.54 percent, 44.67 percent in the Center, and 12.98 percent in the west and south. As we can see, the Center has the highest revenue.

Interpretation

Our products sell during the first three months more in Center compared to other region because the competition is weak in the area, that means the focus should be more on the Center. It is helpful in this regard because it helps us target region that is more qualified or high purchase instance.

1.5.5 Measure the Ten hot products

Staying on top of Hot Product Trends gives you the information you need to make sure you have plenty of these things on hand. By gathering all of the data and determining which things are selling the best, you can change your marketing and promotion strategies to sell even more of these items.

Figure 8: Top ten hot products in April



Source: made by me

Figure 9 depicts the top ten most popular products in April. Based on this data, the ONE BEIGE appears to be the best choice. With a sell-through rate of 74 unity, CAPITAL WHITE comes in second by a wide margin, followed by the others.

Figure 9: Top ten hot products in May



Source: made by me

Figure 10 depicts the top ten most popular products in May. Based on this data, the DIOR MIX appears to be the best choice. With a sell-through rate of 100 unity, DIOR BEIGE comes in second, followed by the others by a wide margin.

Figure 10: Top ten hot products in June



Source: made by me

The top ten most popular products in June are depicted in Figure 11. ONE BEIGE appears to be the best pick by a large margin based on this data. LOGIC PERLA ranks in second with a sell-through rate of 74 unity, followed by the rest.

Interpretation

Analyzing our data is an essential step in building a better, stronger strategy for the business, to keep turning larger profits, by tracking our top products, to focus on and produce it more, especially that the company produces its products according to request, and according to our analysis we notice that ONE BEIGE is among our best products. top products during the three months because of the unique design.

Section 2: Results and discussion

A presentation of research results is made here. First, we report our data through a dashboard proceed with verification of hypotheses, and recommendations.

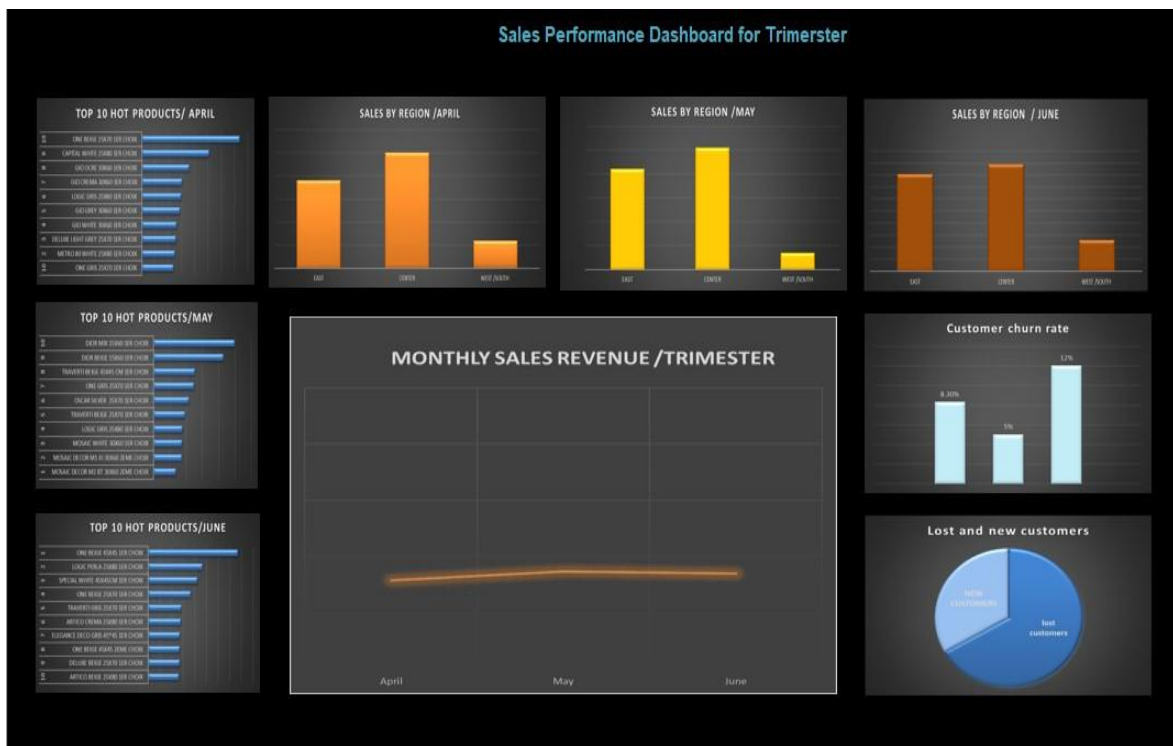
1. Report Results

The last step of implementing the sales performance measurement is to design a proper dashboard format so company can keep track of sales performance over time. A dashboard report is a powerful tool for meeting business goals, displaying vital company data in a one-page layout to make it easy on high-managers to make decisions.

1.1 Dashboard report

CERAM DECOR’s sales performance is based on a Dashboard which is provided in below. The five Key performance indicators that is reported to different aspects of sales department provides a more over look at performance levels.

Figure 11: Sales performance dashboard for a trimester



Source: Made by me.

1.2 Comparison of goals and KPIs

After tracking our setting goals on a regular basis, according to our different KPIs, using Excel tool and presenting the graphs in one dashboard, we deduced that we only met the customer satisfaction goal, and that the company did not meet the setting goals for the trimester in terms of sales revenue and customer churn rate.

1.3 Verification of hypotheses

Below are the results of performance measurements relating to our research hypothesis mentioned in methodology and further elaborated on in the following discussion:

for analysis purposes. KPI dashboard is a great way to display data over time so you can identify trends. They are also a good mechanism for housing descriptive analysis around performance. Our organization didn't meet a certain KPI target in the first trimester due to the lingering effects of COVID, the dashboard gave a quantitative look about our state which is a strong tool to understand how to do the next step according to our weak and strong points.

The aim of our study was to measure the sales performance of the company using five key performance indicator which are: Customer churn rate, Customers Satisfaction, Monthly revenue, Sales by region, and Top ten hot products, comparing with our setting goals. After using descriptive analysis and Dashboard as a tool we found that the hypothesis "Is The sales performance underperformance?" is the correct one.

2. Recommendation

On a practical level, our time in the field made it easier for us to put theoretical concepts into practice and understand the usage of the KPI method to measure sales performance using quantitative and qualitative KPI to get a complete picture of our current situation and compare it to our goals. However, after learning about Ceram Décor's sales activities as well as the standards for managing client relationships, we discovered several flaws and can suggest some amelioration actions.

- As shown in Figure 3, the company lost a significant number of essential suppliers. SD should endeavor to avoid losing its suppliers in the first place by identifying why clients leave and working to improve the weak spots identified in the survey (ANNEX D), such as failing to meet deadlines of orders. Putting the customer at the center of the commercial strategy and considering them as a major stakeholder will help to improve profits and manage relationship with them.
- The Pareto Principle, also known as the 80/20 Rule, states that 20% of your consumers

contribute for 80% of your sales. And 20% of your products contribute to 80% of your revenue. And so forth. Although the Pareto Idea, has long been used by business owners and executives, a recent and unique interpretation of the principle has elevated its importance and power to new heights. According to Perry Marshall's new book, "80/20 Sales and Marketing," the Pareto Principle is exponential, because 20% of your products account for 80% of your sales. Marshall discovered that the 80/20 rule also exists within that initial 20%. That is, the top 20% of the top 20% of your clients represent 64% of your sales (calculated as 80% times 80%). (Lavinsky, 2014)

Using this principal in our research, by focusing on selling our top ten hot products can significantly enhance the income within short period of time.

- Investing in software to simplify communication between employees, clients, and collect sales data for a future analysis, as well as constructing a Marketing department, will be a significant benefit to the firm as a whole in developing a solid strategy based on research.

GENERAL CONCLUSION

General conclusion

It is easy for companies to get lost in the sea of data. To build a useful and customized sales performance measurement, a company needs to examine their current situation carefully and understand their next move. This study demonstrates the importance of defined goals for a clear overview about the direction of the company in the future. A good performance measurement must be able to provide high-level managers with proper information using both financial and non-financial indicators to support a company's decision-making processes. The study also examined several techniques for organizations building their own complete unique sales performance model, concluding the study with some modest suggestions that would allow management to get to the root of the problem.

The research aimed to identify the activities that would be considered the key performance indicators for their organization, and determine realistically the achievement of setting goals of the company by focusing on related KPI.

To answer the research question was formed as the following “What is the state of sales performance in the Ceram Decor company?”

We chose a quantitative approach that included the use of scientific publications, books, quantitative observation, and data analysis. We were able to analyze the gathered data using formula and Excel to calculate it. Which lead us to our finding:

- The sales performance of Ceram Decor did not meet the setting goals, which mean it was underperformance, The Company needs ameliorations in its sales strategy.
- Using many types of KPIs helps giving a clear image about many activities of the department.

This study discusses nowadays tools as dashboard to measure sales performance from theoretical perspective, however; from managerial standpoint this study helps the service to recognize a tool that makes communication easier between the staff and upper-managers, plus an overview about their sales performance during the last three months.

We faced a number of obstacles during our research, including:

- The topic's nature and the difficulty of making a link between the theoretical and practical parts due to the unique characteristics of each organization.
- The lack of scholarly references on the subject; and even the case study's element.

- The lack of comprehension of its core concepts in SD staff, with no database of their activities.

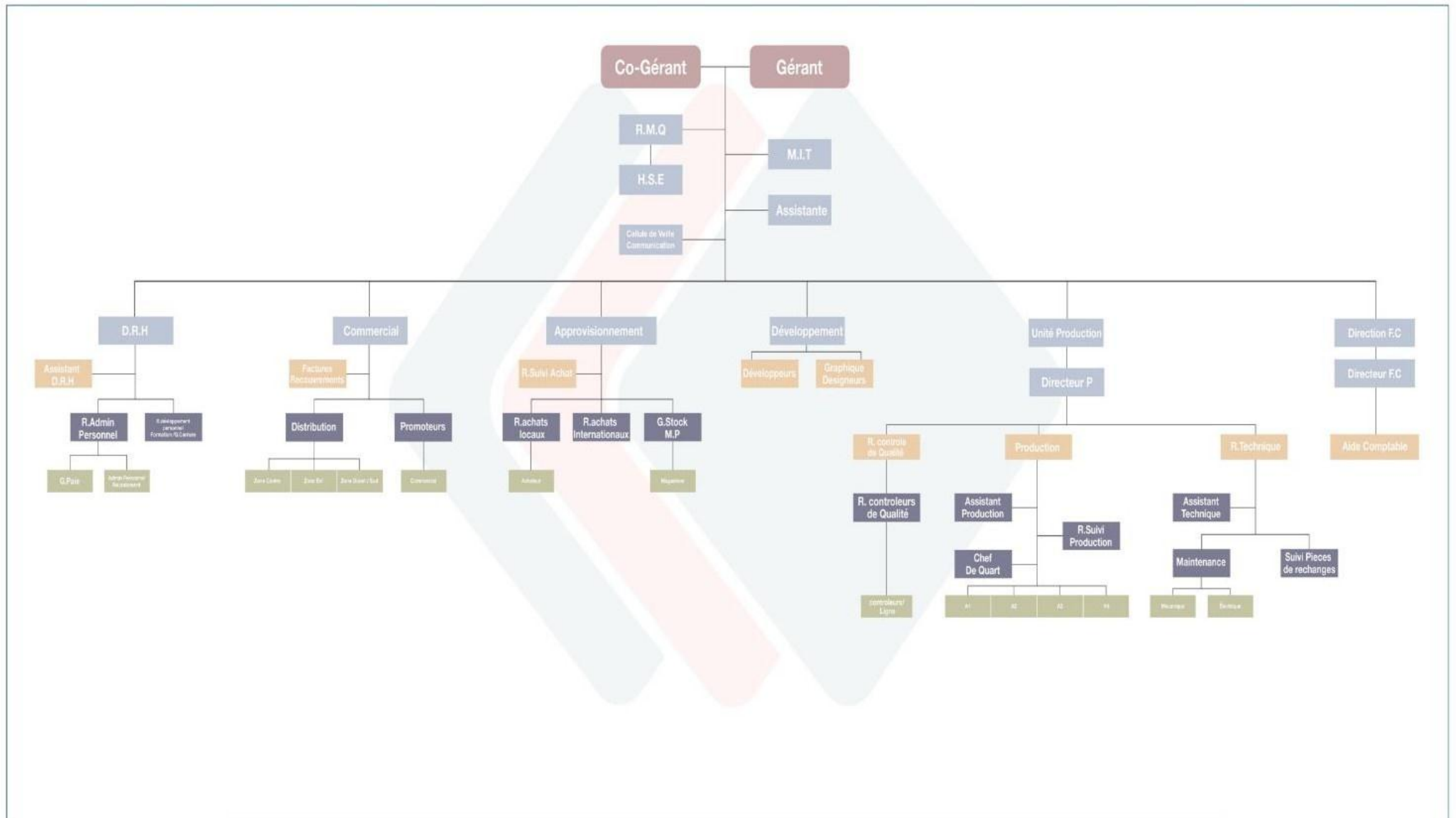
For future research and studies on this topic, we advise students who will work on sales performance to use more types of key indicators to get a major understanding of the company's situation.

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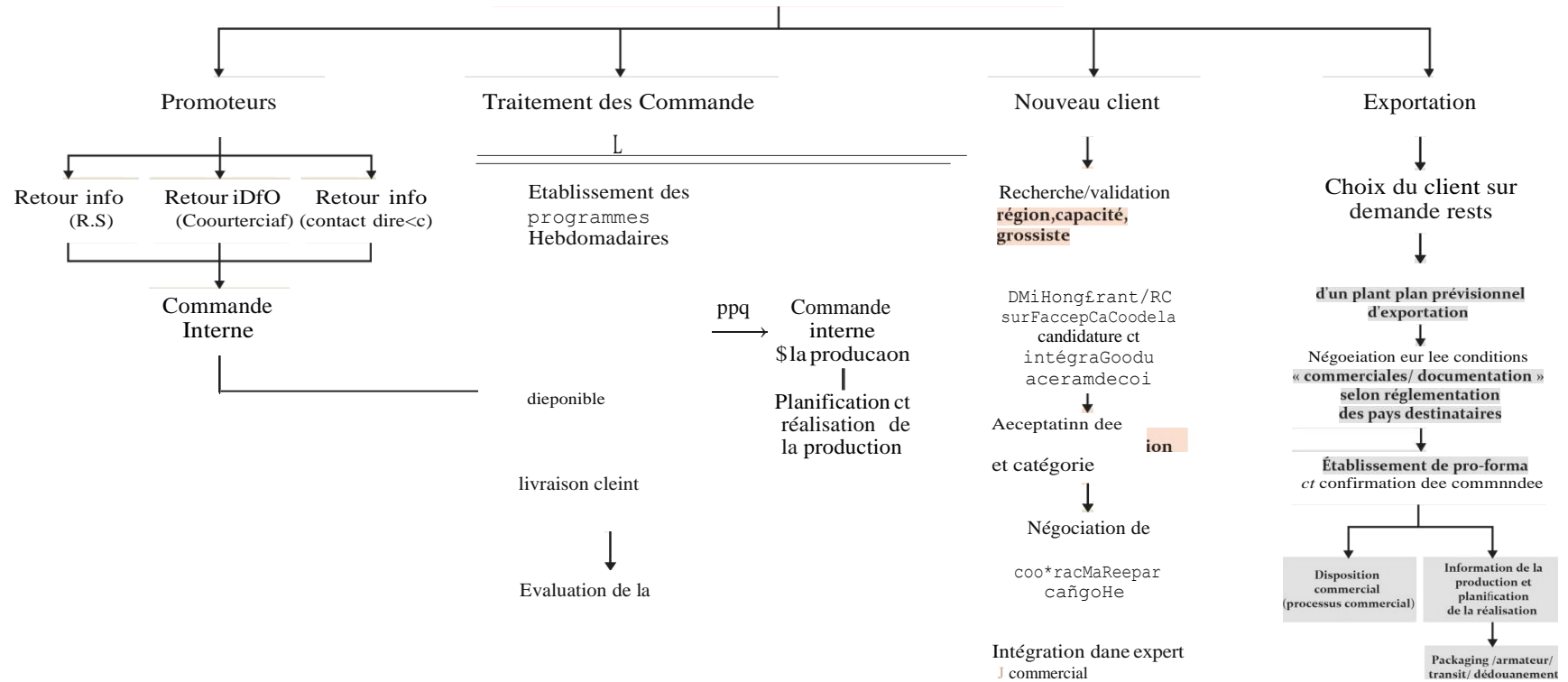
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ANNEX A-
ORGANIZATIONAL CHART OF
CERAM DECOR



ANNEX B-
ORGANIZATIONAL CHART
OF SALES DEPARTMENT

**Information et communication des données/demandes
issus de : Facebook / distributaire / d'erection / promotion**



ANNEX C-
ASSESS MATRICS
DOCUMENT

Assess Matrics document

Date:

Name:

Position:

This document aims to evaluate whether the selected performance metrics are falling down, solid value ,or the best for measuring sales performance according to a defined scale.

Scale Questions	No value on this goal	Some help on this goal	Quite helpful on this goal	Extremely valuable on this goal
Translate your business strategy into concrete action				
Align departments behind common goals				
Fully reflect what your stakeholders care about				
Provide the leverage to create change				
Balance leading and lagging indicators				
Balance strategic and operational indicators				
Enhance your ability to compete in the future				
Drive improvements in how work is performed				
Include internal and external benchmarks to judge performance				
				The score:

ANNEX D-
CLIENTS SATISFACTION SURVEY



**SYSTEME MANAGEMENT
QUALITE**

Date:
10/03/2021

Enquête de Satisfaction Client

FOR.CL.03.V01

Page : 60 / 83

NOM:

N° TELEPHONE:

ENTREPRISE:

ADRESSE EMAIL:

Informations générales

1. Nom du client	_____		
2. Depuis quand êtes-vous client chez CERAM DECOR ?	<input type="checkbox"/> Moins de 1 an	<input type="checkbox"/> De 1 à 2 ans	<input type="checkbox"/> Plus de 2 ans
3. Quel rang occupe CERAM DECOR parmi vos fournisseurs ?	<input type="checkbox"/> 1 ^{er}	<input type="checkbox"/> 2 ^{ème}	<input type="checkbox"/> 3 ^{ème}
4. Si 'Autre', Précisez			
5. Etes-vous satisfait de la prestation de CERAM DECOR en général ?	<input type="checkbox"/> Très satisfait	<input type="checkbox"/> Satisfait	<input type="checkbox"/> Insatisfait

Service Commercial

Quelles sont vos appréciations en ce qui concerne :

6. Notre accueil téléphonique et la réception au niveau de nos bureaux?	<input type="checkbox"/> Très satisfait	<input type="checkbox"/> Satisfait	<input type="checkbox"/> Insatisfait
7. La disponibilité de nos chargées commerciales? (Serviabilité)	<input type="checkbox"/> Très satisfait	<input type="checkbox"/> Satisfait	<input type="checkbox"/> Insatisfait
8. La disponibilité de nos commerciaux ?	<input type="checkbox"/> Très satisfait	<input type="checkbox"/> Satisfait	<input type="checkbox"/> Insatisfait
9. Le temps moyen de livraison de votre commande ?	<input type="checkbox"/> Très satisfait	<input type="checkbox"/> Satisfait	<input type="checkbox"/> Insatisfait
10. Le respect de livraisons annoncées par rapport à vos autres fournisseurs ?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3 <input type="checkbox"/> 4

Traitement des réclamations

Quel est le niveau de votre satisfaction par rapport à :

12. La prise en charge de vos réclamations ?	<input type="checkbox"/> Très satisfait	<input type="checkbox"/> Satisfait	<input type="checkbox"/> Insatisfait
13. Le délai de traitement de vos réclamations ?	<input type="checkbox"/> Rapide	<input type="checkbox"/> Appréciable	<input type="checkbox"/> Lent
14. Les solutions apportées à vos réclamations ?	<input type="checkbox"/> Très satisfait	<input type="checkbox"/> Satisfait	<input type="checkbox"/> Insatisfait

Gamme de produit

Quel est votre avis à propos de :

15. La diversité de notre gamme de produit ?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
16. La disponibilité de nos produits ?	<input type="checkbox"/> Très satisfait	<input type="checkbox"/> Satisfait	<input type="checkbox"/> Insatisfait	
17. La quantité servie des produits ?	<input type="checkbox"/> Très intéressante	<input type="checkbox"/> Intéressante	<input type="checkbox"/> Pas intéressante	
18. L'annonce des produits ?	<input type="checkbox"/> Parmi les 1 ^{er}	<input type="checkbox"/> Parmi les derniers	<input type="checkbox"/> Ni l'un ni l'autre	

19. Selon vous, quel produit peut compléter notre gamme ?	
---	--

Activités marketing

D'après vous :

20. Quelle opinion avez-vous des actions commerciales faites par CERAM DECOR ?	Très satisfait <input type="checkbox"/>	Satisfait <input type="checkbox"/>	Insatisfait <input type="checkbox"/>	
21. Comment classez-vous nos offres commerciales par rapport à la concurrence ?	1	2	3	4

Prestations de CERAM DECOR

22. Avez-vous noté une amélioration de la qualité de service par rapport à l'année précédente ?	Oui	Non	
23. Si « Oui » ou « Non », précisez sur quel plan ?			
24. Comparativement à vos autres fournisseurs, comment évaluez-vous la qualité des prestations de CERAM DECOR ? (1=meilleure 2 équivalente et 3=inférieure)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
25. Envisagez-vous de renforcer votre relation commerciale avec CERAM DECOR ?	Oui <input type="checkbox"/>	Non <input type="checkbox"/>	
26. Si "Non", pour quelle(s) raison(s) ?			
27. Quelles sont vos attentes de CERAM DECOR ? (Veuillez exprimer 03 besoins)			
28. Avez-vous des remarques particulières ?			

Chers clients,

Merci de nous avoir accordé un peu de votre précieux temps, nous espérons toujours être à la hauteur de vos besoins et attentes.

Nous vous prions de croire, Monsieur, à l'assurance de nos salutations distinguées.

ANNEX E-
ROW DATA: PRODUCTS AND
QUANTITY

Code article	Désignation	Quantité
CD00057	ELEGANCE DECO BEIGE 45*45 1ER CHOIX	67,10415
CD00060	ELEGANCE DECO GRIS 45*45 1ER CHOIX	80,015625
CD00074	PARQUET MARRON 45*45 1ER CHOIX	0,052075
CD00075	NEW ZALATOU 45*45 1ER CH	0,083325
CD00093	MARINA BEIGE 45*45 1ER CHOIX	0,75
CD00094	MARINA MARRON 45*45 1ER CH	0,75
CD00111	PLATINIUM BEIGE 15*60 1ER CH	0,834375
CD00112	PLATINIUM GRIS 15*60 1ER CH	0,0625
CD00114	PLATINIUM MARRON 15*60 1ER CH	0,35
CD00131	PRADA 30*60 1ER CHOIX	15,6597
CD00137	LIBERTE MIX 30X60 1ER CHOIX	1,142375
CD00144	PIEDRA MARRON 15X60 1ER CHOIX	1,784375
CD00145	IBIZA WHITE 30X60 1 ER CHOIX	26,8879
CD00152	DALIDA BROWN 30X60 1ER CHOIX	1
CD00153	DALIDA BROWN 45X45 1ER CHOIX	0,072925
CD00162	ALASKA MARRON 30X60 1ER CHOIX	0,25
CD00163	MONACO MIEL 15X60 1ER CHOIX	0,43125
CD00171	TROPICAL BEIGE 30X60 1ER CHOIX	0,916675
CD00172	TROPICAL MARRON 30X60 1ER CHOIX	0,097225
CD00173	TROPICAL GRIS/C 30X60 1ER CHOIX	6,23265
CD00174	TROPICAL GRIS/F 30X60 1ER CHOIX	6,322925
CD00175	FLORENCIA BEIGE 30X60 1ER CHOIX	2,75
CD00176	FLORENCIA MARRON 30X60 1ER CHOIX	2,75
CD00177	FLORENCIA GRIS/C 30X60 1ER CHOIX	0,364575
CD00178	FLORENCIA GRIS/F 30X60 1ER CHOIX	0,8507
CD00181	ATLAS GRIS/C 25X70 1ER CHOIX	5,90625
CD00182	ATLAS GRIS/F 25X70 1ER CHOIX	2
CD00184	CATALANO CREMA 30X60 1ER CHOIX	0,49305
CD00185	CATALANO MARRON 30X60 1ER CHOIX	0,114575
CD00189	ATHINA GRIS/C 25X70 1ER CHOIX	12,5
CD00190	ATHINA GRIS/F 25X70 1ER CHOIX	5,25
CD00193	MERIDIEN GRIS/C 25X70 1ER CHOIX	16,234325
CD00194	MERIDIEN GRIS/F 25X70 1ER CHOIX	8,9453
CD00195	ARABESQUE GRIS/F 30X60 1ER CHOIX	17,25
CD00196	ARABESQUE GRIS/C 30X60 1ER CHOIX	24,48265
CD00197	ARTE BEIGE 30X60 1ER CHOIX	24,875
CD00198	ARTE MARRON 30X60 1ER CHOIX	19,5
CD00202	TERRA LIGHT GREY 30X60 1ER CHOIX	1
CD00203	TERRA BEIGE 30X60 1ER CHOIX	0,25
CD00204	TERRA DARCK GREY 30X60 1ER CHOIX	0,25
CD00205	PETRA GRIS/F 25X70 1ER CHOIX	3,75
CD00211	CHARM CREMA 25X70 1ER CHOIX	46,28905
CD00212	CHARM BLEU 25X70 1ER CHOIX	0,60935
CD00223	METALIC LIGHT 50X50 1ER CHOIX	0,35765
CD00224	VECTORIA BEIGE 30X60 1ER CHOIX	30,111125
CD00225	VECTORIA BROWN 30X60 1ER CHOIX	13,7396

CD00230	CHARM NOIR 25X70 1ER CHOIX	7,25
CD00235	VECTORIA LIGHT GREY 50*50 1ERE CHOIX	0,25
CD00239	BLANCOS SILVER 50X50 1ER CHOIX	0,5
CD00241	SAHARA CREMA 25X70 1ER CHOIX	11,25
CD00242	SAHARA BEIGE 25X70 1ER CHOIX	8,7578
CD00246	CHARM CREMA 45X45 1ER CHOIX	53,234375
CD00247	OSCAR SILVER 25X70 1ER CHOIX	108,242175
CD00251	ONE BEIGE 25X70 1ER CHOIX	357,726475
CD00252	ONE BEIGE 45X45 1ER CHOIX	192,125
CD00255	DELUXE BEIGE 25X70 1ER CHOIX	72,093725
CD00256	DELUXE BROWN 25X70 1ER CHOIX	48,99605
CD00257	DELUXE GRIS 45X45 1ER CHOIX	64,58295
CD00258	ORIGINE CREMA 45X45 1ER CHOIX	69,458325
CD00259	ORIGINE MARRON 45X45 1ER CHOIX	72,302075
CD00260	DELUXE BEIGE 45X45 1ER CHOIX	34,4323
CD00261	DELUXE LIGHT GREY 25X70 1ER CHOIX	100,921825
CD00262	DELUXE DARK GREY 25X70 1ER CHOIX	54,050725
CD00263	ARTSTONE NATURAL 15X60 1ER CHOIX	0,0875
CD00265	PARQUET S GRIS 15X60 1ER CHOIX	1,25
CD00267	MONDO S WHITE 15X60 1ER CHOIX	0,13125
CD00268	MONDO S GRIS 15X60 1ER CHOIX	2,003125
CD00269	MONDO S BEIGE 15X60 1ER CHOIX	2,296875
CD00270	TRAVERTI BEIGE 25X70 1ER CHOIX	119,550725
CD00271	TRAVERTI BEIGE 45X45 CM 1ER CHOIX	96,630175
CD00277	DIOR MIX 15X60 1ER CHOIX	71,478125
CD00278	PRIVILEGE GRIS CLAIR 45X45 1ER CHOIX	3,0052
CD00280	PRIVILEGE GRIS FONCE 45X45CM 1 ^{ER} CHOIX	3,25
CD00281	DIOR BEIGE 15X60 1ER CHOIX	116,55625
CD00282	DIOR GRIS 15 X60 1ER CHOIX	0,15
CD00283	FOSHAN RED 45X45 1ER CHOIX	0,5
CD00284	FOSHAN WHITE 45X45 1ER CHOIX	1,25
CD00285	GIO CREMA 30X60 1ER CHOIX	73,8229
CD00286	GIO OCRE 30X60 1ER CHOIX	69,00345
CD00287	CLASS GRANITE 15X60 1ER CHOIX	0,040625
CD00292	SPECIAL WHITE 30X60 1ER CHOIX	57,34025
CD00293	SPECIAL WHITE 45X45CM 1ER CHOIX	106,71875
CD00294	DIOR WHITE 15X60 1ER HOIX	0,03125
CD00295	GIO WHITE 30X60 1ER CHOIX	82,011975
CD00296	GIO GREY 30X60 1ER CHOIX	81,436725
CD00297	LOGIC PERLA 25X80 1ER CHOIX	153,3867
CD00298	CAPITAL WHITE 25X80 1ER CHOIX	120,7109
CD00299	CAPITAL PARME 25X80 1ER CHOIX	103,7031
CD00300	METRO 80 WHITE 25X80 1ER CHOIX	177,531175
CD00301	DISCOVERY BEIGE 25X80 1ER CHOIX	1,082025
CD00302	DISCOVERY BROWN 25X80 1ER CHOIX	1,10155
CD00303	DIGITAL SOFT BEIGE 02 30X60 1ER CHOIX	8,135425
CD00304	DIGITAL SOFT BEIGE 01 30X60 1ER CHOIX	6,25
CD00305	LOGIC GRIS 25X80 1ER CHOIX	234,89835
CD00306	ONE GRIS 25X70 1ER CHOIX	240,902275
CD00307	MOSAIC WHITE 30X60 1ER CHOIX	134,052075
CD00309	ARTICO CREMA 25X80 1ER CHOIX	71,06245
CD00310	ARTICO BEIGE 25X80 1ER CHOIX	66,828075

CD00311	TRAVERTI GRIS 25X70 1ER CHOIX	84,8164
CD00312	ARTICO G/C 25X80 1ER CHOIX	52,554675
CD00313	ARTICO G/F 25X80 1ER CHOIX	49,527325
CD00314	LOGIC PERLA 45X45 1ER CHOIX	73,411225
CD00315	VECTORIA LIGHT GREY 45X45 1ER CHOIX	60,708325
CD00316	FOSSIL BEIGE 45X45 1ER CHOIX	87,828125
CD00317	FOSSIL GRIS 45X45 1ER CHOIX	64,03125
CD00318	COSTA BLANCO 25X25 1ER CHOIX	63,776025
CD00319	MADOX BEIGE 25X80 1ER CHOIX	4,5
CD00320	COSTA GRIS 25X25 1ER CHOIX	34,27605
D00288	CLASS GRIS 15X60 1ER CHOIX	59,2375
DEC01/B	TROPICAL DECOR	0
DEC02/G	TROPICAL DECOR	0
DEC03/B/01	FLORENCIA DECOR-01	0
DEC03/B/02	FLORENCIA DECOR-02	0
DEC04/G/01	FLORENCIA DECOR S1	0
DEC06/G/02	ATLAS DECOR -02	0
DEC07/ BG	CATALANO DECOR	0
DEC07/B	CATALANO DECOR	0
DEC10/G	ATHINA DECOR	0
DEC12/G	ARABESQUE DECOR	0
DEC13/BG	ARTE DECOR	0
DEC17/BL	CHARM MOZAIC	0
DEC18/BL	CHARM DECOR	0
DEC25/B	VECTORIA DECOR	0
DEC25/G	VECTORIA DECOR	0
DEC26/MM	CHARM DECOR MOSAIC BLACK	0
DEC26/NC	CHARM DECOR	0
DEC26/ND	CHARM DECOR	0
DEC30/M	SAHARA DECOR MOSAIC	0
DEC32	SAHARA MTF CUISINE 1 ERE CH	0
DEC33/M1	OSCAR MOZAIC KI 1ER CHOIX	0
DEC33/M2	OSCAR MOZAIC BT 1ER CHOIX	0
DEC35/M1	ONE DECOR M1 R 25X70 1ER CHOIX	0
DEC35/M2	ONE DECOR C M2 25X70 1ER CHOIX	0
DEC41/M1	DELUXE MOTIF M1 25X70 1ER CHOIX	0
DEC41/M2	DELUXE MOTIF M2 KI 25X70 1ER CHOIX	0
DEC43/M1	DELUXE MOTIF GRIS M1 25X70 1ER CHOIX	0
DEC43/M2	DELUXE MOTIF GRIS M2 KI 25X70 1ER CHOIX	0
DEC45/M1	MOTIF TRAVERTI M1 25X70 1ER CHOIX	0
DEC45/M2	MOTIF TRAVERTI M2 KI 25X70 1ER CHOIX	0
DEC47/M1	GIO DECOR M1 30X60 1ER CHOIX	0
DEC48/M1	LOGIC PERLA MOTIF M1 25X80 1ER CHOIX	0
DEC48/M2	LOGIC PERLA MOTIF M2 25X80 1ER CHOIX	0
DEC49	CAPITAL MOTIF 25X80 1ER CHOIX	0
DEC50/M1	METRO 80 DECOR BLACK 25X80 1ER CHOIX	0
DEC50/M2	METRO 80 DECOR GOLD 25X80 1ER CHOIX	0
DEC51	DISCOVERY MOTIF 25X80 1ER CHOIX	0
DEC52	DIGITAL SOFT DECOR 01 30X60 1ER CHOIX	0
DEC53	DIGITAL SOFT DECOR 02 30X60 1ER CHOIX	0
DEC54/M1	LOGIC GRIS MOTIF M1 25X80 1ER CHOIX	0
DEC54/M2	LOGIC GRIS MOTIF M2 25X80 1ER CHOIX	0

DEC55/M1	GIO DECOR M1G KI 1ER CHOIX	0
DEC55/M2	GIO DECOR M2G BT 1ER CHOIX	0
DEC56/M1	ONE GRIS DECOR M1 R 25X70 1ER CHOIX	0
DEC56/M2	ONE GRIS DECOR M2 C 25X70 1ER CHOIX	0
DEC57/M1	MOSAIC DECOR M1 KI 30X60 1ER CHOIX	0
DEC57/M2	MOSAIC DECOR M2 BT 30X60 1ER CHOIX	0
DEC58	ARTICO DECOR 25X80 1ER CHOIX	0
DEC59	TRAVERTI GRIS DECOR 25X70 1ER CHOIX	0
DEC60	ARTICO GRIS DECOR 25X80 1ER CHOIX	0
DEC61/M1	SEVEN GOLD KITCHEN 25X80 1ER CHOIX	0
DEC61/M2	SEVEN GOLD FLOWER 25X80 1ER CHOIX	0
DEC62	COSTA DECOR BLANCO 25X25 1ER CHOIX	21,210925
DEC63	COSTA DECOR GRIS 25X25 1ER CHOIX	16,5
Code article	Désignation	#VALEUR!
CD50057	ELEGANCE DECO BEIGE 45*45 2EME CH	4
CD50060	ELEGANCE DECO GRIS 45*45 2EME CHOIX	34
CD50103	EDEN BEIGE 45*45 2EME CHOIX	8,765625
CD50111	PLATINIUM BEIGE 15*60 2EME CHOIX	0,75
CD50114	PLATINIUM MARRON 15*60 2EME CHOIX	0,5125
CD50146	IBIZA WHITE 30X60 2 EME CHOIX	4,25
CD50172	TROPICAL GRIS/C 30X60 2EME CHOIX	2
CD50179	ATLAS MARRON 25X70 2EME CHOIX	4,28125
CD50180	ATLAS GRIS/ F 25X70 2EME CHOIX	17,5
CD50181	ATLAS GRIS/C 25X70 2EME CHOIX	0,5
CD50187	ATHINA MARRON 25X70 2EME CHOIX	0,75
CD50188	ATHINA GRIS/F 25X70 2EME CHOIX	7,25
CD50189	ATHINA GRIS/C 25X70 2EME CHOIX	7,5
CD50192	ARABESQUE GRIS/C 30X60 2EME CHOIX	5,270825
CD50193	ARABESQUE GRIS/F 30X60 2EME CHOIX	1,75
CD50194	MERIDIEN GRIS/F 25X70 2EME CHOIX	4,5
CD50195	MERIDIEN GRIS/C 25X70 2EME CHOIX	3,75
CD50197	ARTE BEIGE 30X60 2EME CHOIX	4,75
CD50198	ARTE MARRON 30X60 2EME CHOIX	4,5
CD50200	PETRA MARRON 25X70 2EME CHOIX	1,546875
CD50207	DREAM BEIGE 25X70 2EME CHOIX	2,25
CD50208	DREAM MARRON 25X70 2EME CHOIX	2,25
CD50213	CHARM CREMA 25X70 2EME CHOIX	0,5
CD50217	CRAFT GRIS/C 25X70 2EME CHOIX	2,25
CD50224	SAFARI BROWN 50X50 2EME CHOIX	1,69445
CD50225	OMEGA NOIR 50X50 2EME CHOIX	0,5
CD50226	VECTORIA BEIGE 30X60 2EME CHOIX	4,75
CD50227	VECTORIA BROWN 30X60 2EME CHOIX	0,25
CD50230	VECTORIA LIGHT GREY 2EME CHOIX	0,25
CD50242	SAHARA CREMA 25X70 2EME CHOIX	2,25
CD50246	ONICE GRIS 50X50 2 EME CHOIS	0,09375
CD50247	CHARM CREMA 45X45 2EME CHOIX	19,90625
CD50248	OSCAR SILVER 25X70 2EME CHOIX	56,3203
CD50250	ONE BEIGE 25X70 2EME CHOIX	39,093725
CD50252	ONE BEIGE 45X45 2EME CHOIX	69,53125
CD50254	CHARM BROWN 25X70 2EME CHOIX	0,5
CD50255	DELUXE BEIGE 25X70 2EME CHOIX	16,054675
CD50256	DELUXE BROWN 25X70 2EME CHOIX	13,898425

CD50257	DELUXE GRIS 45X45 2EME CHOIX	40,0677
CD50258	ORIGINE CREMA 45X45 2EME CHOIX	27,479175
CD50259	ORIGINE MARRON 45X45 2EME CHOIX	28,203125
CD50260	DELUXE BEIGE 45X45 2EME CHOIX	17,625
CD50261	DELUXE LIGHT GREY 25X70 2EME CHOIX	21,25
CD50262	DELUXE DARK GREY 25X70 2EME CHOIX	19,02735
CD50267	MONDO S WHITE 15X60 CM 2EME CHOIX	3,29375
CD50270	TRAVERTI BEIGE 25X70 2EME CHOIX	21,742175
CD50271	TRAVERTI BEIGE 45X45 2EME CHOIX	40,484375
CD50277	DIOR MIX 15X60 2EME CHOIX	29,2
CD50280	PRIVILEGE GRIS CLAIR 45X45 CM 2EME CHOIX	22,729175
CD50281	DIOR BEIGE 15X60 2CH CHOIX	25,2375
CD50284	FOSHAN WHITE 45X45 2EME CHOIX	4,5
CD50285	GIO CREMA 30X60 2EME CHOIX	18,503475
CD50286	GIO OCRE 30X60 2EME CHOIX	13,260425
CD50288	CLASS GRIS 15X60 2EME CHOIX	20,65
CD50292	SPECIAL WHITE 30X60 2EME CHOIX	9,277775
CD50293	SPECIAL WHITE 45X45CM 2EME CHOIX	31,447925
CD50295	GIO WHITE 30X60 2EME CHOIX	19,75695
CD50296	GIO GREY 30X60 2EME CHOIX	20,94095
CD50297	LOGIC PERLA 25X80 2EME CHOIX	20,5
CD50298	CAPITAL WHITE 25X80 2EME CHOIX	13,25
CD50299	CAPITAL PARME 25X80 2EME CHOIX	13
CD50300	METRO 80 WHITE 25X80 2EME CHOIX	31
CD50301	DISCOVERY BEIGE 25X80 2EME CHOIX	16,75
CD50302	DISCOVERY BROWN 25X80 2EME CHOIX	9,75
CD50303	DIGITAL SOFT BEIGE 02 30X60 2EME CHOIX	3,5
CD50304	DIGITAL SOFT BEIGE 01 30X60 2EME CHOIX	3,5
CD50305	LOGIC GRIS 25X80 2EME CHOIX	19,867175
CD50306	ONE GRIS 25X70 2EME CHOIX	38,367175
CD50307	MOSAIC WHITE 30X60 2EME CHOIX	28,364575
CD50309	ARTICO CREMA 25X80 2EME CHOIX	8,75
CD50310	ARTICO BEIGE 25X80 2EME CHOIX	8,75
CD50311	TRAVERTI GRIS 25X70 2EME CHOIX	10,550775
CD50312	ARTICO G/C 25X80 2EME CHOIX	2,25
CD50313	ARTICO G/F 25X80 2EME CHOIX	2,25
CD50314	LOGIC PERLA 45X45 2EME CHOIX	40,395825
CD50315	VECTORIA LIGHT GREY 45X45 2EME CHOIX	16
CD50316	FOSSIL BEIGE 45X45 2EME CHOIX	19,5
CD50317	FOSSIL GRIS 45X45 2EME CHOIX	16,859375
DEC09/B2	ATHINA DECOR 2EME	0
DEC10/G2	ATHINA DECOR 2EME	0
DEC11/ G2	MERIDIEN DECOR 2EME	0
DEC12/ G2	ARABESQUE DECOR 2EME CHOIX	0
DEC13 /BG2	ARTE DECOR 2EME	0
DEC14 /G2	PETRA DECOR 2EME	0
DEC14/ B2	PETRA DECOR 2EME	0
DEC17/ BL02	CHARM MOSAIC 2EME CHOIX	0
DEC23/G02	CRAFT DECOR 2EME	0
DEC27/MM	CHARM MOZAIC DECOR 2EME CHOIX	0
DEC31/M	SAHARA DECOR MOSAIC 2EME	0
DEC34/M1 2CH	OSCAR MOZAIC KI 2EME CHOIX	0

DEC34/M2 2CH	OSCAR MOZAIC BT 2EME CHOIX	0
DEC36/2M1	ONE DECOR M1 25X70 2EME CHOIX	0
DEC36/2M2	ONE DECOR M2 25X70 2EME CHOIX	0
DEC40/BRK2	CHARM MTF BR KI 25X70 2EME CHOIX	0
DEC42/M1	DELUXE MOTIF M1 25X70 2EME CHOIX	0
DEC42/M2	DELUXE MOTIF M2 KI 25X70 2EME CHOIX	0
DEC44/M1G	DELUXE MOTIF GRIS M1 25X70 2EME CHOIX	0
DEC44/M2G	DELUXE MOTIF GRIS M2K 25X70 2EME CHOIX	0
DEC46/2M1	MOTIF TRAVERTI M1 25X70 2EME CHOIX	0
DEC46/2M2	MOTIF TRAVERTI M2 KI 25X70 2EME CHOIX	0
DEC47/2M1	GIO DECOR M1 30X60 2EME CHOIX	0
DEC48/2M1	LOGIC PERLA MOTIF M1 25X80 2EME CHOIX	0
DEC48/2M2	LOGIC PERLA MOTIF M2 25X80 2EME CHOIX	0
DEC49/2	CAPITAL MOTIF 25X80 2EME CHOIX	0
DEC50/2M1	METRO 80 DECOR BLACK 25X80 2EME CHOIX	0
DEC50/2M2	METRO 80 DECOR GOLD 25X80 2EME CHOIX	0
DEC51/2	DISCOVERY MOTIF 25X80 2EME CHOIX	0
DEC52/2	DIGITAL SOFT DECOR 01 30X60 2EME CHOIX	0
DEC53/2	DIGITAL SOFT DECOR 02 30X60 2EME CHOIX	0
DEC54/2M1	LOGIC GRIS MOTIF M1 25X80 2EME CHOIX	0
DEC54/2M2	LOGIC GRIS MOTIF M2 25X80 2EME CHOIX	0
DEC55/2M1	GIO DECOR M1G KI 2EME CHOIX	0
DEC55/2M2	GIO DECOR M2G BT 2EME CHOIX	0
DEC56/2M1	ONE GRIS DECOR M1 R 25X70 2EME CHOIX	0
DEC56/2M2	ONE GRIS DECOR M2 C 25X70 2EME CHOIX	0
DEC57/2M1	MOSAIC DECOR M1 KI 30X60 2EME CHOIX	216
DEC57/2M2	MOSAIC DECOR M2 BT 30X60 2EME CHOIX	270
DEC58/2	ARTICO DECOR 25X80 2EME CHOIX	0
DEC59/2	TRAVERTI GRIS DECOR 25X70 2EME CHOIX	0
DEC60/2	ARTICO GRIS DECOR 25X80 2EME CHOIX	0

**ANNEX F –
PIVOT TABLES**

moi	April	May	June	total
Sales revenue	105,560,483.10 DA	116,002,507.30 DA	113,911,683.20 DA	335,474,673.60 DA
%	31.47%	34.58%	33.96%	100.00%

PIVOT Table of Sales by region in April

REGION	EAST	CENTER	WEST /SOUTH	total
VENTE	40,215,253.71 DA	52,890,922.79 DA	12,454,306.56 DA	105,560,483.06 DA
VOLUME DES VENTES	38.10%	50.10%	11.80%	100.00%

PIVOT Table of Sales by region in May

REGION	EAST	CENTER	WEST /SOUTH	total
Sales by Region	48,737,590.26 DA	59,192,483.15 DA	8,072,433.84 DA	116,002,507.25 DA
%	42.01%	51.03%	6.96%	100.00%

PIVOT Table of Sales by region in June

REGION	EAST	CENTER	WEST /SOUTH	total
sales by Region	47,031,098.32 DA	51,820,384.43 DA	15,060,200.50 DA	113,911,683.25 DA
%	40.54%	44.67%	12.98%	98.20%

PIVOT Table of Customer churn rate

FORMULA	April	May	June
Exisiting Customers	33	33	29
lost Customers	6	3	5
New Customers	3	1	1
Churn rate	8.30%	5%	12%

PIVOT Table of Top 10 Hot products for April

RANK	NAME OF PRODUCTS	JANTIY
1	ONE BEIGE 25X70 1ER CHOIX	61.25
2	METRO 80 WHITE 25X80 1ER CHOIX	63.5
3	DELUXE LIGHT GREY 25X70 1ER CHOIX	65.0486
4	GIO WHITE 30X60 1ER CHOIX	67.145825
5	GIO GREY 30X60 1ER CHOIX	73.40625
6	LOGIC GRIS 25X80 1ER CHOIX	75.936725
7	GIO CREMA 30X60 1ER CHOIX	76.761975
8	GIO OCRE 30X60 1ER CHOIX	90.5703
9	CAPITAL WHITE 25X80 1ER CHOIX	128.656225
10	ONE GRIS 25X70 1ER CHOIX	186.7109

RANK	NAMEOF PRODUCTS	QUANTITY
1	MOSAIC DECOR M2 BT 30X60 2EME CHOIX	28
2	MOSAIC DECOR M1 KI 30X60 2EME CHOIX	35
3	MOSAIC WHITE 30X60 1ER CHOIX	35.5
4	LOGIC GRIS 25X80 1ER CHOIX	36
5	TRAVERTI BEIGE 25X70 1ER CHOIX	39
6	OSCAR SILVER 25X70 1ER CHOIX	44
7	ONE GRIS 25X70 1ER CHOIX	50
8	TRAVERTI BEIGE 45X45 CM 1ER CHOIX	51
9	DIOR BEIGE 15X60 1ER CHOIX	86
10	DIOR MIX 15X60 1ER CHOIX	100

**PIVOT Table of Top 10 Hot products for
June**

RANK	NAME OF PRODUCTS	QUANTIT
1	ONE BEIGE 45X45 1ER CHOIX	768.5
2	LOGIC PERLA 25X80 1ER CHOIX	466.7812
3	SPECIAL WHITE 45X45CM 1ER CHOIX	424.625
4	ONE BEIGE 25X70 1ER CHOIX	368.3125
5	TRAVERTI GRIS 25X70 1ER CHOIX	287.1562
6	ARTICO CREMA 25X80 1ER CHOIX	282.8748
7	ELEGANCE DECO GRIS 45*45 1ER CHOIX	275
8	ONE BEIGE 45X45 2EME CHOIX	273.625
9	DELUXE BEIGE 25X70 1ER CHOIX	273.3124
10	ARTICO BEIGE 25X80 1ER CHOIX	265.0936