Lisbon School of Economics & Management
Universidade de Lisboa

MASTERS IN MANAGEMENT (MIM)

MASTERS FINAL WORK

INTERNSHIP REPORT

CLIENT ENGAGEMENT OF A SAAS SOLUTION: GFOUNDRY CASE

DAVID MIGUEL OLIVEIRA GOMES

MARCH - 2022

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ABSTRACT

The current Report follows the professional experience at GFoundry - a leading digital solution for Employee Engagement with Gamification.

The role of the International Business Developer is, on a first level, to manage the Domestic Market and support the international expansion of the organisation.

On a secondary level, and directly related to the Research Problem from the current report, the goal is to create a Data Visualization tool that allows the GFoundry team to quantify the current level of engagement from its clients. The intention is for this tool to have a direct impact on Customer Success Management, while understanding the main trends from the Client's Engagement.

Following this challenge, the Literature Review focuses on gamification and its application in relevant areas, employee engagement and its impact on organisations, and finally (and most importantly) in Customer Success Management and the importance of those processes for SaaS solutions.

The methodology was developed in order to create an Engagement Matrix that allows the GFoundry team to understand, in real time, what are the current levels of engagement of the clients with the digital solution they have implemented in their internal structures.

The result, deployed to Partners and Clients in Google Sheets, co-relates the usage of the platform from the employees (through their visits to the frontend) with the usage of the Backoffice (where all the information available in the frontend is managed). This co-relation provides a quantitative score that allows to position the companies in a Matrix - the Engagement Matrix.

The tool has a significant impact in the long-term sustainability of the company, since the information provided by the tool allows to understand not only how the clients are, at the moment, engaged with the platform, but also allows to understand historical trends that might indicate positive or negative changes in the way clients are using the platform. With this information, the Business Development Team can efficiently manage clients and guarantee their licenses' renewal.

Keywords: Digital Solution, SaaS, Employee Engagement, Gamification, Customer Success Management, Data Visualization

ABBREVIATIONS

SaaS: Software as a Service

HR: Human Resources

API: Application Programming Interface

CEO: Chief Executive Officer

CTO: Chief Technology Officer

IaaS: Infrastructure as a Service

PaaS: Platform as a Service

CSM: Customer Success Management

CV: Curriculum Vitae

KPI: Key Performance Indicator

OKR: Objectives and Key Results

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INTRODUCTION

By the end of the Academic Year of the Master's Degree in Management at ISEG, I was given the opportunity to join GFoundry as International Business Developer, starting my functions on the 1st of July of 2021.

GFoundry is a SaaS solution for Employee Engagement, using its powerful Gamification Engine to boost the performance of employees. It is a solution available both in Web and App (iOS and Android) version, with 12 Modules that can impact all the phases from the Talent Management Cycle, going from Attraction and Recruitment of Employees, passing through their Onboarding and Development, until their Offboarding of the company. GFoundry's Business Model is indirect, meaning that the platform is always implemented with a Partner, which has the responsibility to support the client in the implementation and follow-up throughout the project, representing an important role for the success of every project. Some examples of their services during the implementation phase are the development of Internal Communication Plans, Gamification Design, Strategic Planning, among other examples.

With the digitization of HR processes, along with a worldwide pandemic, GFoundry has become a crucial solution for companies that aim to reach and engage their employees in an easier and efficient way through a digital tool, along with providing them a better experience through an app where they can connect with their company and its contents, but also be rewarded for their actions and interactions within the platform. Nowadays, around 56% of companies worldwide have restructured their human resources program to bring digital technology and mobile phones, and 51% of companies have already implemented digital technology in the organisation (Varadaraj & Al Wadi, 2021).

Especially in the past 3 years, companies have been collaborating with cloud-based systems to transition their processes into the digital environment, not only easing the way to reach people, but also taking advantage of the power of analytics from this type of solutions.

To support the continuous growth in the structure, but also to support the expansion strategy defined by the Executive Board for the next years, GFoundry decided to recruit an additional element to the Business Development team: an International Business Developer. The International Business Developer has 3 main roles under its responsibility.

One of them is to support the commercial management in Portugal, by being in contact with both Clients and Partners, both new and current ones. This implies meeting with them frequently, as well as supporting the implementation of projects throughout its critical period of setup.

The second orientation is to expand to International Markets. The expansion is done not only through Potential Clients, or current Clients in Portugal that aim to expand the platform to other regions but is also done through the acquisition of new local partners in the regions that are part of GFoundry's Strategy of Expansion, mainly in Europe.

Lastly, and due to the knowledge acquired in the Major in Data Analytics for Business, there is an additional challenge in the role of the International Business Developer – to create a data visualization tool that indicates what are the levels of Engagement from GFoundry Clients.

The current report is focused on the development of the Clients' Engagement tool, as it is of extreme relevance for the company. Being a digital platform for Employee Engagement, it is important to understand in which ways are the clients interacting with the digital solution, which indicates their level of engagement with the platform itself.

On the company's side, this study has an impact on the customer success management procedures, as it is possible to understand, in real-time, the engagement levels of clients through their usage of the platform. Additionally, the tool allows to understand behaviours and anticipate any decreases, both in User's visits and Backoffice usage. Through a simple and intuitive tool, the management team has better access to information about the current success of the projects running.

Being a SaaS solution, with a product that has a yearly licensing, it is important to manage clients' satisfaction, in order to make sure they renew the licenses, guaranteeing the long-term profitability of the company.

On an Academic perspective, this work might have an impact on the increased knowledge and research on Data Visualization tools for Customer Success Management. Even though every company is different, and might have different types of data, it is always important to make use of the data available and use it for the strategic management of clients.

CHAPTER 1 – OBJECTIVES AND RESEARCH PROBLEM

1.1. Sector

GFoundry is a SaaS solution, Cloud-based, that aims to support clients in the Engagement of their Employees. With a platform available in both Web and App (iOS and Android) interfaces, it is possible to build a stronger connection with employees, having different dynamics that allows the company to engage their target audience.

The company is part of the SaaS Business Sector, more specifically in the Human Resources solutions.

A press release from Gartner showed that worldwide end-user spending on cloud services is forecast to grow 23.1% in 2021, to a total of $332.3 billion, compared to $270 billion in 2020 (Gartner, 2021). This demonstrates the increasing interest and investment in Cloud Services, which are easier to deploy and have better cost-saving efficiency. Since the company does not have ownership of the platform, they only have to pay for licensing fees, not having any responsibility over the costs of maintaining the IT structure behind.

Considering the SaaS solutions directly related to Human Resources Management, they register a growing trend, aligned with general SaaS solutions. In fact, by 2023 it is estimated that 60% of large companies will have invested in a solution for Human Capital and Talent Management (Gartner, 2020). The same report provides an interesting division of the Cloud Human Capital Management Solutions Market, dividing it by their main objective in the company: HR Administrative Functions, HR Service Management, Talent Management Applications and Workforce Management.

GFoundry is inserted in the Talent Management Applications, since its aim is to provide support on the engagement of the Employees, while developing and supporting critical Talent Management processes and routines, such as Performance Evaluation, Feedback, Training, Objectives Management, among other examples.

The Talent Management Applications market is very competitive, with great players taking steps towards better, and more efficient, ways of innovating Talent Management processes.

One of the examples is SAP Success Factors, which is a key player when it comes to providing better Employee Experiences. In fact, SAP communicates their product as a Human Experience Management software, providing better experiences and putting people "in the heart of everything they do" (SAP, 2021). Success Factors went through a merging process with SAP in 2011, maintaining its original name since the beginning. Being part of the SAP umbrella, the company acquires a strong reputation by being under a solution that is known worldwide for their efficiency and holistic view over a company's processes. Their headquarters is located in San Francisco, California.

Their solution is divided in 4 main areas: Employee Experience Management, Core HR and Payroll, Talent Management, and HR Analytics and Workforce Planning.

The Employee Experience Management product is mostly related with Feedback procedures, benefits management, among other examples, while Talent Management focuses on Performance, Onboarding and Recruiting. The Core HR and Payroll are related with regular HR administrative processes, such as Payroll, Document Management, Absence management. Finally, HR Analytics

and Workforce Planning represents an important part of the product, especially when Analytics and Business Intelligence is an area of interest for most companies since it has a strong impact on decision-making.

In 2022, SAP announced that Success Factors had reached 12,000 clients worldwide, representing 191 million users in more than 200 countries.

Another example of a competitor in Talent Management solutions market is Workday. The company has its headquarters located in the United States of America, founded in 2005 and launched to the market in 2006, being a solution that includes not only HR processes but also Financial Management and Enterprise Resource Planning solutions.

By 2016, Workday announced its first-time achieving revenues over 1 billion US dollars. Over their history, they have acquired many companies that strengthened their knowledge in core areas, such as Employee Engagement, HR Analytics and Workforce Planning.

Lastly, another competitor is Lattice, which is a software also focused on Employee Experience and Engagement. While SuccessFactors and Workday are much more focused on the HR processes, and tend to not invest in Users' experience, Lattice is more focused on the experience of the employees that use the platform for their relevant HR processes.

The platform provides tools for Objectives Management, Training, Performance and Growth Plans, improving the communication between the company and the employee. It also has a strong Analytics side, which provides great overviews to the HR Managers when it comes to the management of the employees and their motivation.

The company invests some of their efforts in making publicly available content for HR managers, such as Articles, Interviews, E-books, Webinars and Templates, which represents an interesting investment in Content creation for their target audiences.

1.2. GFoundry

The Vision and Mission of a company defines the purpose of its existence. By defining a Vision, it is possible to understand what the main goal is. The definition of a Mission allows to understand how it is possible to achieve the Vision.

GFoundry's Vision is:

"To be a dominant player in Digital Engagement, offering an amazing user experience that generates real engagement"

This represents an ambition to be among the best HR Solutions as a Service to contribute to the engagement of a targeted audience. Through a Digital platform, it is possible to provide dynamic and engaging experiences from everywhere.

GFoundry's Mission is:

"We aim to help companies communicate in the best and most innovative way using the best in mobile, gamification and social technology. We intend to change "have to do" behaviours into "want to do" behaviours, improving service performance and engagement in a meaningful - and measurable - way"

The statement provides an insight on how GFoundry aims to support its clients on the communication with their targets, through a digital tool, influencing the behaviours from the audience reached.

On the contrary of solutions such as SuccessFactors and Workday, that are much more process-oriented, GFoundry is an Employee-Centric solution, built and designed to provide dynamic and engaging experiences to employees, using its gamification engine to boost their performance.

The company was founded around 2014, under an investigation project related with Gamification in Learning environments. Over the last few years, and especially during the pandemic period, the company has registered continuous and sustained growth, both in revenues and in clients. Until today, new areas and new features were developed in the platform, contributing to the final product that is available today to its clients.

As a SaaS company, the product is sold through a yearly licensing. The cost is communicated and presented to the client by a cost per user, per month, in order to have an overview of the actual investment per individual. With the licensing, the client has the right to use the platform, with a specific Backoffice and frontend application to use.

The Backoffice is the control panel where HR managers and other selected people can manage the information available on the platform. The frontend is the interface that employees have access to, either via Web or Mobile Application.

Being a multi-tenant software, the same code is used for multiple clients. Through the same mobile app (available in the iOS store and Play Store), multiple clients can access their different containers in a simple way.

Additionally, there is a Service Level Agreement through a Technical Support package available to clients. This package includes all the support given by the Tech Team, in order to

support the clients in their technical issues, such as big amounts of users to be moved or deleted or provide assistance in generating a report that does not exist yet.

The software is sold in 3 Licensing plans according to the Modules that the client has available. (See Appendices 1 for Modules Description).

The BASE Plan includes the Learn and Market Modules. The PLUS Plan includes the Learn, Market, Comparisons, Machine Gaming, Recognition, Goals, Innovation, Feedback, Contributions, Tasks, and Engagement Thermometer Modules. Finally, the PREMIUM Plan includes all the Modules from the PLUS Plan, also including the Evaluation & Careers Module.

The plans are divided according to the type of challenges from the client. Even though the product is divided into modules, the Sales team avoids selling a list of modules, but instead focuses on providing a holistic solution for the Talent Management challenges that companies face, such as Onboarding, Recruitment, Innovation Management, Performance & Potential Evaluation, among other examples.

The BASE plan is indicated for companies that face challenges related with Training. In some of the cases, companies start with the BASE plan, and expand the scope of the projects over time to other licensing plans.

The PLUS plan is indicated for companies that have some challenges such as Feedback, Recognition, Training, Onboarding, among other examples, which can be tackled with a more complete solution.

Finally, the PREMIUM plan is for companies that aim to have and use the full potential of the platform. The Evaluation & Careers Modules is purposely only available on the PREMIUM plan since the module integrates with the rest of the experience of the platform. For example, when an employee is doing their Individual Development Plan, they can choose content that is available in the Learn Module to include in their Plan for the next evaluation cycle.

Apart from the Modules, all the Licensing plans include some base features from the platform, such as the gamification elements, internal communication tools, among other examples.

The client has access to other type of technical services provided in order to have a better experience, such as the Single Sign-On Authentication and APIs to other softwares used in the company.

Regarding the selling process, the Business Model is indirect, which means that the software is always sold to the clients through a Partner.

The Partners are organisations specialized in Human Resources, Employee Engagement, Internal Communication, Corporate Communication and/or People Analytics. The expertise of the Partners is used to support the client in the implementation and follow-up of the project - an effort already accounted in the Licensing prices.

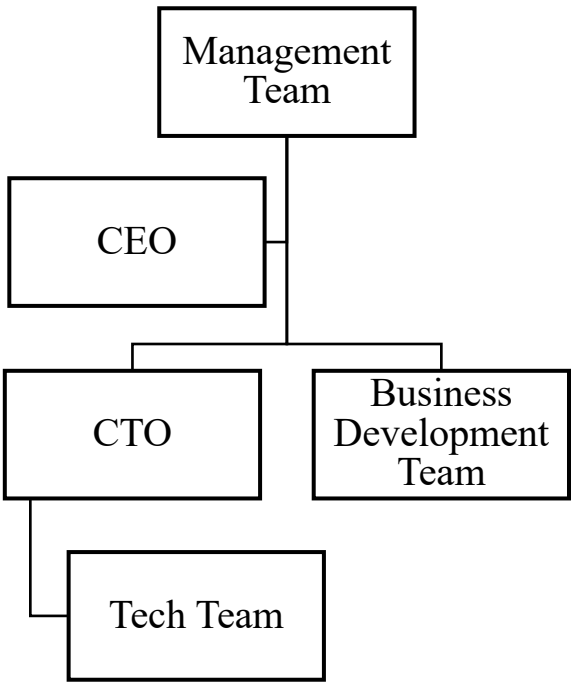
This business model is much appreciated by the clients, which can count on an experienced view on how to deal with the implementation of a new technology in the organisation, allowing them to not invest so much time in learning on how to manage the platform. It also allows the clients to not having to invest large amounts of time in planning and understanding how to implement such new structure internally.

The support of the Partner is crucial during the setup, but it is also a support that is continuous throughout the licensing period, and across the years that the projects are renewed. In every licensing fee, there is an amount that is delivered to the partner and is converted to services provided.

The GFoundry Team is divided between Lisboa and Matosinhos. In Lisboa, there are two people directly connected to Business Development, while in Matosinhos is where the Tech Team is located. The Management Team does not have full-time positions in any of the locations, being present in key roles and meetings from the organisation whenever is needed.

The Organisational Chart is composed by the following elements:

Figure 1 - GFoundry's Organisational Chart



Source: Self-Elaboration

The Management Team is composed of 7 Partners, all of them with wide experience in Human Resources Management, Technology and Employee Engagement. The Management Team has regular meetings with the CEO to understand the current situation of the business and define the strategic guidelines for the upcoming months.

The CEO is the responsible for overseeing the work from both the Tech Team and the Business Development Team.

The Tech Team is composed by the CTO, along with 3 other members of the team. The Tech Team is focused on the product development, testing and quality assurance of the platform. They are also responsible for Customer Support in technical issues.

The Business Development Team is composed by the International Business Developer and the CEO, whom both assure the relationship with Prospects, Clients and Partners. The team is also responsible to operationalize the Sales Strategy from the company.

1.3. Role

The role in GFoundry is in the Business Development Team, as International Business Developer. The role has 3 main functions related to the Business Development of the Organisation.

The first one is related with the management of Prospects, Clients, and Partners from the Domestic Market (Portugal). This implies managing the relationship with the stakeholders, scheduling follow-up calls, align commercial strategies with the Partners, among other related tasks.

The second one is related with the International Expansion. Along with the supervision of the CEO, it is duty to define the strategy for International Expansion, focusing on expanding the Partner's Network. Since the Business Model is indirect, having always a partner associated with a project, local Partners are needed to support the projects that might come ahead in those specific locations.

The third one is directly related with Customer Success Management. Due to specific knowledge in Data Analytics, the challenge is to create a Data Visualization tool that allows the GFoundry team to understand what the level of Engagement of the Clients with the platform is. The engagement level should not only be given by the usage coming from the users (which are, mainly, employees from the organisation), but should also come from interactions from the Backoffice managers and Partners that are associated with the project.

These interactions represent the overall usage of the platform, which is supposed to be high in order to make the most out of the solution.

1.4. Research Problem

The Research Problem derived from the role is related with the development of the Data Visualization Tool that allows to understand the current engagement of Clients through their usage of the platform.

By understanding how clients use a digital solution, it is possible to understand not only how they are using the platform at the moment, but also to observe some trends over time. In some cases, abnormal increases or decreases might provide important indicators for who is responsible for Customer Success Management in companies that provide SaaS solutions for Talent Management.

In the case of GFoundry, there is a common agreement between all the stakeholders (both the Team and Partners) that if the platform is not fed with new content and new dynamics regularly, the users will lose the interest and not access it. At the end of the day, if the users are not interacting, the platform does not serve its purpose anymore, and the project will not make sense to the client anymore. Thus, it might fall into the cancellation of the licensing, which is something not desirable for the long-term sustainability of the company.

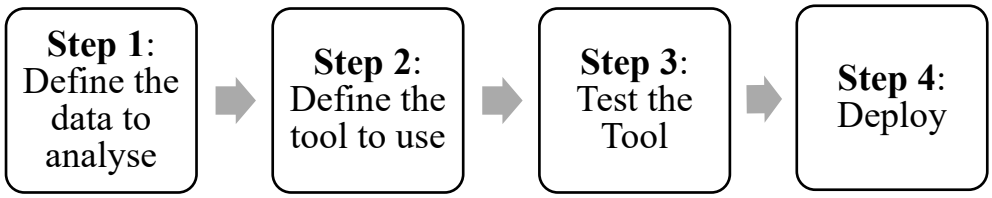
The Data Visualization Tool relates the Engagement with the platform by the users (the employees), with the Engagement with the platform by the Backoffice Managers (the client and/or the Partner). The reasoning behind the correlation of the 2 variables is related to the two stakeholders who have an impact on how the platform is being used internally. First of all, the end-users need to access the platform in order for it to be used and, consequently, much needed internally. Second of all, the Backoffice Managers need to interact with the tool by creating new content in order for the end-users to have an organic interest in accessing it more often.

The report will explore the best methodology to map the engagement of the clients while providing a visual perspective on the trends over time.

1.5. Project Timeline

Regarding the timeline for the project, there are 4 important steps:

Figure 4 - Project Roadmap



Source: Self-Elaboration

The first step is related with the definition of the data to analyse. It is extremely important to understand which data is available to use, and how it can be used to provide information to the variables. This step took place in October of 2021.

The second step is crucial for the success of the project - it is necessary to define which tool (or tools) to be used in order to transform raw data into a Data Visualization tool that compiles

information about the Client's Engagement. The chosen tool is supposed to make the process automatic and provide filters for better further analysis. The decision was made between November of 2021 and January of 2022, while different tools and platforms were studied in order to make a better decision.

The third step is to test the tool. This is the step where it is important to involve the Partners and Clients, in order to define the variables to analyse, and its values. This step started in December of 2021, with an Interview to one of the Partners.

The last step is to deploy the tool. Not only it should be used by the Management Team but should also be a tool for Partners to understand their own Client's Engagement, and to work closely with them to create actions when needed. This step took place in March of 2022 and will have a continuous follow-up by the Business Development Team.

CHAPTER 2 - LITERATURE REVIEW

2.1. Gamification

Gamification, as a concept, was born around 2002, first mentioned by Nick Pelling, a game designer who is known for being in charge, at the time, of developing a game interface for ATM and vending machines.

Nick describes the ugly word "gamification" as the application of game accelerated interfaces to make electronic transactions more "enjoyable and faster" (Pelling, 2011). Over the time, authors like Nick Pelling focused more on gamified elements applied to mobile electronic devices, while other authors tend to relate gamification methods in real contexts, such as pedagogical environments.

Even though the concept is constantly expanding (Németh, 2015), there has been common agreement among authors about the basics that underline the pillars of the concept.

As stated by Deterding et al. (2011), gamification can be defined as "the use of game design elements in non-game contexts" (Deterding, Dixon , Khaled , & Nacke, 2011). In the same paper, Deterding et al. (2011) clarify that game is different than playfulness, which differ in the elements present in games (such as badges, levels, leader boards, among others). It is also stated that "non-game contexts" is a socially constructed concept, since game elements can be applied to a lot of contexts in daily routines.

Most of the studies published focusing on gamification are commonly related with Business Management and Marketing, since it has been proven to be a powerful trend in these areas (Csaba, Damsa, & Kristóf, 2017).

Nowadays, the gamification market has registered a sustained increase over the years, growing from 4.91 billion U.S. dollars in 2016 to 11.94 U.S. dollars in 2021, which represents an increase of approximately 243% over a period of 5 years (Statista, 2021).

2.2. Gamification applied to Learning

Most of the papers relating Gamification and Learning processes state that there are not many relevant studies that analyse in depth the true impacts of using such methods for better learning experiences. Although, authors also state that the existing studies give relevant insights on how it is expected to impact learning methods in the future (Smiderle, Rigo, Marques, Peçanha de Miranda Coelho , & Jaques, 2020).

Landers et al. (2017) try to provide a theoretical basis around Gamified Learning and how game elements, isolated or in combinations, can impact learning positively. One of the important conclusions from Lander's research is that the use of leader boards influenced the total amount of time that people were putting into the learning process. According to previous authors, the time-on-task is critically important for the learning process itself (Brown, 2001).

Additionally, Wang et al. (2021) presented findings that proves the positive correlation between the application of gamification in corporate training while increasing participants' interest and participation. Nevertheless, the authors underlined that gamification methods are sometimes ambiguous, and the incorrect use of game elements can distort some of these results depending on the context of its usage (Wang, Hsu, & Fang, 2021).

2.3. Gamification applied to Platforms

According to Herzig et al. (2014), gamification requires considerable effort in the design phase, in order to create a joyful experience to the player. As soon as the design is finished, the step afterwards is focused on inserting the game design into a platform. This platform can be a Customer Relationship Management software, Supply Chain Software, Enterprise Resource Planning or Talent Management platform.

A report by Gartner (2011) predicted that by 2014, 70% of medium and large companies would have implemented at least one digital solution with gamification in their internal structure.

This is based on the trend identified back then that gamification would be a major solution to engage the new generations (such as Generation Z) to their learning plans and even on their jobs (Fong, 2020).

One example of a best practice using gamification comes from Deloitte, where the Learning & Development team created a game around a specific context (a zombie apocalypse), where the "Chosen Analyst" had to undergo a series of trainings in order to find a cure to the mutation. For the purpose, the IT team developed a platform to sustain the game, and the feedback from the first analysts (back in 2018) was very positive, stating that the experience was extremely engaging. They also added that some learners started to play the game as a team, while sharing knowledge informally, increasing its impact throughout the programme (Schnure, Peters, & Suettinger, 2019).

2.4. Gamification applied to Users' Engagement

Bitrián et al. (2021) affirmed that gamification can have an impact on different levels, such as in customers, in-game, transformative and intra-organisational. Recent papers over the impact of gamification in intra-organisational levels showed a positive relationship between the use of gamification in the workplace with motivation and engagement (Mitchell, Schuster, & SeungJin, 2020), and employee productivity (Oprescu, Jones, & Katsikitis, 2014).

Additionally, when it comes to mobile apps, gamification has proven to have promising results in increasing user's engagement levels (Bitrián, Buil, & Catalán, 2021), more specifically on their continued use intention, their Word-of-Mouth intentions, and their ratings of the mobile applications.

2.5. Employee Engagement

According to Schaufeli, Engagement, on its general definition, is mostly related to involvement, commitment, passion, focus, dedication, and energy towards something to which someone is engaged, that can involve emotional and psychological connections (Schaufeli, 2013). Other perspectives are related to the fact that Employee Engagement is a multi-faceted concept, composing five dimensions: organisational identity, dedication, absorption, vigor and pleasant harmony (Liu, 2016).

Nevertheless, it is agreed upon many of the authors that there is not a commonly agreed universal definition of what "Employee Engagement" means.

Most often, the concept has been defined as the employee being connected emotionally and intellectually to a particular job, so that they give a discretionary effort towards achieving the results expected (Woodruffe, 2005).

Although, it is also commonly assumed that the concept of Employee Engagement presented by different authors can, sometimes, interfere in the comparability between different papers, since some authors focus more on the psychological concept, while some other authors might end up correlating engagement with a more holistic connection, that includes the mental, physical and emotional areas (Kular, Gatenby, Rees, Soane, & Truss, 2008).

It is also important to understand that Employee Engagement and Organisational Commitment are two distinct concepts, even though they can be related. While Organisational Commitment might refer to an attitude towards work, Employee Engagement goes beyond an attitude, being mostly related to the degree in which the employee is attentive to their role and in their performance (Saks, 2006).

2.6. Impact of Engagement on Productivity

A report by Gallup, comparing different sample sizes, proved that there is a direct relationship between Employee Engagement and business outcomes (Gallup, 2020). This study was very important to prove that organisations that invest in Employee Engagement can quantify the expected results from these investments based on the statistical studies performed within different companies.

The Gallup study also states that higher engagement levels would lead to lower levels of employee turnover, proven before to increase productivity in teams (Winne, Marescaux, Sels, Beveren, & Vanormelingen, 2018)

Earlier findings also showed that higher workplace engagement would lead to an increase on returns from publicly listed companies, specifically on their Earnings per Share, representing an increase of 15.6% (Ott, 2007).

2.7. Customer Success Management

Customer Success Management became a buzzword to define a common practice in businesses, especially when referring to business-to-business contexts, where the practice includes goal management, stakeholder management and even learn management (Hilton, Hajihashemi, Henderson, & Palmatier, 2020).

Mehta et al. (2016) clarify that customer success management is not a "one size fits all", since the concept has been evolving throughout the years, and it has to be adapted to the reality of each business relationship (Mehta, Steinman, & Murphy, 2016).

According to the Customer Success Association (2019), the definition of Customer Success is a "*long-term, scientifically engineered, and professionally directed business strategy for maximizing customer and company sustainable proven profitability*" (Customer Success Association, 2019). This definition gives a broad overview on the importance of Customer Success Management for the long-term relationship between the service provider and the customer, which is supposed to be sustainable enough to bring profitability.

2.8. Customer Success in SaaS Solutions

Cloud Computing consists in the delivery of hosted services over the internet (Armbrust, et al., 2010)., which has given space for companies to develop business models around it in three main types - Software as a Service (SaaS), Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) (Mahmood, 2011).

While the market has been changing over the past years, and companies tend to focus on subscription-based services (as the example of SaaS solutions), Customer Success Management (CSM) practices are now part of the philosophy behind business relationships. Seidenstricker et al. (2021) underlines that CSM is also a new management practice since it is now crucial to cooperate more closely with clients while creating trustworthy relationships (Seidenstricker, Melzig, Fischer, & Krause, 2021). Also, Zibi et al. (2019) clarify that the role of a Customer Success Manager is having an increasing importance and it is expected to become the third most important future role.

Seidenstricker also states that companies must use a Customer Success framework based on 3 spheres: Customer, Supplier and Joint. On each of these spheres, there are guidelines for companies to develop their own tools in order to have structured Customer Success Management procedures. As an example, on the supplier side, it is important, on the controlling part, to create hard metrics in order to have a data-based evaluation on the success of the service or product (Seidenstricker, Melzig, Fischer, & Krause, 2021).

2.9. Customer Success impact on Revenue

Mehta et al. (2016) state that companies that are investing in new Customer Success Management practices are reducing churn from clients and even growing their recurring revenues

only by applying new methodologies for managing customers more closely (Mehta, Steinman, & Murphy, 2016).

Alongside, von Martens et al. (2011), stated early in the second decade of 2000 that transaction-based revenue management lacks the capacity to generate customer relationships that are profitable, while customer-value-based revenue management proved to be an integrated approach that allows companies to experience better customer-relationships (von Martens, T., Hilbert, A., 2011).

CHAPTER 3 - METHODOLOGY FOR DATA COLLECTION

For the construction of the Matrix that allows GFoundry to understand the engagement of its clients, the data used comes from two different sources: **GFoundry Platform** and **Interviews with Partners**.

3.1. Quantitative Data Analysis - GFoundry Platform

The GFoundry platform, through its Backoffice available to HR Managers and Partners, has information available about interactions with the platform, both with the backoffice and with the frontend. This information can be visualized directly through the Backoffice in some graphics available, or it can be exported in xlsx files for further analysis.

Since there are two important variables to correlate between each other, the end result is an **Engagement Matrix**, compiling all GFoundry Clients at the moment. Additionally, individual Engagement Matrixes per client are also made available for Clients and Partners to use when needed.

The tool gives the possibility to filter the clients positioned in the Matrix, but also the periods to analyse, allowing the stakeholders to use the tool to compare the information and identify relevant trends.

This tool also allows GFoundry's Management Team to have a visual perspective on how the Clients are behaving and interacting with the platform. Ideally, all Clients should be at the top right quadrant of the matrix, with high levels of engagement coming from both Employees and Backoffice Managers. If it is not the case, actions should be implemented.

The matrix has two axis that takes into account two variables: Employees' Usage and Backoffice Usage. The method used for both variables is a regular extraction of data, with further transformation accordingly.

In order to collect the Quantitative data from Employees' Usage, the information used is from the monthly visits from registered users in the platform (See example in Appendices 3.1, Table 7).

To collect the data from Backoffice Usage, the information collected is from the Backoffice Sessions Flow tab, which contains information about all the interactions from Backoffice Managers with the platform (See example in Appendices 3.2, Table 8). This report contains information regarding visualization of pages in the Backoffice, as well as insertion or deletion of content. The level of interactions represents how much the platform is being used by the people that are supervising the project. Additionally, this set of data also allows to understand the level of monthly visits to the Backoffice, which is also accounted when calculating the Backoffice usage of the platform.

Through these sets of data, it is possible to relate the usage of the platform by the employees (through their visits) with the usage coming from who manages the information within (through their interactions with the Backoffice).

The data is exported in individual reports from each one of the Backoffices from current clients of GFoundry, since every client have their own independent container. The population of each of the clients ranges between 150 users and over 6,000 users. The total number of clients to be analysed is anonymous.

For the purpose of the current report, one client is used as an example, in order to test the Matrix. The client has one Partner associated, and currently has a population of around 340 users registered in the platform.

There is also a level of correlation between the 2 variables, since the employee's usage might be influenced by the amount of new information that is added to the platform on a frequent basis.

As it was stated before, if the Partners and/or HR Managers do not implement new dynamics (within the Backoffice), it is expected that the employees' visits decrease as they lose interest in accessing the platform.

In order to have a tool that compiles the information from all clients in the same area of visualization, and to be able to compare among them, both variables from the matrix are normalized between 0 and 1.

When the data is processed, the expected level of interactions both in the Backoffice and from the Employees are defined, in order to adjust the between 0 and 1 through the following formula:

$$Level\ of\ Usage\ = \frac{X\ -\ Xmin}{Xmax\ -\ Xmin}$$

The *Xmax* represents the expected interactions for a value of 1 (one). The *Xmin* is considered as 0 (zero).

Regarding the Employee's Usage, the *Xmax* is given by the expected level of monthly visits from employees to the platform. This value is different from project to project, since the challenges and scopes tackled by each of the projects are different.

Regarding the Backoffice usage, the interactions are defined by the Modules available in GFoundry. As an example, if a Backoffice Manager interacts once with the Learn Module to check the statistics of general performance, that is considered 1 (one) interaction. Additionally, the weekly visits to the backoffice should also be taken into account when considering the level of usage of the backoffice.

Each client uses different sets of Modules available at GFoundry, for different purposes and goals, which means that the expected interactions are different from each other.

For example, a client might use the Learn Module only to store internal information (such as PDFs with Newsletters, Infographics, Presentations, among others), while other client might use the same Module for the whole training and learning content of the company. Thus, the level of interactions that are expected from each client are different since each of them have different levels of usage according to the objective of the project.

This way, and since every client has a Partner associated to support on the implementation of a GFoundry project, the interviews with the Partners were meant to define the expected interactions for each one of the modules that each of the clients use, the expected number of visits to the backoffice, and the expected level of visits to the platform from the employees. (See Appendices 2 for Script for Interview with the Partner).

With this information, it was possible to normalize the data collected from the interactions and have as a result the Matrix that gives a visual overview of the engagement from every GFoundry client.

CHAPTER 4 - RESULTS ANALYSIS

For the construction of the Engagement Matrix, and for the purpose of the Master's Final Work, the analysis and deployment of results focuses on one GFoundry client.

Since the data from the company needs to be anonymous, all data from the users was handled according to GDPR guidelines, and the company will be referred to as **Company A**.

The Partner associated with the project from Company A will be referred to as **Partner 1**.

4.1. Quantitative Data Analysis

The Quantitative Data needed for the Engagement Matrix was exported from the GFoundry's backoffice from Company A, considering a period of 6 months, from July of 2021 until December of 2021.

Two reports were used: one with the Users' Visits to the platform, and another one with the registration of all the interactions in the Backoffice (See Appendices 3.1 and 3.2 for examples).

4.1.1. Company A

The Company A is an organisation from the consultancy sector, specialized in Information Technology projects.

With the current challenges related with Internal Communication and Talent Retention, especially in such competitive environment for recruitment, they have decided to look for a solution that would tackle challenges related to their Talent Management procedures.

Currently, and after some years of working with the GFoundry platform, they are using many of the modules from the suite: Learn, Recognition, Evaluation, Evaluation, Goals, Contributions, Innovation, Tasks, Engagement Thermometer, and Information (Push Notifications + News Feed).

The Quantitative Data Analysis took into account the information coming from the reports mentioned in the Methodology. The transformation of data was performed using Microsoft Excel.

In Table 1, it is possible to look at some statistics regarding the accesses to the platform's frontend by the users:

Table 1 - Monthly Visits (per user) to the frontend platform by interface and overall (Company A)

Company A	**2021**					
	July	**August**	**September**	October	**November**	**December**
Average Monthly Visits (Android)	1,02	0,50	1,11	1,21	0,75	1,12

Average Monthly Visits (iOS)	0,34	0,22	0,36	0,45	0,27	0,33
Average Monthly Visits (Web)	1,84	0,98	2,53	2,25	1,33	1,83
Average Monhtly Visits (Overall)	3,21	1,70	4,00	3,91	2,34	3,28

Source: Company A's Backoffice Report from Users Visits (2021)

As it is possible to observe from Table 1, the Average Monthly Visits has fluctuations over the months. Some of these variations are related to mandatory HR processes that people must undertake, which are done through the platform, and impact the number of visits, such as the Performance Evaluation Process or the Mandatory Trainings that employees need to do.

Another variable that impacts the number of visits to the platform is the holidays. The month of August registers the lowest number of visits to the platform (an average of 1,70 visits in overall), due to the time of the year where the employees take time to spend the summer holidays with their families.

From this data it is also possible to understand that, comparing the web interface with the mobile one (iOS + Android), the visits are higher on the web interface rather than the mobile interface. This is due to the importance of the processes performed in the platform, such as mandatory training or evaluation processes, that employees prefer to do on their work computers, using the web interface.

One of the challenges of implementing a platform in an organisation is understanding the reality behind the indicators. When there is a company with a big structure, composed by many different people, hard to reach communication-wise, with different expectations and needs, their interactions with these types of dynamics are very different. Also, the fact that some people take sick days, or are not even engaged with the platform have an impact on the numbers shown previously. The Table 2 showcases additional indicators that allow for better understanding of the reality behind the results:

Table 2 - Additional Indicators on the Monthly Visits (per user) to the frontend of the platform

Company A	2021					
	July	**August**	**September**	**October**	**November**	**December**
Standard Deviation Monthly Visits (Overall)	4,18	3,03	3,90	4,58	3,56	4,10
Maximum Visits per Month (Overall)	26	26	28	29	23	39
Minimum Visits per Month (Overall)	0	0	0	0	0	0
Average Monthly Visits (without 0)	4,57	3,54	4,59	4,84	3,38	3,86
Number of Users with 0 visits	95	166	41	61	98	48

Source: Self-Elaboration and Calculations

The Standard Deviation is an important indicator to show the dispersion of the data related to the mean. When the Standard Deviation is high, it means that the data is extremely dispersed, in the opposite of a lower Standard Deviation that will indicate concentrated data points.

As it is possible to state from Table 2, the Standard Deviations are considerably high (higher than 3), with a maximum of 4,58 during the month of October, which shows that the data is extremely dispersed, thus, the number of visits from the users have values (data points) that are far from the mean.

The Maximum and Minimum number of visits also give a good perception about the dispersion of the data. As it is expected, the Minimum number of visits is zero, which means there are users that do not visit the platform in that month. The Maximum number of visits varies between 39 (December) and 23 (November), which indicates that some people might access the platform more than once a day.

Other indicators that are important to understand the true impact of the platform is understanding the Average Monthly Visits without counting the users with zero visits, which means that the calculation is considering employees with a real and practical engagement with the platform, comparing to the number of users that have 0 visits in the specific months. In this case, it is possible to see that the average level of visits does not have strong fluctuations, standing between an average of 3,38 and 4,84 visits per month.

The last indicator is related to the number of users that do not visit the platform at all, allowing to compare the increase (or decrease) of interest in the platform with the dynamics created and new content added to the platform. When this data is combined, it becomes easier to take any type of decisions.

Regarding the indicators from the Backoffice usage, in Table 3 is possible to observe some relevant indicators:

Table 3 - Monthly Usage of the Backoffice per Visits and per Modules used (Company A)

Company A	**2021**					
	July	**August**	**September**	**October**	**November**	**December**
Monthly Visits to the Backoffice	26	21	26	28	26	24
Average Weekly Interactions per Module:	-	-	-	-	-	-
Learn	0,75	0,5	1,25	8,5	5,5	2,25
Recognition	2,5	2,75	2,25	1,5	0,25	0,25
Goals	10	7	6,5	47,25	48,5	42
Contributions	0,5	0,5	79,25	31,5	2,75	70
Innovation	13,3	7,5	22	9,5	47,5	39,5
Tasks	0	0	0	0	0	0
Engagement Thermometer	7	5,5	6,5	2,75	1,75	0,5
Information: Push Notifications	0	0,75	1	0	0,25	0,75
Information: News Feed	4	5,25	5,5	12,25	0,75	5,75

Source: Company A's Backoffice Report from Backoffice Sessions Flow

As it is possible to state from Table 3, the monthly visits to the Backoffice are always higher than 21. Considering that in one month, the average number of workdays is 22, this indicator allows to confirm that the platform is a daily tool that the company (and the Partner) use for their work routines.

It is also interesting to look at the average weekly interactions per Module. These interactions can represent creation of new content, analysis of statistics, or checking results from a created dynamic (e.g., a quiz created in the Learn Module or looking at the results of an Innovation cycle).

The level of interactions suffers different variations along the year. This is easily explained by the fact that the modules are used for very different purposes, and not all of them have the

same purposes along the year. When a client has the access to the modules, they can use them for the purpose they want to.

Observing the level of interactions with the Contributions, or with the Innovation Module, the value is very high (79,25 for the Contributions in September and 47,5 for the Innovation in November). These modules are mostly answer-type interfaces, that allow users to interact, submit their answers or ideas to a specific topic. Thus, the level of interactions on the Backoffice increases, since the Backoffice users extract the data in order to analyse the answers.

The Goals module also has high levels of interactions, specifically in the end of the year, since users reach the time where they need to check on their performances of the year and define what comes next.

The Tasks module registers no interactions throughout the last semester of 2021. This is explained by the fact that the module only contains a list of tasks that employees must do before they start their Learning path of the year. In this case, and since the task list is already created and shared with the employees, there is no need to access the module for any purpose, unless there are any changes to be made or new task lists to be added.

The Information Module interactions allows to understand if the clients are using the Push Notifications or the News Feed, which represent strong tools for better and more efficient internal communication. Regarding the Push Notifications, it is possible to confirm that the company has not been using it constantly, since July and October even reach zero interactions.

As for the News Feed, the company uses it more often, especially when it comes to communicating important information internally.

4.3. Qualititative Data Analysis

The Qualitative Data was collected through a One-on-One Interview with the Partner associated with the project. It was important not only to understand the scope of the specific project (since all of them are very different when it comes to the objectives, to the way they use the platform, the purpose, among other details), but also to establish the expected interactions with the platform. This way, the results of the Engagement Matrix can be as close as possible to the real engagement.

Finally, the meeting was also important to collect feedback on the tool, being possible to understand what could be improved and what could be the next steps of the analysis.

4.2.1. Interview with Partner 1

The interview with the Partner started with an explanation of the Engagement Matrix. It was important to explain the logic behind the model, in order to be easier to define what it means to define the "expected level of interactions".

Afterwards, the Partner started to give context about the project on this company. According to their *verbatim*, "*the main goal was to reduce the friction in the organisation, reducing the risk of high turnover*" (Partner A, 2021).

As it is normal in IT consultancy organisations, the turnover is extremely high as the recruitment for this type of professionals is very competitive. Thus, the main goal of the project is to allow the HR structure to "*disseminate messages of investment in people, through training, structured trainings that add value to the individuals, and making sure that people actually guarantee the 40 hours of mandatory training every year*" (Partner A, 2021).

For this goal, the company created a Player Journey inside the platform, which allowed to structure a visual path composed by the trainings where people take their courses and develop the skills they need for their role, receiving a digital certificate in the end of the journey.

Finally, the Partner stated that currently, the HR team has the perception that "*people really feel like they have a diverse training offer, and that the company really invests in the people from their structure*" (Partner A, 2021).

As to what regards the modules used by the client for their internal structure, Partner A described the following:

Table 4 - Verbatim used by Partner 1 to describe the purpose of each module on the project

Module	Purpose
Learn	*"They use it for all their training content, since we imported all the courses on their training catalogue, from many different sources such as Microsoft Learn, Coursera, Udemy, among others."*
Recognition	*"They use it a lot, especially the star badges. People recognise their peers."*

Evaluation	*"It is part of their Performance Evaluation process. Currently changing to the new and updgraded "My Career" Module."*
Goals	*"Since they still did not do the transition to the new "My Career" module, they use the Goals Module for their Individual Goals, mostly from training."*
Contributions	*"They are currently using it for feedback from their training sessions, but also to do the assessment of the managers."*
Innovation	*"They use the Innovation to allow people to provide referrals of new employees."*
Tasks	*"Mostly used for the Mission path, as they insert in a list of the tasks that are supposed to be done outside of the platform."*
Engagement Thermometer	*"They use it for their climate surveys."*
Information: Push Notifications	*"Mostly used by us, as Partner. They could use it much more than they are using at the moment. We can see the clear impact on the visits to the platform!"*
Information: News Feed	*"Using it a lot for communicating and welcoming of new employees. Much like a showcase of the newcomers!"*

Source: Interview with Partner 1

As it is possible to state from the *verbatim* used to describe the usage of each module from the platform (transcribed in Table 4), Company A uses the different modules for different purposes that are aligned with the main objectives of the project.

The Partner also stated that being GFoundry a flexible solution, it is up to the Partner and to the client to be able to be creative and solve challenges using the different features available.

Following up on the purpose of the modules, the Partner started to define the expected number of interactions for each of the modules.

For the **Learn Module**, 2 interactions per month are expected, since "*they already have all of the content available, but it is still important to check the statistics of who is completing their training courses and who is not*" (Partner A, 2021).

For the **Recognition Module,** 1 interaction per month is expected, being the reason the same as the Learn module, since it is important for the client to be aware of the information shared among the employees.

For the **Evaluation Module**, it was decided that the usage of this module should not impact the Engagement Matrix, since it is a mandatory process that everyone must undertake, and it is not performed every month. Its analysis would negatively impact the results in months where the evaluation is not happening.

For the **Goals Module**, 5 interactions per week are expected, since the HR team and the Partner need to be "*aware of who is completing their trainings, in order to update their levels of completion*" (Partner A, 2021).

For the **Contributions Module**, 1 interaction per week is expected, since people are always giving feedback about the sessions they have throughout the year.

For the **Innovation Module,** 2 interactions per week are expected because "*they receive many CVs from there, and they need to extract that information*" (Partner A, 2021).

For the **Tasks Module**, 1 interaction per week is expected. Even though they are not using the module lately, the Partner believes that giving the red alert on the Engagement Matrix can be a good impulse to understand how the module can be used for other purposes internally.

For the **Engagement Thermometer**, 2 interactions per month are expected, in order to "*extract the information from the climate surveys and react to the information provided*" (Partner A, 2021).

For the **Information: Push Notifications**, 2 interactions per week are expected, even though the "*client is not using the feature that much, but it can be good to use the Engagement Matrix as an impulse to use more*" (Partner A, 2021).

For the **Information: News Feed**, 1 interaction per week is expected, which is a reasonable level of interaction for a "*company that uses this internal communication feature a lot*" (Partner A, 2021).

Finally, the Partner had to state the expected number of visits to the Backoffice and to the frontend by the users.

According to the Partner, "*5 visits per month from the employees are expected, since this tool it is a crucial one for their roles, and they should access it on a regular basis*" (Partner A, 2021).

Even if they never reach the desired level of visits from the users, the Partner underlined that it is an ambitions KPI for them to work towards it.

As to what regards the visits to the Backoffice, the Partner states that it should be 5 visits per week, which is the number of days in a week that the HR team and the Partner should access, to keep track on the main indicators, extract valuable information and updating the needed information.

In the end of the interview, it was explained to the Partner that, as soon as this tool becomes available, the Partner should be responsible to keep track of the information every month and use the Engagement Matrix as a tool to understand trends on the usage, both from employees and from the Backoffice users.

Also, the Partner is allowed to change the expected level of interactions through time, since the projects can change their purposes, as well as the modules can be used for many different purposes in different times of the year.

This way, and with a correct update of the indicators, the Engagement Matrix should provide a realistic overview of the current engagement levels from clients.

The interview ended with positive feedback from the Partner about the Engagement Matrix, and how it will be useful to discuss relevant challenges with the clients.

4.3. Matrix Results

After collecting the Quantitative Data from the reports from the Backoffice and after defining the Expected level of interactions through the Qualitative Data from the Interview with the Partner, it is possible to calculate the results of the 2 variables and position Company A in the Engagement Matrix.

In order to perform the transformation of the data, the normalization and position Company A in the Matrix, the chosen platform was Microsoft Excel. The tool is extremely powerful when it comes to transforming raw data into relevant graphics. Other tools were studied, such as Google Data Studio and Microsoft Power BI.

Microsoft PowerBI is extremely strong in Data Visualization, although its cost does not compensate the type of transformation needed. Google Data Studio is a free tool for Data Visualization, but it has strong limitations when it comes to data handling and transformation.

As to the deployment of the tool to Partners and Clients, Google Sheets is used, since it has direct integration with the type of files created in Microsoft Excel, allowing for easier storage, sharing and usage of the tool.

For simplification purposes, the calculations take into account the data from July of 2021.

Regarding the Employees Usage, and considering the level of Expected Interactions with the platform, the results from the normalization are the following stated in Table 5:

Table 5 - Employees Usage Normalization from July 2021

	Monthly Average of Visits	Expected Monthly Interactions	Normalization
Employees Usage in July 2021	3,58	5	0,72

Source: Self-Elaboration and Calculations

The result from the normalization indicates that Company A, in July 2021, had an Employees Usage of approximately 0,72, which represents a considerably high level of Employees' Usage.

Regarding the Backoffice Usage, and considering the level of Expected Interactions with the platform collected in the interview with Partner 1, the results from the normalization are the following stated in Table 6:

Table 6 - Backoffice Usage Normalization from July 2021

	Monthly Interactions	Expected Monthly Interactions	Normalization
Backoffice Visits	23	20	1
Learn Module	3	2	1
Recognition Module	10	1	1
Goals Module	40	20	1
Contributions Module	2	4	0,5
Innovation Module	53	8	1
Tasks Module	0	4	0

Engagement Thermometer Module	28	2	1
Information: Push Notifications	0	8	0
Information: News Feed	16	4	1
Backoffice Usage in July 2021	-	-	0,75

Source: Self-Elaboration and Calculations

The result from the normalization indicates that Company A, in July 2021, had a Backoffice Usage of approximately 0,75, which also represents a high level of Backoffice usage.

With this information, it is possible to position Company A in the Engagement Matrix:

Figure 7 - Engagement Matrix Results for Company A in July 2021

Source: GFoundry's Engagement Matrix Tool

As it is possible to visualize from Figure 3, Company A is positioned in the top right quadrant of the matrix, which indicates a positive level of engagement of the company with the platform. Not only the Backoffice usage is high, considering the level of interactions expected, but also the

employee's usage of the platform is positive, considering it is a month where most employees have their summer holidays.

CHAPTER 5 - DISCUSSIONS AND CONCLUSIONS

After the collection of data that was relevant for the Engagement Matrix, it is possible to have a tool that co-relates the Backoffice usage with the Employee's usage of the platform, providing some perception over GFoundry Client's Engagement.

5.1. Main Conclusions

One of the first conclusions from this research project is the relevance of the model. With a framework already created and fully working, it is possible to understand the real engagement from the clients with the platform. This tool is not only allowing the GFoundry team to see the picture of what the engagement at the moment is, but to also understand the trends over time. This way, if any action is needed, it can be implemented in time of saving a project and, consequently, a client, having a very important and direct impact in the business.

Another conclusion is that this model will be under continuous improvement. The tests that were made during the research project were not enough to understand if the model is mature enough to give a true perception of the engagement level of the clients. Since the project was focused on the example of one client, it is natural that, with the testing on the other clients, the model will continue its improvement day by day.

Lastly, one of the main impacts of the research is related to Customer Success. Having a model that aims to understand the real engagement with the platform, bringing two different perspectives (Employees and Backoffice Users), will determine the success of the projects GFoundry has implemented in all its clients. Besides from being a tool used by the GFoundry team, it will be a crucial tool to be used by the Partners who are also directly related to the projects.

The Research Methodology was structured according to the needs from the Research project. On a first approach, it was important to collect the quantitative data that would feed the Matrix, already available in the Backoffice of the platform. On a second approach, it was extremely relevant to have an interview with the Partner allocated to the project, as it was possible to understand not only the main objectives from the project, but also to understand some of the results that came from the quantitative analysis. Lastly, the interview had the main purpose of defining the expected level of interactions from the client, according to the modules and to the

objectives of the project. This process allowed to have sensitivity when it comes to understanding the results from the data transformation.

Referring to the strongest parts of the project, it is related with the framework created. The relation of the usage between the two variables gives a broad perspective on how the project is being successful (or not) in the client. The behaviours from both variables will give important insights about challenges from the project, either related with visits from users or related to new information being published in the frontend.

The area where some improvements are needed is related to the automation of the process. Currently, the Engagement Matrix is deployed through Google Sheets, with some Data Transformation and Visualization having to be done manually. This fact brings challenges to the process related to time consumption and efficiency.

5.2. Main Findings

The interesting finding from the project is the evolution of the results over time. By only looking at the Data Visualization tool, and without performing any calculations on the variations over the periods, it is possible to understand some trends. For example, some of the changes in the behaviours related to usage can be easily explained by the periods of the year where most people take holidays, as it is the case of the Summer and Christmas Holidays.

Also, it is possible to state that whenever the Backoffice usage is lower (which means that there is less interaction in the Backoffice in terms of content-creation or information checking), the visits from the employees decrease. As it was pre-assumed by the GFoundry team, whenever the platform is not fed with new content, the users lose interest in accessing the platform and visiting it.

The Engagement Matrix has a strong impact on GFoundry's business. By having access to the summary of information about how the clients are using the platform, the team does not have to rely on perception, client by client, to understand what the current level of engagement is. If before, the process was opinion-based, now it is possible to have clear data on how that engagement is turning out after all.

Considering the current expansion that the company is facing, not only on the National level, but also with a new international strategy, it would become inefficient to manage the larger number of clients only by opinion and perception of the individual responsible for the project. The main recommendation that can be done to the company is to use the tool as a pillar for

Knowledge Management from clients. Since some people from the team might change, from time to time as it is a natural phenomenon of turnover, the tool will be crucial to keep information about the clients' engagement of the months, and even over the years since they have been a GFoundry client.

5.3. Main Learnings

By doing the current project, a lot of learnings were acquired. On a first level, skills such as resilience and focus become crucial key success factors to reach the goal of the research. As time goes by, not everything goes according to plan, and it is important to know when to pause and think, as new information arrive every day. These moments are determinant to understand where to go, and where to lead the research project.

Additionally, some technical skills were acquired, such as understanding the importance of Data Preparation, performing different analysis, and even improving Microsoft Excel skills. Furthermore, some other platforms were studied as possible tools to receive the Engagement Matrix (e.g., Google Data Studio and Microsoft PowerBI), and even though they did not fill the requirements for the project, the knowledge remains, as new opportunities might come up in the close future.

Finally, a last learning from this period was understanding the importance of having a committed team. Even though the project was an individual one, under one owner, the whole GFoundry team was always available to support in whichever areas were needed in order to fulfil the needs of the project. By understanding the true impact of the project on the business, the team quickly showed availability to support and help build the right environment to test and re-test the model.

5.4. Main Contributions

The contributions coming from the current research project have a long-term perspective. First, the long-term perspective is directly related to the fact that, the more historical information on the engagement is available, the better perspective it can give out about the state of the projects in-hand.

On another perspective, the current project is one of the steps towards a bigger project related to the usage of Big Data generated by the platform to impact People Analytics in the GFoundry clients. Not only the model can improve in the future but can also improve the depth of the variables that explain the Backoffice and Employee's Usage.

As for the contributions to the sector, the current project can serve as a model or inspiration for a framework or other models developed in different SaaS companies.

Since companies are very different among themselves, and even across Talent Management solutions, the same exact framework applied in GFoundry may not fit the actual Engagement levels from other platform of another SaaS company. This is the main limitation of the current project, as its application cannot be directly replicated in other companies since adjustments need to be always made.

5.5. Main Recommendations

As recommendation for future researchers on this area, the main suggestion is to focus most of the time (and efforts) on designing and building the model that fits the company's needs than looking for tools that can solve the issues. It becomes more important to have a structured and prepared model that explains Customer Success than having a good-looking platform, fulfilled with complex features that will not answer the main basic needs of the model designed.

Nowadays, many solutions related with Business Intelligence and Data Visualization are available to the public. Although not all of them have the requirements that are needed for a specific model, being more important to clear out which tools fill the exact needs of the project, and then focus the time on learning how to perform the model on the tool, rather than using a complex tool.

In conclusion, the Engagement Matrix brings a new perspective over Client Engagement Management, but also Customer Success Management. By having a powerful Data Visualization tool that provides information about the engagement and connection that clients have with the product that the company is offering to the market, companies like GFoundry have the right tools to help customers and partners detect (and reverse) low engagement levels, and to predict irreversible customer churn.

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APPENDICES

1. Description of GFoundry Modules

Learn Module - The module where it is possible to host Learn content, either directly or integrated via API.

Market Module - The module that works as an internal store of the platform where companies can make available items that users can redeem with their Virtual Coins.

Comparisons Module - The module where it is possible to create comparisons cycles, where employees can vote on their preferences.

Machine Gaming Module - The module where companies can integrate any type of data that can be gamified and integrated into leader boards.

Recognition Module - The module where the users can recognise each other for their competencies, skills and recognise them for an attitude.

Goals Module - The module where companies can manage their Goals and Objectives through the OKR methodology.

Innovation Module - The module where it is possible to create innovation cycles in specific topics, and users can participate by suggesting ideas, comment, and vote.

Feedback Module - The module where it is possible to give 360º feedback in different scopes and areas.

Contributions Module - The module where it is possible to create forms of any type and purpose.

Tasks Module - The module where is possible to manage tasks.

Engagement Thermometer Module - The module where it is possible to create assessment cycles related with Organizational Climate, Manager's assessment, among other options.

Evaluation & Careers Module - The heaviest module of the suite, where it is possible to have the Performance Evaluation and Potential Management of employees.

2. SCRIPT FOR INTERVIEW WITH PARTNER

Question 1: Introduction / Explanation about the Engagement Matrix

Question 2: Could you give me some context about the project?

Question 3: Which modules does the company use?

Question 4: For each of the modules that the company uses, what is their purpose?

Question 5: For each of the modules that the company uses, what is the level of interactions expected?

Question 6: What is the number of expected visits to the backoffice of the platform?

Question 7: What is the number of expected visits to the platform from the employees?

Question 8: Do you have any feedback about the module? Do you think it will be useful for you and for your client?

3. EXAMPLES OF INFORMATION EXPORTED FROM THE BACKOFFICE

3.1. Report from Backoffice - User Visits

Table 7 - Report from Backoffice: Monthly Visits from users in July 2021

Name	Email	Platform	Total visits	Jul, 2021
1	CONFIDENTIAL	Overall	3	3
1	CONFIDENTIAL	Android	0	0
1	CONFIDENTIAL	Ios	0	0
1	CONFIDENTIAL	Web	3	3
2	CONFIDENTIAL	Overall	6	6
2	CONFIDENTIAL	Android	1	1
2	CONFIDENTIAL	Ios	0	0
2	CONFIDENTIAL	Web	5	5
3	CONFIDENTIAL	Overall	2	2
3	CONFIDENTIAL	Android	0	0
3	CONFIDENTIAL	Ios	2	2
3	CONFIDENTIAL	Web	0	0
4	CONFIDENTIAL	Overall	9	9
4	CONFIDENTIAL	Android	0	0
4	CONFIDENTIAL	Ios	0	0
4	CONFIDENTIAL	Web	9	9
5	CONFIDENTIAL	Overall	17	17
5	CONFIDENTIAL	Android	1	1
5	CONFIDENTIAL	Ios	0	0
5	CONFIDENTIAL	Web	16	16
6	CONFIDENTIAL	Overall	2	2
6	CONFIDENTIAL	Android	0	0
6	CONFIDENTIAL	Ios	0	0
6	CONFIDENTIAL	Web	2	2
7	CONFIDENTIAL	Overall	4	4
7	CONFIDENTIAL	Android	0	0
7	CONFIDENTIAL	Ios	0	0
7	CONFIDENTIAL	Web	4	4
8	CONFIDENTIAL	Overall	7	7
8	CONFIDENTIAL	Android	0	0
8	CONFIDENTIAL	Ios	0	0
8	CONFIDENTIAL	Web	7	7
9	CONFIDENTIAL	Overall	3	3
9	CONFIDENTIAL	Android	3	3
9	CONFIDENTIAL	Ios	0	0
9	CONFIDENTIAL	Web	0	0
10	CONFIDENTIAL	Overall	8	8
10	CONFIDENTIAL	Android	8	8
10	CONFIDENTIAL	Ios	0	0
10	CONFIDENTIAL	Web	0	0
(...)	(...)	(...)	(...)	(...)

Source: Company A's Backoffice

3.2. Report from Backoffice - Backoffice Sessions Flow

Table 8 - Report from Backoffice: Backoffice Sessions Flow in August 2021

Name	Email	URL	Action Type	Date
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/learn/courses/196/users	Pageview	2021-07-16 09:12:09
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/information/articles/new	Pageview	2021-07-16 09:11:09
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/information/articles	Pageview	2021-07-16 09:11:08
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/contributions/list	Pageview	2021-07-16 09:10:50
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/information/articles	Pageview	2021-07-16 09:10:43
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/statistics/thermometer	Pageview	2021-07-16 09:10:31
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/statistics/general	Pageview	2021-07-16 09:10:22
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/statistics/general	Pageview	2021-07-16 09:09:53
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/taskList/lists	Post	2021-07-16 09:09:42
TESTE	test@admin.com	https://XXX.gfoundry.com/backend.php/missions/list	Delete	2021-07-16 09:09:32
(...)	(...)	(...)	(...)	(...)

Source: Company A's Backoffic