



Master

2020

Open Access

This version of the publication is provided by the author(s) and made available in accordance with the copyright holder(s).

Improving menstrual health outcomes in swiss workplaces: an entrepreneurial case study

Sheene, Emily Aileen

How to cite

SHEENE, Emily Aileen. Improving menstrual health outcomes in swiss workplaces: an entrepreneurial case study. Master, 2020.

This publication URL: <https://archive-ouverte.unige.ch/unige:145138>

Improving Menstrual Health Outcomes in Swiss Workplaces: An Entrepreneurial Case Study

Internship Thesis Spring 2020

MSc Innovation, Human Development and Sustainability

University of Geneva, Switzerland

Emily Sheene

Thesis Supervisor: Dr. Jose Luis Fernandez Marquez

Internship Supervisor: Ingeborg Albert



**UNIVERSITÉ
DE GENÈVE**

ABSTRACT

By utilizing an entrepreneurial innovation process, the aim of this research is to develop and test assumptions related to the hypotheses that (1) there is a need for improved menstrual health environments in Switzerland and that (2) a menstrual product provision service would create sufficient value to individuals and organizations to encourage adoption of said service. To verify these assumptions, the author conducted a pilot study during which she provided organic menstrual products (in collaboration with Organ(y)c brand) to employees at three office complexes in Geneva and Lausanne, Switzerland from the months of October to December 2019. People based at the three locations were asked to complete two surveys about their experiences related to menstrual health management (MHM) at the workplace. Results indicate that menstruation management at Swiss workplaces could be improved and that the provision of menstrual products limits period emergencies, encourages positive health and wellbeing outcomes, may be linked to decreases in productivity loss, and results in employees having heightened feelings of appreciation by and for their employers. While generalizability is limited due to the select sample of participants and the limited scope of the study, this thesis gives significance to the need for improved research on menstrual health outcomes in more developed countries and in the workplace - study areas that have been largely excluded from menstrual health literature to date. The overall innovation process and resulting conclusions showcase the opportunity and roadmap for the development of a sustainability project from idea to realized impact.

Key words: menstruation, workplaces, Switzerland, innovation process, business model design

TABLE OF CONTENTS

ACRONYMS, ABBREVIATIONS & KEY DEFINITIONS	3
1 INTRODUCTION	5
1.1 Internship	7
2 BACKGROUND	9
2.1 Menstrual Health Management	9
2.2 The Role of the SDGs in Menstrual Health Management	12
2.3 The Geneus Innovation Process	14
3 FEM.FRIENDLY PROJECT	21
3.1 Fem.Friendly History	21
3.2 Fem.Friendly through the Geneus Lens	24
3.2.1 Value Proposition Canvas, Elevator and Executive Pitches	24
3.2.2 Minimum Viable Product	28
3.2.3 Business Model Canvas	29
3.3 Assumptions	30
4 PILOT METHODS	32
5 PILOT RESULTS	34
5.1 Survey 1	34
5.2 Product Manual Data Collection	40
5.3 Survey 2	41
6 DISCUSSION	50
6.1 Hypothesis 1	51
6.2 Hypothesis 2	54
7 CONCLUSION	60
REFERENCES	63
APPENDICES	66
Appendix I: SDG target links to MHM	66
Appendix II: Fem.Friendly Pilot Informational Leaflet	68
ACKNOWLEDGEMENTS	69

ACRONYMS, ABBREVIATIONS & KEY DEFINITIONS

B2B - Business to business
BMC - Business Model Canvas
CBIP - Campus Biotech Innovation Park
EIP - EPFL Innovation Park
FF - Fem.Friendly
MHM - Menstrual health management
MVP - Minimum viable product
SDGs - Sustainable Development Goals
Tdh - Terre des hommes
VPC - Value Proposition Canvas
WASH - Water, sanitation and hygiene

Menstruation or menses is the “natural bodily process of releasing blood and associated matter from the uterus through the vagina as part of the menstrual cycle.” (UNICEF, 2019, p. 8)

A **menstruator** is a person who menstruates. While largely girls and women, terms such as menstruator or “people with periods” take into account the facts that not all who menstruate are women and not all women menstruate.

Menstrual hygiene is defined as when “women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear.” (WHO/UNICEF, 2012, p. 16)

Menstrual health management (MHM) encompasses both menstrual hygiene and the “broader systemic factors that link menstruation with health, well-being, gender equality, education, equity, empowerment and rights.” (UNICEF, 2019, p. 8)

Menstrual products are “products used to catch menstrual flow, such as pads, cloths, tampons or cups.” (UNICEF, 2019, p. 8)

A “**period emergency**” is when the onset of menstruation begins at a moment when the menstruator is unprepared with the adequate menstrual products they need to manage their menstruation. This definition can be further expanded to include moments when a menstruator may have the menstrual products they need but do not have access to adequate facilities where they can manage their menstruation in a timely, safe and hygienic manner.

1 INTRODUCTION

At any given moment, more than 800 million people are on their period (FSG, 2016). Despite this fact, throughout history and still today, globally menstruation continues to be a topic surrounded by discomfort, negative stigma and taboo (Sommer, Vasquez & Worthington, 2013). Such negative associations with the biological process adversely impact menstruators, who are largely female, by inhibiting best menstrual health management (MHM) practices. Thus, it is no surprise that menstrual health outcomes can be one of the most (if not the most) important identifiers for broader overall female health outcomes and gender parity, as they are intrinsically linked (Patkar, Aidara & Winkler, 2016; UNICEF, 2019; Schechtman, 2015). As leading menstrual health researchers note, “normalizing menstruation is part of a broader agenda to normalize being a girl” or woman (Wilson, Haver, Torondel, Rubli & Caruso, 2018, p. e17). Furthermore, with around half of the population spending an average 6.25 years releasing menstrual blood (Kane, 2017) spread out over an average span of 40 years, it is evident that menstruation is a topic that will intersect with and impact nearly all areas of a female’s life. One such area is the workplace. While research to date on MHM in the workplace remains limited, it is evident that improving MHM standards in workplace settings is beneficial to overall health, economic and human rights outcomes (Sommer, Chandraratna, Cavill, Mahon & Phillips-Howard, 2016).

The Fem.Friendly project, the creation of the author and topic of this academic work, aims to improve MHM standards in Swiss workplace settings. By providing an organic menstrual product service, Fem.Friendly hopes to create more menstrual-positive environments that are supportive and inclusive of everybody, no matter the time of the month. Fem.Friendly is a project that was initiated in 2017 by the author and five other classmates of the Master in Innovation, Human Development and Sustainability during a keystone workshop class on Measuring and Predicting Sustainable development. In early 2019 Fem.Friendly sought expertise and support from the SDG Accelerator, a program of the Geneva-Tsinghua Initiative that supports people working on SDG-related projects to scale up their innovations. The support received from the SDG Accelerator not only provided Fem.Friendly with the necessary funds to

continue project work, but also facilitated the formal internship connection with Geneus, which this academic work builds upon. Over the past year, Fem.Friendly has continued to grow as the author has completed an internship with the Geneva-based innovation initiator Geneus as SDG project innovator. These developments have led the author to treat Fem.Friendly as an early-stage social startup, entertaining the idea that it might have the potential to become a local business to business (B2B) operator with a subscription service of organic menstrual products for Swiss organizations, including workplaces in particular.

As the topic of menstruation remains taboo and the environment surrounding menstruation as well as gender parity in the workplace is very context-dependent, the primary goal of this thesis is to highlight the author's internship experience with Geneus and investigate *the extent of the need and market interest for an inclusive workplace menstruation coverage service in Switzerland*. Thus, there are two primary hypotheses that will be further expanded upon with additional assumptions later in the work, which include:

- (1) There is a need to improve the overall menstrual health management environment in Switzerland including infrastructures and practices, particularly at Swiss workplaces
- (2) The Fem.Friendly service (as proposed) is valuable to individuals and organizations and the outlook for adoption of the service is positive

The findings of this work are mostly based on a pilot study that took place between October and December of 2019 that was the culminating process output of the author as SDG Project Innovator at Geneus (the internship placement). The pilot study served as a validation and de-risking tool to gather customer feedback in order to better understand the existing need and market interest for such a service within Switzerland.

The remainder of this work is structured thematically for reader clarity first presenting a context of the internship work before continuing with additional chapters including the (2) [Background](#), the (3) [Fem.Friendly Project](#), the (4) [Pilot Methods](#), the (5) [Pilot Results](#), the (6) [Discussion](#) and

finally, the (7) [Conclusion](#). The Background section that follows provides a state-of-the-art overview that serves to give the reader a certain broad awareness of the topics at hand. The Fem.Friendly Project chapter that follows will look at the history of the project, how the Geneus process shaped the innovation and business design of Fem.Friendly and the resulting assumptions that were formulated through this process. Following the Pilot Methods, the Pilot Results chapter will be presented before the Discussion chapter will take a closer look at the assumptions formulated through the Geneus process and whether they were verified through the resulting survey data. The paper will conclude by overviewing the study limitations, strengths and potential avenues for future research.

1.1 Internship

The internship of the author lasted approximately four months from May to September of 2019 and was conducted under the supervision of Ingeborg Albert, the Community and Innovation Manager of Geneus. Geneus, a Geneva-based life science innovation initiator, supports innovators in evolving their ideas into viable projects and business models that are ready to move forward to the incubation stage after completion of the Geneus process. The organization is financially supported by the Canton of Geneva and works in partnership with several other established innovation incubators such as Fongit, Fondation Ecllosion and EPFL Innovation Park (EIP). Since its foundation in 2016, the organization has supported over 50 innovation projects. Highlighted by their physical location at the Campus Biotech Innovation Park, Geneus focuses on supporting life science entrepreneurs as they bring their projects to life by utilizing best practices in innovation and a wide network of in-house experts. Internship work took place both in the Geneus offices in Geneva and remotely with digital check-ins between the intern and the internship coordinator. Additionally, the Fem.Friendly pilot was launched with the oversight of Geneus at both CBIP and EIP, which was overseen by Maïa Logossou, the former Office and Events Manager of the innovation initiator. As with all projects hosted at Geneus, the author took part in the mentorship process that involves giving participants an enhanced conceptualization of entrepreneurial concepts and innovation tools that help with the process from idea to viable and scalable business model. Through incorporation of tools such as the Value Proposition Canvas

(VPC), the Elevator Pitch, and the Business Model Canvas (BMC), among others, outputs such as the validation of the product-need fit, validation of the product-market fit and validation of the business model fit for the Fem.Friendly business model were produced.

This internship project is novel and important because it serves as the commencement of a relationship to be continued by Geneus, the Geneva Tsinghua Initiative and the Master in Innovation, Human Development and Sustainability (IHDS) students. It allows for interns to gain better practical business and entrepreneurial orientation while opening the door for further innovative and sustainability-based life science projects to enter and benefit from Geneus. Such a relationship serves as an example of the key element of collaboration that is necessary to advance the Sustainable Development Goals (SDGs). Furthermore, this blossoming partnership will allow for a continued improvement via learning by doing from all parties involved.

The content for this thesis is largely based on hypotheses and data collection made by the author predominantly throughout the Geneus internship and primarily from the main output of the innovation process, the menstrual product pilot. However, it also builds upon project material sourced from before the internship period, as Fem.Friendly has been hosted at Geneus since 2018 and growing from an idea since 2017. The bulk of the data collection took place via desk-based literature reviews, informal interviews, surveys and on-site product management during the Fem.Friendly pilot period. In particular, responses from industry experts, company decision makers (potential clients) and end users were utilized for the procurement of most of the data collection.

2 BACKGROUND

This chapter exists to showcase existing literature concerning not only MHM, but also the innovation tools used within the Geneus process. The first section will give an overview on the importance of MHM, paying special attention to the implications of and relationship to workplace environments. The proceeding subsection will look at how the topic of MHM is linked to the United Nations' Sustainable Development Goals, while lastly, the Geneus process and integrated resources will be expanded upon to showcase what types of tools and steps have been drawn upon throughout the innovation and assumption formulation processes.

2.1 Menstrual Health Management

The link of menstruation to human rights and gender equality is one that will impact almost every sphere of a menstruators' life with negative perceptions of menstruation being linked to negative effects on the wellbeing of menstruators at large (Hennegan, Shannon, Rubli, Schwab & Melendez-Torres, 2019). Furthermore, the environmental, social and physical determinants of a menstruator's body and their surroundings will ultimately result not only in their own broader lifelong health outcomes, but consequently, those of the people who surround them too. While overall, the literature surrounding the topic of menstruation is limited, the large majority of research to date focuses on low and middle-income countries and girls in school settings. While menstruators in more developed countries arguably have overall better conditions in general to manage their periods, the existing limited research that focuses on more developed regions shows that menstruators in these areas also face frequent challenges. As leading menstrual researcher Chris Bobel elaborates on in her most recent book, "the point is this: menstrual stigma is potent, ubiquitous, and impactful, even if its intensity varies place to place" (2019, p. 55).

Although more developed regions of the world may in general be better-equipped for positive MHM, not all members of these societies may have equal affordability or accessibility to the products, facilities, education or even policies available. Period poverty remains a menstrual injustice that evokes the argument of equality of the sexes in favor of change (Johnson, 2019).

Related research shows that one in ten girls struggle to afford menstrual products in the UK with the average UK school girl taking three days off each term due to their period (PHS Group, 2019). Parallely, in the United States, one study showed that 2 out of every 3 low income women could not afford the menstrual products they needed the year prior and nearly half say there are times when they must choose between food or menstrual products (Kuhlmann, Bergquist, Danjoint & Wall, 2019). The issue of affordability of menstrual products is further exacerbated in many countries by the classification of the products as higher value-added “luxury” or non-essential items, a phenomenon coined as the ‘tampon tax’ (Magistretti, 2019). In Switzerland, products were taxed at the higher rate of 7.7% instead of 2.5% up until 2019. Furthermore, many marginalized groups such as those in prison, homeless or trans people with periods face extreme barriers to managing their menstruation with ease and dignity.

Even when girls and women can afford menstrual products, in a world striving for gender equity, the real question is should they have to? The average female will menstruate for 3,500 days of her life (UNICEF, WaterAid & WSUP, 2018), spending an approximate \$6360 on menstrual products, a cost unproportionately subjected to women and not men (Sadlier, 2019). While some argue that menstrual products should be provided by the government, as is the foundational recent case in Scotland, many others, including leading menstrual health researchers, (Schmitt, Clatworthy, Ogello & Sommer, 2018) and UNICEF, WaterAid and WSUP (2018) have repeatedly said that female toilet facilities should be accessible to all and include menstrual products among other things such as water, soap, toilet paper or water to clean private body parts after toilet use, adequate waste management, sufficient lighting, indoor door latches to ensure privacy, hooks or shelves to store personal items, mirrors to allow users to check their clothing and encourage hand washing and clear signage. Legal researcher Elizabeth Montano points out that the lack of menstrual products in toilets could otherwise be referred to as the “Bring Your Own Tampon (BYOT) policy and it is a violation of human rights and equal protection” (2019, p. 371).

Ultimately, the environments (both physical and societal) that menstruators spend their time in can greatly impact how they manage and are affected by their menstruation. Despite the average adult spending one-third of their life at work (WHO, 1994), most countries and organizations lack any regulations related to MHM at the workplace. Yet, the limited research that does exist shows a link between poor MHM workplace standards and a multitude of negative outcomes related to productivity, confidence, fear, etc. Although limited in nature, the most abundant research linked to outcomes of workplace MHM include those showcasing the strength of the menstrual taboo and the negative perceptions of MHM in work settings. It is widely reported that menstruators feel the need to hide their menstrual products in the workplace, especially from men (Johnson, 2019; Segran, 2016; Mac Court, 2019). One study by Developing People Globally (DPG) in the UK of 2,000 menstruators shows that 74% feel they must hide their menstrual products while at work (Mac Court, 2019). While hiding products is a behavior that menstruators are often taught from a young age (Brantelid, Nilvér & Alehagen, 2014), the reactions that many receive in response to MHM at the workplace (and elsewhere) is likely to also be a reason people want to keep their MHM practices secret. The DPG study shows that, not at all dissimilar from anecdotal evidence widely available, many comments made about menstruators in their place of work can be very negative. Menstruators report colleagues saying things such as ‘it’s because she’s on the rag’ or ‘it’s just an excuse to act like a bitch’ (Mac Court, 2019, para. 10). However, some of the negative experiences menstruators face at the workplace are not as obvious. One study found the presence of an unconscious bias after people were made aware of another’s state of menstruation in a workplace setting (Roberts et al., 2002). Observers viewed women who “accidentally” dropped a tampon (versus a hairclip) on the floor as less competent and less likeable and they distanced themselves further from such women (Robert et al., 2002 as cited in Johnson, 2019).

When these are the outcomes of MHM at the workplace, it is no surprise that 60% feel unable to discuss menstruation at all with colleagues or managers (Mac Court, 2019) and that 18% have missed work due solely out of fear that someone might discover they are menstruating (Segran, 2016). Although many try to hide their menstruation from colleagues, the fact is that (unlike the

ability to withhold urination or defecation) it is impossible to stop menstrual flow and many find themselves having period emergencies at the workplace (Sommer et al., 2016). Research from Free the Tampon Foundation in the United States shows that 86% of people have experienced period emergencies by having started their period unexpectedly while in public without the materials they needed (2013). The same research shows that when caught off-guard, menstruators are forced to act immediately to solve the problem, with 79% “MacGyvering” a temporary product out of toilet paper or another material, 62% going to a store to buy supplies, 53% asking another woman for a product and 34% going home to get supplies (Free the Tampon, 2013). While the emotional and psychological associations with unexpectedly starting one’s period such as correlated negative feelings of embarrassment, annoyance, or anxiousness have been proven through existing studies such as Free the Tampon’s, other impacts of poor MHM standards at the workplace such as that on productivity, are largely missing in the current literature.

To the author’s knowledge, there is no existing literature measuring improved MHM outcomes in workplace settings in Switzerland. Yet, as Sommer et al. note, there does exist a global need for enhanced advocacy “about the essential importance of providing improved water, sanitation and hygiene (WASH) workplace standards” (2016, p. 4), which the author hopes to do through this work. The next section will investigate the role that the Agenda 2030 plays to improve global advocacy on the topic.

2.2 The Role of the SDGs in Menstrual Health Management

As all of the preceding information showcases, it is undeniable that menstruation and adequate MHM must be taken into account in order to achieve greater gender parity and better working environments for females. Yet, the holistic and far-reaching nature of MHM affects much more than gender parity. MHM is situated at an intersectional matrix that is highly impacted and should be viewed using a human rights framework lens by considering related components such as education, environment, religion, culture, work and policy (Menstrual Health Hub, 2019). However, menstruation management can also impact many other areas. These include areas such

as health, education, environmental sustainability, poverty, human rights and work, to name a select few.

When the Millennium Development Goals (MDGs), a set of guiding principles on policy for development cooperation that were in place from 1990-2015 and that served as the precursor to the SDGs were released, there was some concern over the lack of mention of menstruation. In particular, the lack of reference to menstruation seemed especially relevant to the MDGs that would be impacted by MHM practices (whether good or bad), including: MDG 2: Achieve universal primary education; MDG 3: Promote gender equality and empower women; MDG 5: Reduce maternal mortality by three-quarters; MDG 7: Ensure environmental sustainability; and, MDG 8: Develop a global partnership for development (Tjon A Ten, 2007). Furthermore, according to Dr. Varina Tjon A Ten from the IRC, “the most important conclusion to be drawn [from the missing link to menstruation] is that there is a lack of courage and (political) will to acknowledge menstrual hygiene” (2007, p. 5). After the MDGs were not fully successful and when the successive SDGs were developed, menstruation was once again not considered. In fact, there is a lack of mention to menstruation in all of the 169 targets and 244 indicators of the Agenda 2030. While menstruation-related initiatives are largely considered to fall within the water, sanitation and hygiene (WASH) agenda under the umbrella of SDG 6, which calls for universal and equitable access to safe, affordable drinking water, as well as adequate and equitable sanitation and hygiene for all by 2030, the isolation of said initiatives to this single development sector can be problematic. The SDGs serve to be interconnected, crosscutting and holistic, yet “the [WASH] sector alone cannot address the gender-based discrimination and stigma issues that continue to perpetuate” (Lieberman, 2018, para. 10).

Although there is no specific SDG goal or indicator that explicitly mentions MHM, it is clear that menstruation matters to many goals, and most closely to the following: SDG 1: No Poverty; SDG 3: Good health and well-being; SDG 4: Quality education; SDG 5: Gender equality; SDG 6: Clean water and sanitation; SDG 8: Decent work and economic growth; SDG 10: Reduced Inequalities; and, SDG 12: Responsible consumption and production. There are additional

individual SDG targets that link to menstruation, which have been overviewed in Appendix I. While menstruation is not explicitly incorporated into the SDG targets and indicators, in recent years the topic has received attention as a popular focus area within UN organizations, NGOs and governments around the world. Menstruation has been highlighted in several recent events including, but not limited to, the Commission on the Status of Women in March 2018 (UN Women, 2018), the 2018 High Level Political Forum that saw several side events focused on menstruation (Lieberman, 2018) and World Water Week 2019 (SIWI World Water Week, 2019). Furthermore, the last decade has seen protests for successful elimination of the ‘tampon tax’ in countries such as Canada, France, India, the UK, Australia and most recently, Germany. This momentum for advancing menstruation at a global context is proof that the topic is beginning to be conceptualized as more than just a WASH sub-sectoral problem. This conceptualization and integration of MHM into other arenas proves positive for the SDGs, as the International Women’s Health Coalition notes, ultimately “without addressing these linkages, governments’ efforts to achieve the SDGs will fall short” (Kane-Hartnett, 2018, para. 10).

2.3 The Geneus Innovation Process

Using tools relating to foundational entrepreneurial and business concepts, the main goals of the Geneus process are to find the service or product-market fit and to de-risk the business model of program participants as much as possible. The idea is that throughout an iterative process of assumption formulation and testing, entrepreneurs will make key pivoting decisions on their product in an attempt to reach an ultimate product-market fit. Lean business tools such as those developed by global entrepreneurial and business experts including Steve Blank, Eric Ries, Alex Osterwalder, Yves Pigneur, Marc Gruber and Sharon Tal serve as key learning aids within the Geneus process.

Of further importance, is the timeline of these decisions. With 9 out of 10 startups failing (Griffith, 2014) and CB Insights research suggesting the most common reason for failure as a lack of market need (2019), the reason cited by 42% of post-mortem startups, Geneus seeks to establish and verify business model assumptions as early as possible. Project innovators are

encouraged to repeatedly pitch their project and gain feedback from peers, pros and customers in the reiterative process that targets project improvement, working towards de-risking and understanding of the product market fit and need. While each project and innovation will progress distinctly, Geneus exists to support these journeys from idea to innovation to the best of their ability in a multitude of ways. Beyond the individualized coaching and mentorship of business models provided by Geneus, their innovation process simultaneously offers collaborative office space in the heart of the biotech community of Geneva, targeted community networking in the local life-science and innovation scenes and learning opportunities from industry experts to maximize project growth over time. The full Geneus Initiation process (Figure 2.1) involves the formulation of the Value Proposition Canvas (VPC), the Executive Pitch, the Minimum Viable Presentation, the Customer Feedback and the 12-slide deck, which is largely constructed from the Business Model Canvas (BMC) and ultimately results in a graduation from the Geneus program and a potential startup set up.

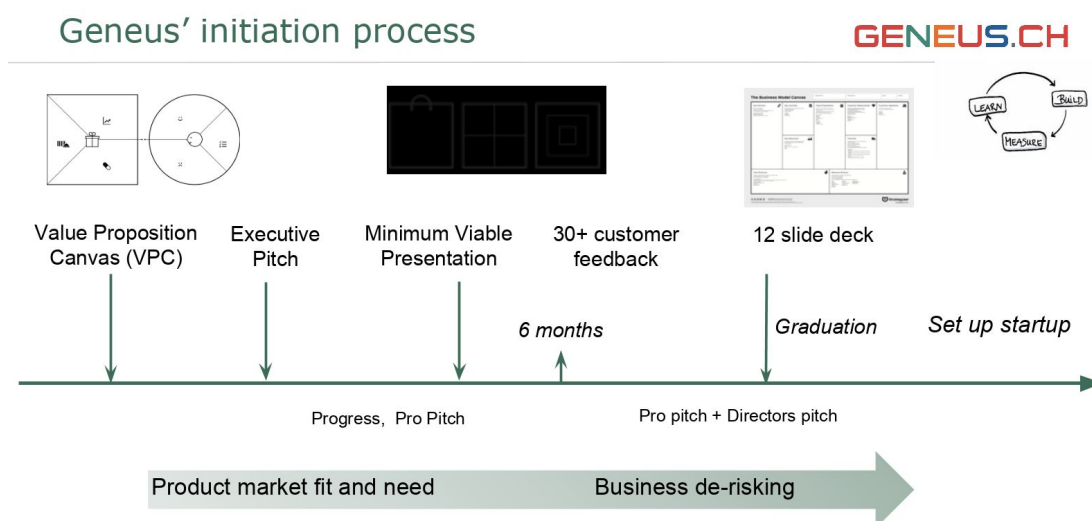


Figure 2.1: Geneus' Initiation Process

The first tool illustrated in Geneus' timeline is the VPC, which was developed by Alex Osterwalder as a framework to ensure product-market fit. The VPC greatly helps with business model development as it allows for a deeper understanding of the customers, their needs and how they can be better and more successfully attracted and retained. The VPC takes a deeper look at

two specific areas, namely ‘customer segments’ and ‘value propositions’ to ensure that the product or service being developed is positioned to meet true customer needs. The VPC includes two blocks (the company value proposition and the customer profile), which each include three additional subsections as can be seen on the template below (Figure 2.2).

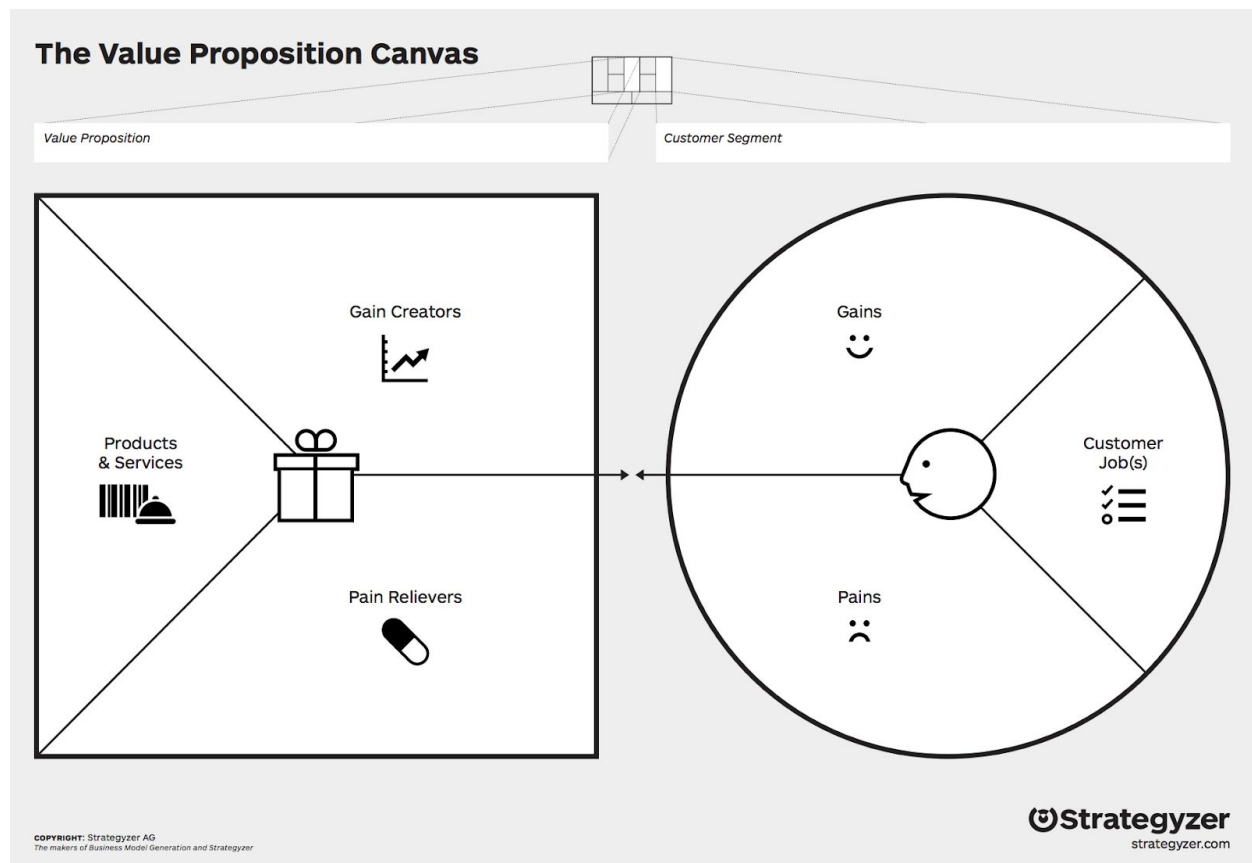


Figure 2.2: Blank Value Proposition Canvas (Strategyzer, 2019)

The ultimate goal of the VPC is to create “customer fit”, which is found when the products and services being offered match the jobs, pains and gains of the customers. Additionally, as each “distinct customer segment has different jobs, pains, and gains” it is important to create different canvases for each type of customer (Garner, 2015, para. 6). The output of the VPC is a set of hypotheses or assumptions that can later be tested through customer feedback and market research.

The next tool widely used in the Geneus innovation process is the Executive Pitch, which can be identified as a one-page visual representation of the traditional Elevator Pitch. With the Executive Pitch, just like with the VPC, various pitches are made for each customer segment so that certain points of interest are expressed accordingly. These can include things such as the opportunity, the market, the product or service, the unique selling point, any technology or intellectual property associated with the product or service and more about the company and team. Additionally, more about the financial opportunity or the financing and use of funds can be included for pitches that will be presented to investors. While the Executive Pitch can include a mix of those items, depending on the product or service being offered and who the entrepreneur is pitching to, the simpler Elevator Pitch it is built upon is more straightforward and incorporates the varying segments of the Value Proposition Canvas. Figure 2.3 shows the template recommended by Geneus and Fongit, which is based on the Strategyzer tools popularized by Osterwalder. Just like all other tools recommended by Geneus, the process of formulating the Executive and Elevator Pitches should be iterative and evolve over time.

Our _____ help(s) _____

who want to _____

by _____ and _____

(unlike _____)

Figure 2.3: Elevator Pitch Ad Lib (Strategyzer, 2019)

Once the idea of the project is clearly formulated, entrepreneurs are then encouraged to begin building their Minimum Viable Product (MVP). The MVP is a tool that is part of the “build” step in the build-measure-learn tool, a business development method used within the Lean Process. As Steve Blank describes it, the MVP, “is the simplest thing that you can show to customers *to get the most learning at that point in time*” (Blank, 2015, para. 7). While the MVP could be a

presentation or a product, the goal is that as more is learned, the MVP will continue to develop from low-fidelity, or “simple and low-tech concepts”, to higher-fidelity prototypes that are “highly functional and interactive” (Esposito, 2018, para. 3-4). The two main inquiries one is trying to answer through a low-fidelity MVP are the following: (1) is the customer problem or need understood, and (2) do the potential customers care about this need, or in other words, is it an urgent need (Blank and Dorf, 2012).

Once assumptions are made to the above questions and innovators have some sort of MVP to show potential customers, albeit basic, they can then begin to gather customer feedback, the next recommended step from Geneus. Customer Feedback can come from direct customers or indirect customers such as users, prescribers, deciders, payers or key opinion leaders (KOLs) and Geneus recommends collecting a minimum of 30 feedback points. The first step in the process of customer feedback is to understand what learning objectives are present. Many of the learning objectives will be to test assumptions formulated during the VPC, Executive Pitch and MVP creation. One tool Geneus recommends to its resident innovators to help with the Customer Feedback process specifically is Javelin, a software platform that helps innovators design targeted interview questions for their market research, among other things. Once the value is clearly established, it is the key moment to refine the value proposition and achieve business model fit (Geneus, 2019). This can include steps such as defining the market access strategy and who early adopters would be, as well as optimizing the business model or design of the product or service.

The final tool recommended by Geneus, the 12-slide pitch deck serves as a summary of the innovation that incorporates all of the data points formulated using the previous tools in a presentation targeted at investors or potential customers. It especially builds upon the Business Canvas Model (BMC), a tool that Geneus incorporates iteratively throughout their innovation timeline. The BMC (see Figure 2.4) is a tool that was developed by Alex Osterwalder with Yves Pigneur in their 2010 book and it served as an elaboration on concepts first proposed by Osterwalder in his earlier thesis work. The BMC’s unique selling point is that it offers an

organized way to map out, visualize and communicate the story of a business model. Since its introduction, the tool has been popularized and adopted by many entrepreneurial and business experts. The nine boxes that make up the BMC are the following: Value Proposition, Key Activities, Key Resources, Customer Segments, Customer Relationships, Channels, Key Partners, Cost Structure and Revenue Streams.

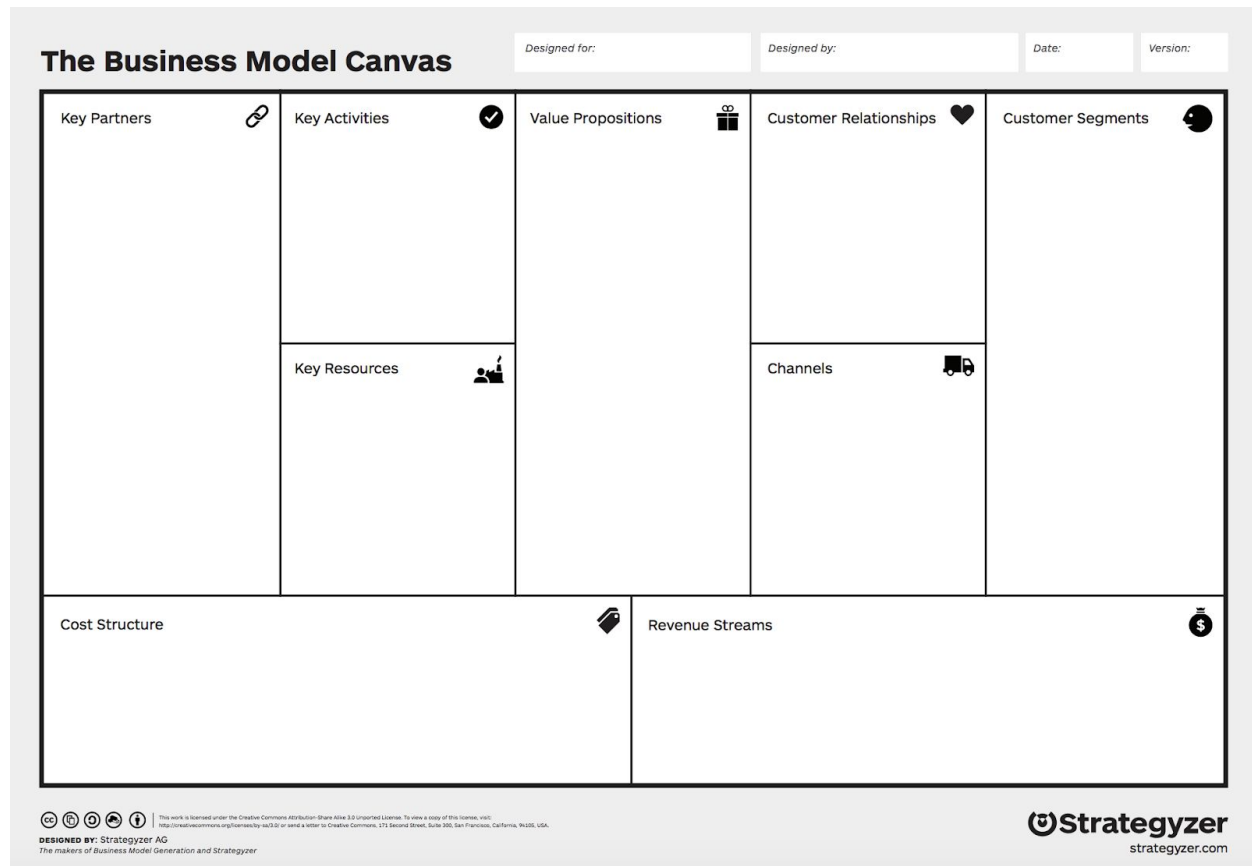


Figure 2.4: Business Model Canvas, Strategyzer (2019)

While the 12-slide pitch deck incorporates and builds upon the BMC and other innovation tools, it extends further to encompass a total of 12 key areas which include the: (1) executive summary, (2) problem/ need/ opportunity, (3) solution, (4), underlying magic (unique selling points and unfair advantages are explained here), (5) market (size, potential, segmentation), (6) competition, (7) value chain & business model (including a deeper look at customers, KOLs and use cases), (8) implementation roadmap (achievements, milestones and next steps are included here), (9)

introduction to the team, boards and support network, (10) metrics and financial overview, (11) financial offering (with information on use of funds, sources and exit strategies) and (12) conclusion and call to action. While this pitch deck is a tool that Geneus expects to be polished by the time innovators leave their support program, it is continuously improved through an iterative process like all of the other tools, that sees the introduction to a 12-slide pitch format with ample opportunities for peer and pro pitches presented by Geneus throughout the initiation process.

In short, these are the main tools utilized during the Geneus innovation process to propel innovation business model designs forward and the general timeline of which they are followed. The following chapter will showcase a small section of Fem.Friendly's history and how the Geneus tools were utilized specifically with Fem.Friendly to establish the thesis hypotheses and assumptions.

3 FEM.FRIENDLY PROJECT

This chapter will introduce Fem.Friendly by first looking at the history of the project and some of the previously collected data points to show the evolution of the project and how it has transformed to be in its current state. The Geneus innovation process will then be expanded upon to look at the business model of Fem.Friendly in depth and see how the hypotheses and related assumptions were formulated during the internship period. The assumptions presented at the end of this chapter were the basis for the pilot data collection and will be discussed further after results are presented later in the paper.

3.1 Fem.Friendly History

The road to the current state of Fem.Friendly has been a continuously developing one and it is therefore important to briefly introduce the history of Fem.Friendly and how it arrived to where it is today. The project began in October of 2017 as a result of the effort to solve real world problems as part of a master workshop class on Measuring and Predicting Sustainability. During this early research stage of Fem.Friendly, the working group identified that data on MHM was in general gravely lacking. Speaking with industry experts from organizations such as IRISE International, Uganda For Her, WASH United, FSG Consulting and the Global Humanitarian Lab, the project scope was initially narrowed down to focus on demonstrating the lack of sufficient MHM environments in toilet areas by collecting data on toilet facilities via a crowdsourced-based platform. A Fem.Friendly survey was created to map global toilet facilities via EpiCollect5, a free mobile-data gathering platform that allows anyone to create surveys and easily collect responses (both online and offline). While this survey is still open for data collection, the majority of the geolocalized toilets were mapped between December 2017 (when the survey was initiated) and July 2018. The survey included a variety of questions seeking to map each location and gather a sense of whether the location is “Fem.Friendly” by asking about the important characteristics that a female needs and should have access to when menstruating, such as water, soap, privacy, menstrual products, etc.¹

¹ This source is unpublished open-source raw data and is available to view at <https://five.epicollect.net/project/femfriendly>

After months of data collection, there was one particular point of interest evident from the dataset that brought Fem.Friendly to a pivoting point. While Swiss toilets are consistently some of the highest rated and best equipped with things such as toilet paper or soap, they are almost never supplied with menstrual products. Furthermore, collected data showed that there exists a large difference between accessibility of menstrual products from one “more developed” country to the next. In total, approximately 36% toilets mapped in the United States showed product access versus 40% in Ireland and 14% in France, while only around 1.3% (2 out of 157) were stocked with products in Switzerland.² An overview of the global data collected on product accessibility is seen in the map below with grey representing free products in toilets, pink representing paid products in toilets and yellow representing no product availability.



Figure 3.1: Toilets with Menstrual Products (Fem.Friendly & EpiCollect5, n.d.)

While the data collected in this survey only represents a small sample of each country’s toilets, it serves to give a general idea of the larger ecosystem including a total of 368 mapped toilets across 22 countries. The striking visualization of the lack of menstrual products in Swiss toilets highlights what many menstruators notice daily in their toilet use. Furthermore, as mentioned, it

² This source is unpublished open-source raw data and is available to view at <https://five.epicollect.net/project/femfriendly>

served as a key pivoting point for Fem.Friendly. From this point, research shifted primarily towards developing a viable business model that could bring greater menstrual product accessibility within Swiss toilets. Research continued with Fem.Friendly through the 2018 SDG Summer School, an intensive 8-week program of the Geneva Tsinghua Initiative, in partnership with Be He@lthy, Be Mobile, a joint program between the International Telecommunications Union (ITU) and the World Health Organization (WHO). The final two weeks of the summer school based at Tsinghua University in Shenzhen and Beijing, China were especially fruitful for the progression of Fem.Friendly. Being physically able to visit product manufacturers helped the author to envision the prospect of Fem.Friendly transitioning from idea to startup to viable and scalable business model. Being professionally welcomed by the company CEO at the manufacturing headquarters to discuss the purchase of organic products brought the author greater confidence to present the project as a serious business opportunity. Seeing Fem.Friendly and the team being welcomed where other already existing product companies also began a similar journey sparked a “light at the end of the tunnel” moment for work that had been largely theoretical to date. Furthermore, the author was able to conduct surveys investigating period emergencies and pitch Fem.Friendly to a diversified, mostly Chinese audience to develop a broader understanding of the shared cultural practices and environments surrounding MHM. This helped to gain a fresh perspective on how the service might look in a different environment outside of Switzerland.

After returning from China, Fem.Friendly work continued through the SDG Accelerator and within Geneus, serving as a working phase to better understand the problem and need (through surveys and interviews), the feedback on the project idea (through numerous pitches and brainstorming sessions) and the feasibility. One specific survey for Fem.Friendly created by the author and two colleagues which was distributed via social media channels and personal connections received 169 responses and led to additional important findings. Such findings include the fact that respondents in general use products at a ratio of 60% tampons to 40% pads, that one in five respondents said they do not always have the money they need to buy menstrual products, that nine in ten have had a prior period emergency, that around 75% of people have left

class or work to go to the store during a period emergency and that most people spend approximately 30 minutes dealing with their period emergency when they have one, among other findings.³

The outcome of this research phase was the focus of Fem.Friendly to build a B2B (business to business) business model targeting Swiss workplaces, schools and other businesses to provide free products to end users such as employees, students or customers. It was evident that to fully understand and have hopes of launching Fem.Friendly as a business, there needed to be a better understanding of the direct customers, the market and the need. This is when the author's SDG project internship was formed with Geneus and the innovation process provided a better understanding of the aforementioned business tools and how to utilize them to improve the Fem.Friendly service design and de-risk the business model. The section that follows highlights the work completed in an organizational manner during the internship phase with Geneus that serves as the basis for the assumptions that follow.

3.2 Fem.Friendly through the Geneus Lens

This section serves to outline some of the key outputs of the internship at Geneus using the Geneus innovation process. The primary outputs highlighted within this section include: the VPC and Elevator Pitches (for select customer segments), the Executive Pitch, the MVP and the BMC. Additional tools such as the influence, stakeholder and competition maps were also utilized to assist in the formulation of the business model and the value chain. It is important to note that everything included within these outputs still serve only as assumptions or hypotheses until they are proven to be validated. Therefore, this section will conclude with a structured overview of the assumptions or hypotheses formulated throughout the section, which will be analyzed in more detail later in the paper using the collected customer feedback points.

³ This source is unpublished raw data. For any inquiries about the survey results, please contact the author.

3.2.1 Value Proposition Canvas, Elevator and Executive Pitches

The VPCs that follow showcase a few potential customer segments including (1) schools, (2) international organizations/NGOs and an identified specific location, (3) the SDG Solution Space in Geneva. These VPCs were developed for the Fem.Friendly service from July to August 2019 during the Geneus internship using the most recent B2B business model concept.

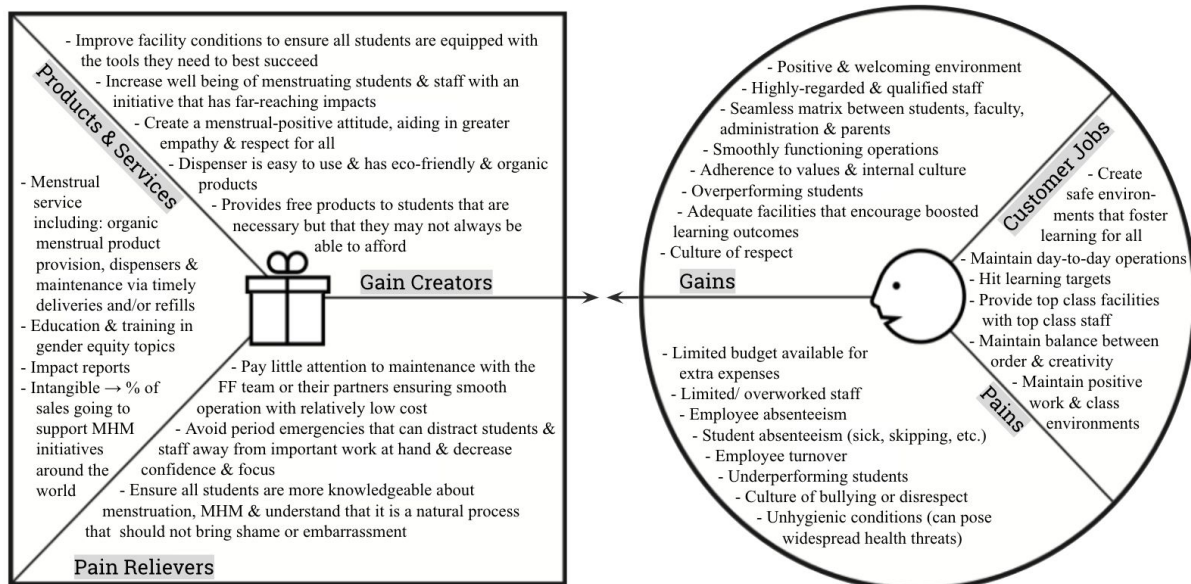


Figure 3.2: Fem.Friendly VPC - Schools

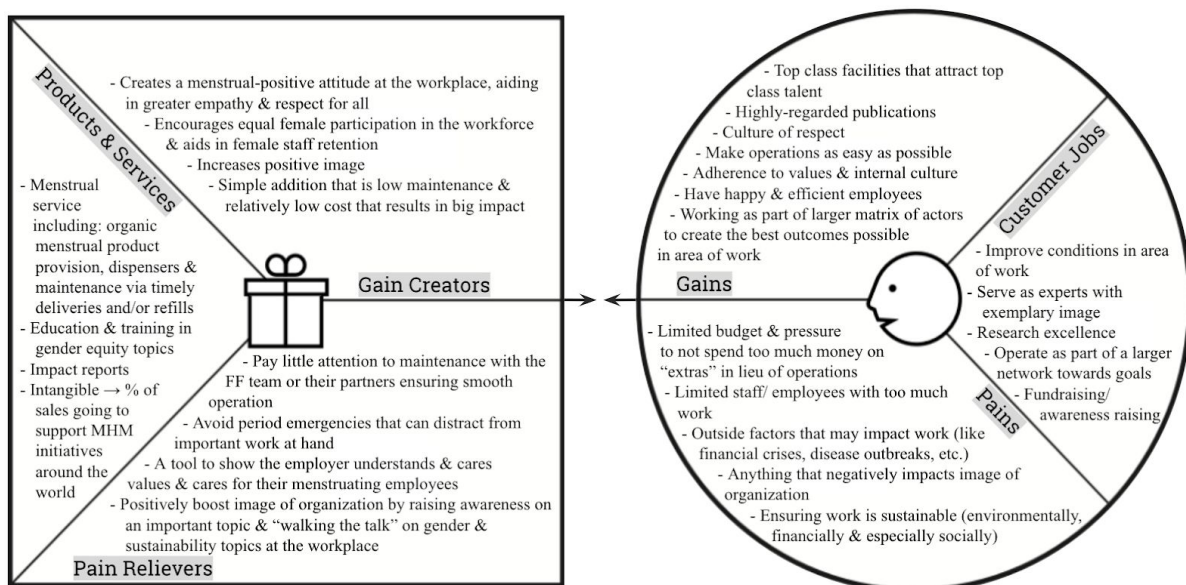


Figure 3.3: Fem.Friendly VPC - International Organizations/ NGOs

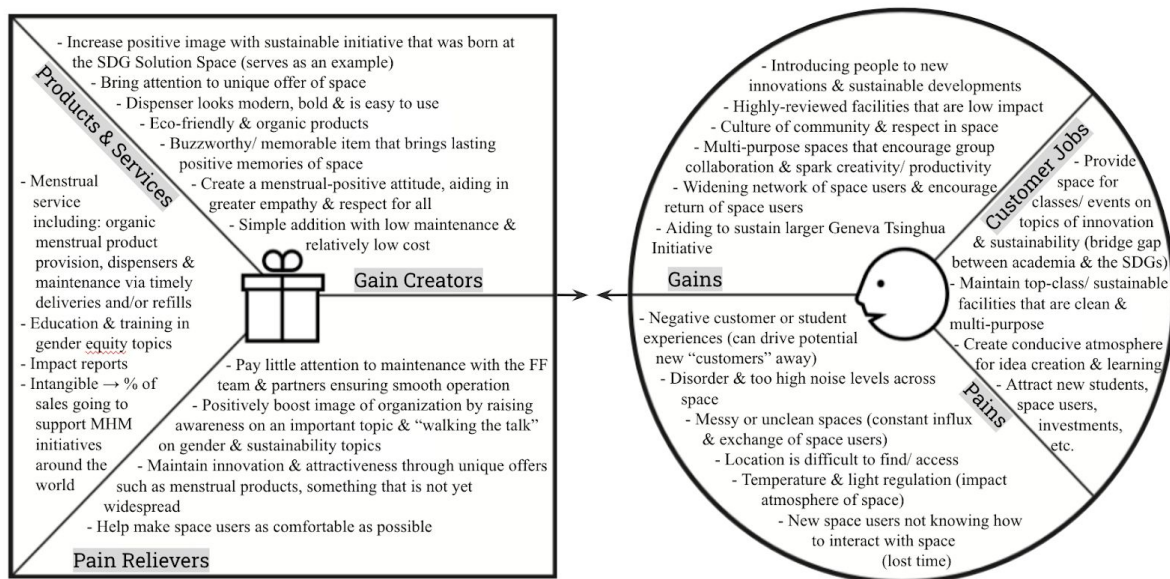


Figure 3.4: Fem.Friendly VPC - SDG Solution Space

As can be seen from the above VPCs, each customer segment brings a diverse set of unique jobs, gains and pains, which is why it is vital to hone in to each segment to ensure that the service that is being provided truly matches with the jobs and pain points that customers face. When targeting a specific customer within a customer segment, this tool can be taken one step further by making a VPC that is unique to that business or organization in order to further narrow down the focus. For example, while in general the above VPC for schools will be useful when considering all schools, the specific jobs, pains and gains will vary greatly within schools when considering different demographics such as private or public. The table that follows shows a larger series of customer segment groups and the elevator pitches that target their unique jobs.

Table 3.1: Fem.Friendly Elevator Pitches by Customer Segment

Customer Segment	Elevator Pitch
Schools	The Fem.Friendly menstrual coverage service helps schools ensure superb learning environments and outcomes. Through the provision of free, organic menstrual products and internal trainings, schools send a strong message that all

	students belong, no matter the time of the month. With period emergencies minimized student and staff focus can remain uninterrupted.
International Orgs/ NGOs	The Fem.Friendly menstrual coverage service helps international organizations who want to have top-notch working and research environments and project a positive image by increasing gender equity to attract and retain female talent and provide a concrete action to align with the SDGs.
SDG Solution Space	The Fem.Friendly menstrual coverage service helps the SDG Solution Space to have a first-class learning and event space and promote collaboration between academia and the SDGs by showcasing an innovative student project with real-world impact while showing space users they care about their needs.
Restaurants	The Fem.Friendly menstrual coverage service helps restaurants keep happy and returning customers and a nice atmosphere by allowing them to stand out from competition with unique services that leave lasting positive impressions on customers and ensure stellar hygienic standards.
Gyms	The Fem.Friendly menstrual coverage service helps gyms who want to provide a unique wellness experience by ensuring no customer need goes unmet and providing a product that meets high quality, safety and hygienic standards.
Co-Working Spaces	The Fem.Friendly menstrual coverage service helps co-working spaces who want to attract and retain new users and promote productivity through fully-serviced spaces. Via the offering of the Fem.Friendly service, they can expect to have an innovative edge above competitors and better show all clients they understand their daily needs while promoting prolonged comfortability for users while they work.

Although similar in nature and expression, each of the above pitches slightly differs to offer a more targeted message to the customer segment it is designed for. While short, the elevator pitch serves as a synthesis of the work behind each VPC, painting a larger picture of the needs of each customer. The same is true for the more visual representation of the elevator pitch, the Executive Pitch.



Fem.Friendly  **A personalized menstrual product subscription for Swiss businesses and schools**

We provide dispensers that give free organic tampons and pads to employees and students. Our startup team is part of the 90% of females who have had period emergencies at school and work in Switzerland and our goal is to change this number.

EXPECTED BENEFITS:

1. Increased employee satisfaction and retention with innovative benefits
2. Better ability to meet gender equality and sustainability standards
3. Boosted productivity with healthy employees who do not have to leave the workplace in a period emergency

Developed at the SDG Solution Space and supported by:

GENEUS.CH INNOVATION INITIATOR  **GENEVA TSINGHUA INITIATIVE** 

We are the future of gender-positive change in Switzerland and we want to help you to be so too!

www.femfriendly.com

Figure 3.5: Fem.Friendly General Executive Pitch

Just as with the VPC and Elevator Pitch, when going through the Geneus process, innovators will create several versions of the Executive pitch that they may utilize in different scenarios or to pitch to different audiences. Figure 3.5 is a general executive pitch that was formulated to pitch the Fem.Friendly business model to prospective customers in the business sector who employ people.

3.2.2 Minimum Viable Product

In an attempt to develop an MVP, the author and another team member first created Prototype 1 (see Figure 3.6). While this dispenser was used for beta testing in one location (the SDG Solution Space), the author was encouraged by Geneus to develop an even more minimal MVP. This MVP (Figure 3.7) allowed for quicker and cheaper testing of assumptions. The MVP of the Fem.Friendly dispenser is a simple box that was used to test the assumptions and gather customer and end user feedback during the pilot phase across three locations (to be discussed further in the following chapter). While the box itself did not offer any advertising nor separate compartments for the different types of products, this MVP did allow sufficient space for end

users to receive two types of products (tampons and pads) and some marketing material while maintaining an easy to install and remove structure that pleased space managers who were unsure about the length of their commitment at the start of the pilot.



Figure 3.6: Fem.Friendly Prototype 1



Figure 3.7: Fem.Friendly MVP

3.2.3 Business Model Canvas

Like the other tools, Geneus suggests innovators work with the BMC repeatedly as their ideas and innovations evolve. The drafts of the BMC will change over time as new learning opportunities and pivoting points are created for the project. The BMC highlighted below corresponds to the current startup trajectory of Fem.Friendly and is the third version of the tool, which shifted as the project did over the time period from March 2018 to August 2019.

Fem.Friendly Business Model Canvas: Version 3				
Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
<ul style="list-style-type: none">- Organyc: current product supplier (10,000 free products including delivery; alternative: manufacturer for own white label brand)- BioPartners: intermediary between Organyc & Fem.Friendly- FabLab: dispenser help- Trotec: FabLab materials- Print shops: stickers/ info material- Industry experts: gender & diversity and HR professionals- Cleaning companies?- Shipping companies?	<ul style="list-style-type: none">- Provide/ maintain timely product deliveries via dispenser- Provide comprehensive "Fem.Friendly kits"- Maintain website with map of locations- Future: gender trainings	<ul style="list-style-type: none">- Convenient, simple & innovative way for office company, school or any management to increase employee/ student/ customer satisfaction & show they care- Increased overall gender equity- Increased health & wellness for users- Helps to better meet sustainability standards- Projects a positive image- Provides top class facilities- Increased employee retention- Way to stand out	<ul style="list-style-type: none">- Direct customers: to view FF as efficient and able to bridge knowledge gap between personal topic in a professional setting- End users: to view FF as a trustworthy brand that is a "menstrual champion" in CH	Space/ toilet providers Examples: 1. Offices: international organizations, SMEs, large corporations 2. Schools: public/ private, primary, highschool, university 3. Wellness Centers: most luxurious, most convenient, etc. 4. Customer service: restaurants, co-working spaces, bars, etc. Other: Those with unsustainable business operations like tobacco companies, airport, etc., or alternatively those with very sustainable/ "cool" operations
Key Resources	Channels			
<ul style="list-style-type: none">- Physical: fablab, products, storage space- Intellectual: trademark- Human: people to sell, fill & restock- Financial: upfront \$ for products/dispensers, marketing, salaries, etc.	<ul style="list-style-type: none">- Direct customers: SEO, traditional media, LinkedIn, networking, website, phone calls- End users: social media, Google ads, referral program, website, newsletter, etc.			
Cost Structure		Revenue Streams		
Operations: <ul style="list-style-type: none">- Salaries - social impact business scheme- Marketing (ads, promotions, rollups, photos, other)- Administration (website, G Suite, storage and office space)- Stocking fees if working with third party- Shipping fees (can be built into pricing)	Hardware: <ul style="list-style-type: none">- Menstrual products- Dispenser materials- Packaging materials	<ul style="list-style-type: none">- Dispenser prices (list price & feature dependent for customizable options)- Subscription fees for products that are volume & customer segment depending pricing (business vs NGO vs school & # of users) for fixed subscriptions- Advertisements on dispensers- Event subscription (dispenser lending + fixed price on products)- Future: retail & online shop to sell products- Future: consultancy		

Figure 3.8: Fem.Friendly BMC 3 - August 2019

The final vision of the business model includes a shift to a focus on key customer segments such as office spaces and schools in order to change the status quo by bringing meaningful impact to end users in the spaces where people spend a majority of their time. Additionally, the operations scheme became clearer with the collaboration and support from Organ(y)c, a leading organic menstrual product supplier owned by Corman group and BioPartners, the leading wholesaler of Organ(y)c products in Switzerland. Leading up to the pilot phase, Organ(y)c donated a stock of tampons and pads to Fem.Friendly with the help of BioPartners. After these changes to the business model were made, Fem.Friendly began operating more as an early stage startup with assistance from Geneus to implement the pilot phase using the donated Organ(y)c products.

3.3 Assumptions

All of the preceding information presented through the business tools in this chapter serve as assumptions until they are further verified. The following chapter will showcase the pilot study methods and results that help to analyze the validity of the ten primary assumptions outlined

below. The assumptions formulated and targeted during the Geneus - Fem.Friendly testing process are all specific to the setting of Switzerland and employees and menstruators working at (or utilizing the spaces of) Swiss-based organizations. The ten assumptions below are organized into two categories: firstly, those relating to the problem and need (hypothesis 1) and secondly, those relating to the value creation market interest of the proposed service (hypothesis 2).

Primary assumptions relating to Hypothesis 1:

1. Menstruators in Switzerland are experiencing period emergencies while at work and the consequences are negative
2. Provision of Organ(y)c brand tampons and pads will meet workplace MHM needs and the ratio of use will be around 40% pads to 60% tampons
3. Menstrual products will be well-utilized when placed in toilet areas (including at least one MVP box accessible to all genders)

Primary assumptions relating to Hypothesis 2:

4. Period emergencies will be limited
5. Working environments, employers and employees will become more menstrual positive and knowledgeable on MHM
6. Providing menstrual products at the workplace shows a commitment to gender equality
7. Employee health and wellbeing outcomes will improve
8. Loss of productivity due to MHM will be lessened
9. Employees will feel better appreciated by and a greater satisfaction with their employers
10. The adoption of service is encouraged by organizations having related pain points and users recommending replication of business model

4 PILOT METHODS

This section serves to primarily highlight the data collection methods for the Fem.Friendly pilot that ran from October 22, 2019 to the week of December 20, 2019. However, in addition to the pilot data, there was a plenitude of auxiliary data collected through various methods from the start of Fem.Friendly (October 2017) to the present. During the Geneus innovation process, data collection methods were formulated and strategically structured to assist with assumption verification. A mixed-methods approach was taken to collect feedback from not only direct customers and indirect customers (end users) but also experts in innovation and gender, academia, fellow startups and the general public. The learning outcomes gathered from these experiences have been incorporated into the Fem.Friendly business model and project at large but are not discussed in detail here due to the limited thesis scope.

As mentioned above, the Fem.Friendly pilot ran from October 22, 2019 until the week of December 20, 2019. It consisted of the installation of the Fem.Friendly MVP -- a simple box providing tampons, pads and informational materials -- at three specific buildings in Geneva and Lausanne. There were a total of ten MVP boxes located at CBIP across seven floors, ten MVP boxes at EIP building C across four floors and 6 MVP boxes located at Terre des Hommes (Tdh) in Lausanne across two floors. The author worked with two specific contacts at the organizations to facilitate the process including Gaviota Motta, the Facility Manager for CBIP and EIP and Gergey Pasztor, the former Quality and Accountability Advisor at Tdh. Prior to installation, informal discussions took place with the contacts for each location to discuss things such as the need, the potential outcomes and the logistics of operation. At the initial install, MVP boxes were placed into all female and some mix-gendered toilet areas of the buildings and included Organ(y)c menstrual products consisting of 30 tampons and 48 pads, the informational leaflet for the tampons and an informational sheet for the Fem.Friendly project and pilot in both English and French (see Appendix II). To accompany the launch of the pilot, informational sheets on Fem.Friendly and links to the website were also sent by email and at Tdh, an informational brown bag lunch session took place to introduce the topic and the project to employees and offer a time to ask questions or express concerns. Data was collected by the author through a weekly

count and restock of each box to maintain an inventory of 48 tampons and 30 pads each. At every weekly restock, the type and number of products taken from each box was recorded in a database with the goal to measure trends over time of product use at each location. In addition to the weekly manual data collection of products, two surveys were released to all employees and students based at each location at the start and end of the pilot respectively. Survey links were sent via email to all who were considered to be a resident or employee in each space, regardless of gender. While no reward was offered for completing the survey, the accompanying email strongly suggested everyone to please complete the survey as a sort of exchange for the free Organ(y)c products being provided by Fem.Friendly.

The goals of the surveys were to gather a baseline of data regarding attitudes and practices towards gender equality as well as menstrual health practices at the workplace. Each survey was made available in both French and English and was composed by the author using Google Forms. All questions were available to skip in case respondents felt uncomfortable answering and answers were kept completely anonymous. Furthermore, due to conditional formatting, depending on the answer submitted in previous questions, each respondent may have received fewer or additional survey questions as they progressed through the survey. Most survey questions were closed-ended, asking respondents to choose from a select set of options (often including an “other” option in case necessary), such as questions that asked about types of menstrual products used by respondents, average amount of period emergencies per year at work or the ways in which respondents typically handle their period emergencies, to name only a few examples. “Other” answers submitted by survey respondents have been mostly excluded from these results as they were often explanations to the answers selected, or opinions given on the subject matter. There were additional Likert scale questions asking about opinions towards the Fem.Friendly service as well as health, wellbeing and gender equality at the workplace. Finally, the survey concluded with some final open-ended questions to gather additional qualitative data on general opinions, comments or suggestions in regard to Fem.Friendly and how to improve menstrual and gender equality standards and positivity in the workplace setting.

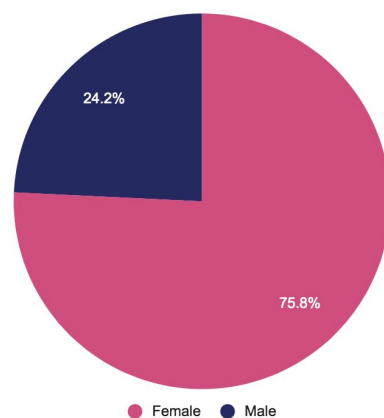
5 PILOT RESULTS

This chapter serves to visually highlight some of the data collected via the pilot entrance survey, the manual product count data and the final exit survey across all three pilot locations including CBIP, EIP and Tdh, Lausanne. Due to the extensiveness of the collected data and the similarities between the locations (all office spaces, excluding the SDG Solution Space within CBIP) posed against the concise nature of this thesis, data from the three locations has been aggregated to showcase compiled answers that include responses from all locations together and only the most relevant survey results have been included in this section. For clarity reasons, questions are numbered as they were presented within the surveys. The survey distributed at the start of the pilot in October will be referred to as Survey 1, while the survey distributed at the end of the pilot period in January will be referred to as Survey 2 from this point forward.

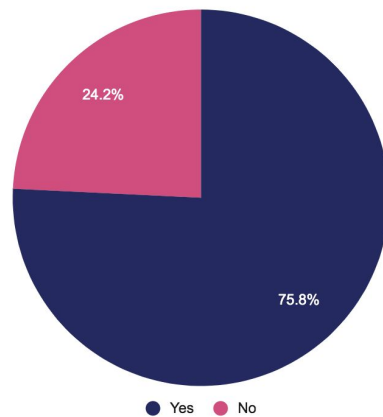
5.1 Survey 1

As previously noted, the data in this section is a mostly visual excerpt of an aggregated data set from the survey conducted by the author that was distributed in October 2019 to those working and based at the three pilot locations. A total of 99 people answered the survey including 38 respondents from CBIP, 26 respondents from EIP and 35 respondents from Tdh before it was closed. The survey included a total of 17 questions (3 of which were open-ended and are not presented here).

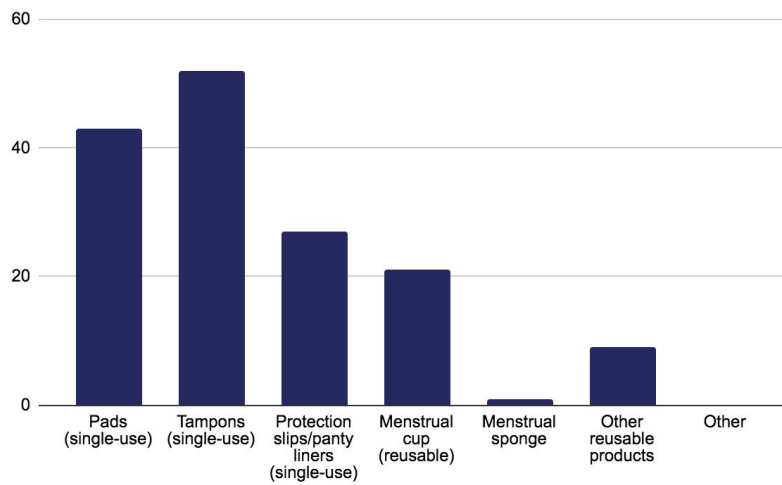
1. Currently how do you identify?



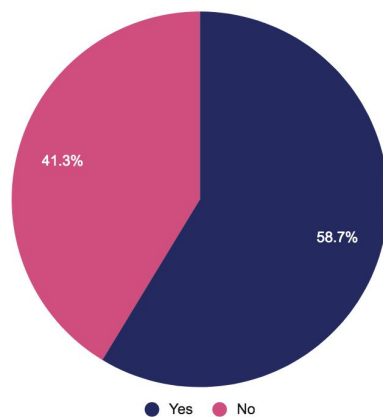
2. Have you ever previously had a menstrual cycle?



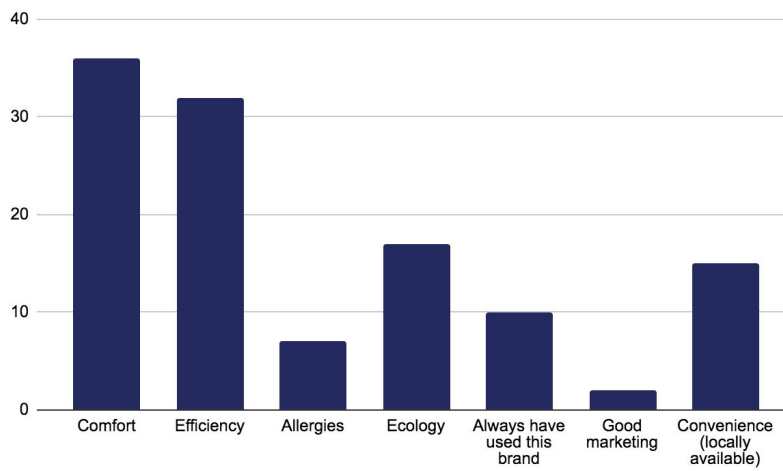
3. What types of products do you use to manage your periods? Select all that apply.



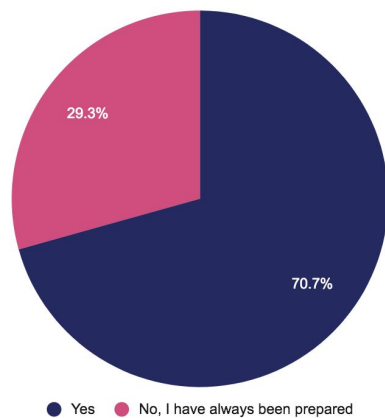
4. Are you particularly loyal to any certain brand of tampons and pads?



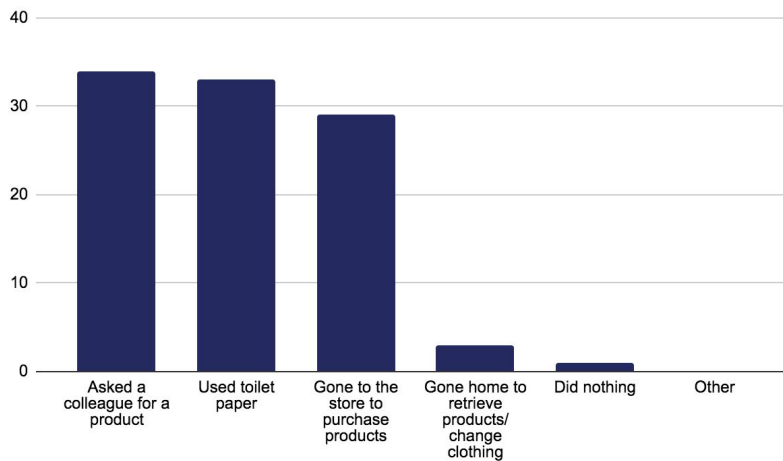
5. Why are you loyal to these brands?



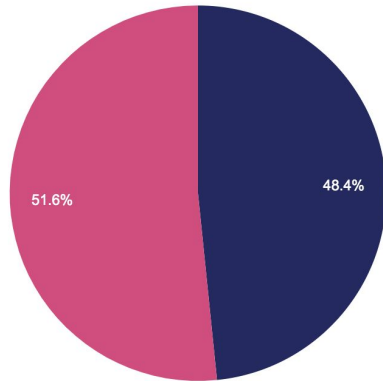
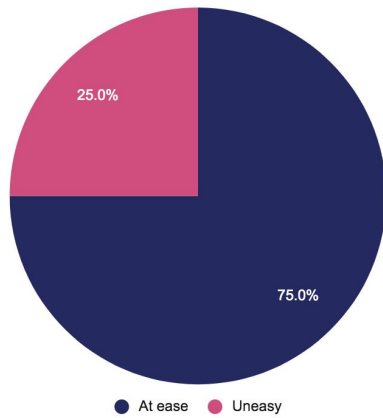
6. Have you previously needed a menstrual product when you did not have one while at work?



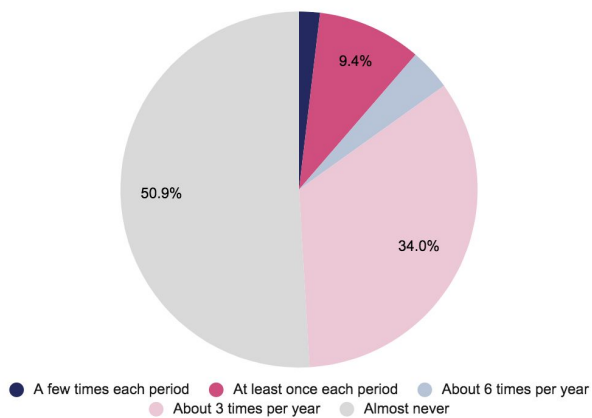
7. How have you handled previous work period emergencies? Select all that apply.



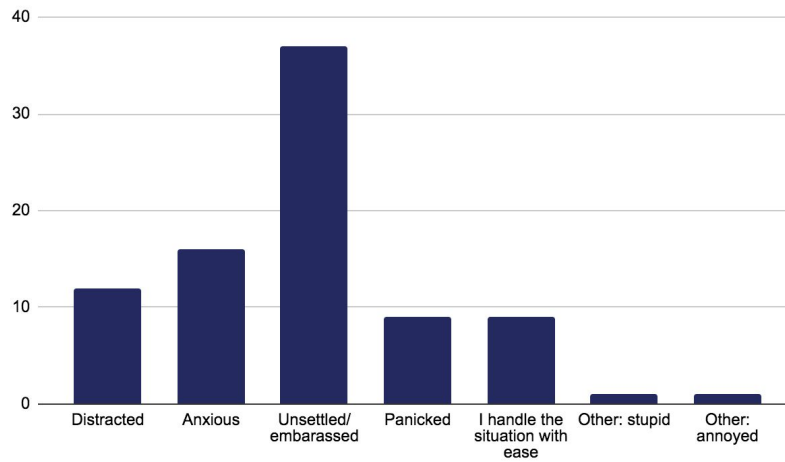
8. How would you feel going to the office pharmacy (or similar) to retrieve menstrual products during a period emergency? Select all that apply and use "Other" to add any additional comments.



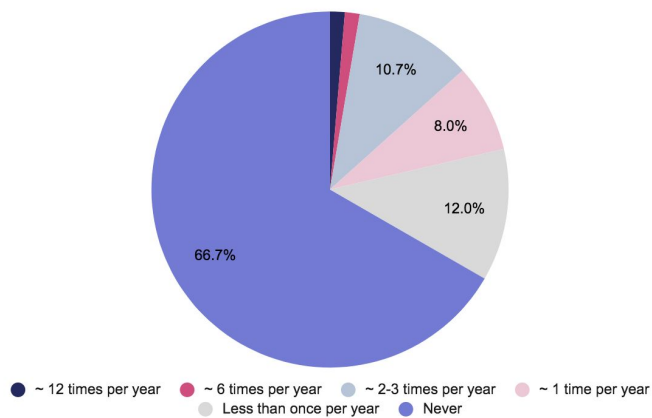
9. How often does it happen that you don't have your menstrual products when you need them while at work?



10. How did you feel when you didn't have your menstrual hygiene products with you when you needed them? Select all that apply and use "Other" for additional feelings.



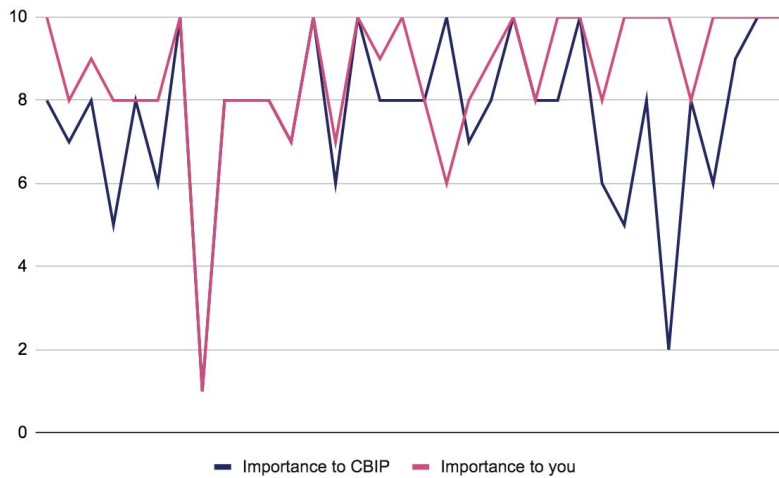
11. On average, how often (if ever) do you miss work because of your period?



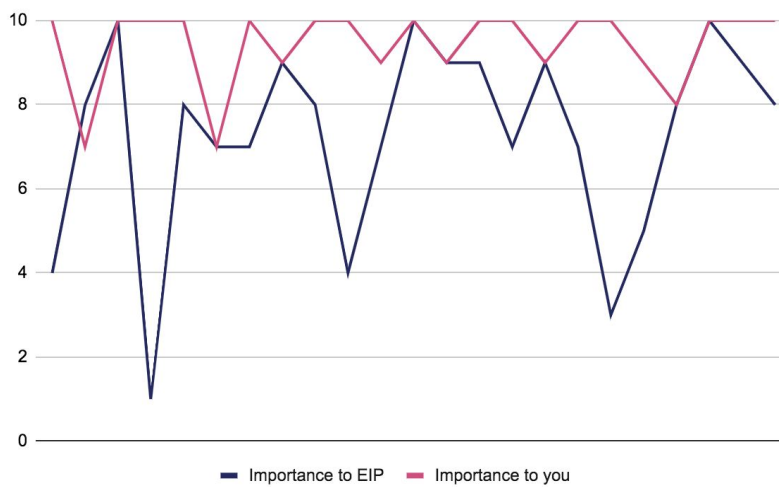
12. On a scale of 1-10, how important do you think gender equality is to CBIP / EIP / your employer (Tdh)?

13. On a scale of 1-10, how important is gender equality to you?

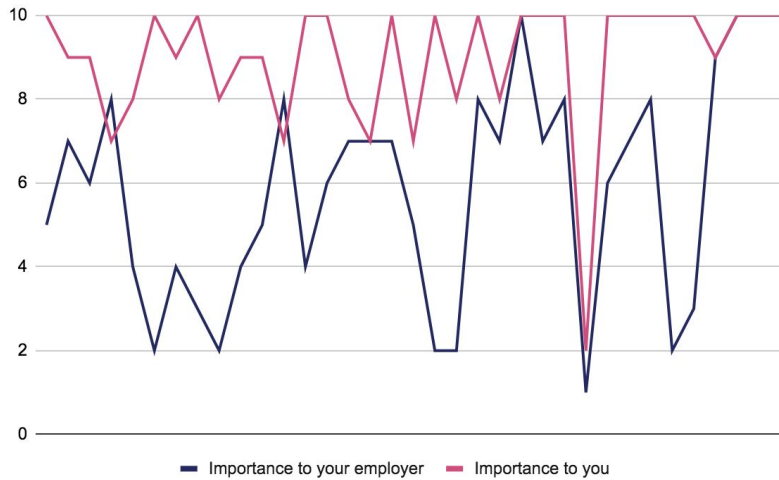
CBIP:



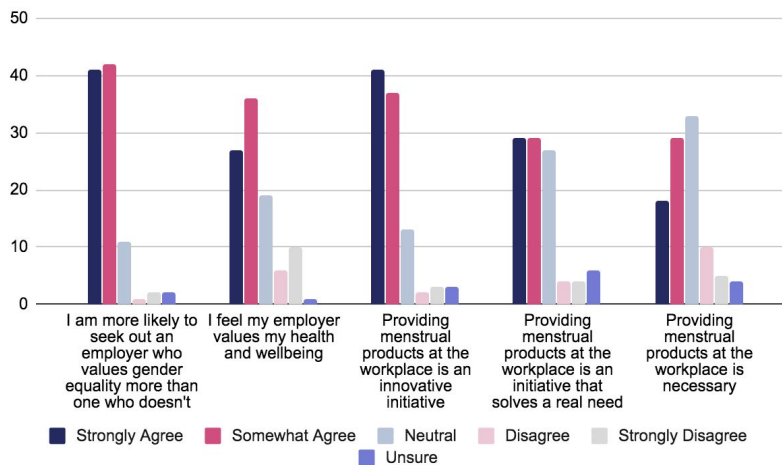
EIP:



TDH:



14. Please rate your agreement with the following:



5.2 Product Manual Data Collection

As previously described, between the release of the two surveys, the author kept a count of product use in each toilet of each pilot location while performing the weekly restock of products to monitor product use. The product count overview is presented in the table that follows.

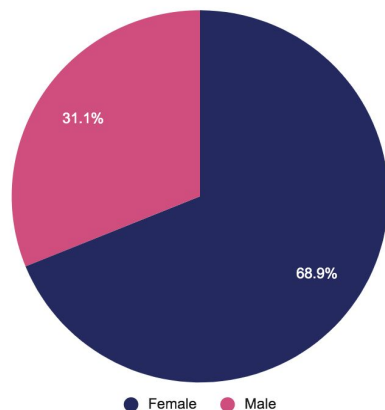
Table 5.1: Pilot Product Use Count

	CBIP			EIP			Tdh		
	Tampons	Pads	Total	Tampons	Pads	Total	Tampons	Pads	Total
Week 1: October 28	23	53	76	7	77	84	26	27	53
Week 2: November 4	29	44	73	26	26	52	27	28	55
Week 3: November 11	11	27	38	29	42	71	28	29	57
Week 4: November 18	8	18	26	11	40	51	29	30	59
Week 5: November 25	26	50	76	33	89	122	30	31	61
Week 6: December 2	21	43	64	10	83	93	31	32	63
Week 7: December 9	14	27	41	19	42	61	32	33	65
Week 8: December 16	20	36	56	44	61	105	33	34	67
Grand Total	152	298	450	179	460	639	236	244	480

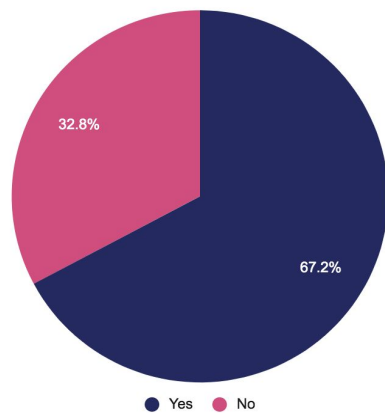
5.3 Survey 2

Just as with the first survey, the data in this section is a visual summary of an aggregated data set from a second pilot survey conducted by the author that was distributed in January 2020 to those working and based at the three pilot locations. A total of 61 people answered the survey including 17 from CBIP, 15 from EIP and 29 from Tdh. This final pilot survey was slightly longer than the first one distributed and included a total of 22 questions for CBIP and EIP participants (2 of which were open ended) and 25 questions for Tdh employees (3 of which were open-ended), which follow below with their corresponding results. The open-ended questions are not included here and one question was removed due to inconsistencies.

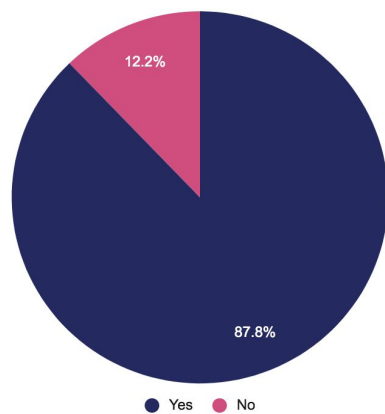
1. Currently how do you identify?



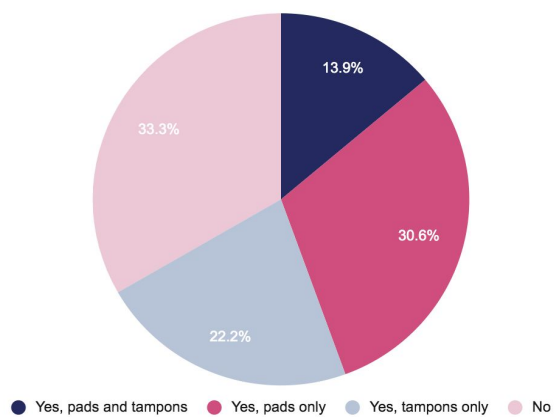
2. Have you ever previously had a menstrual cycle?



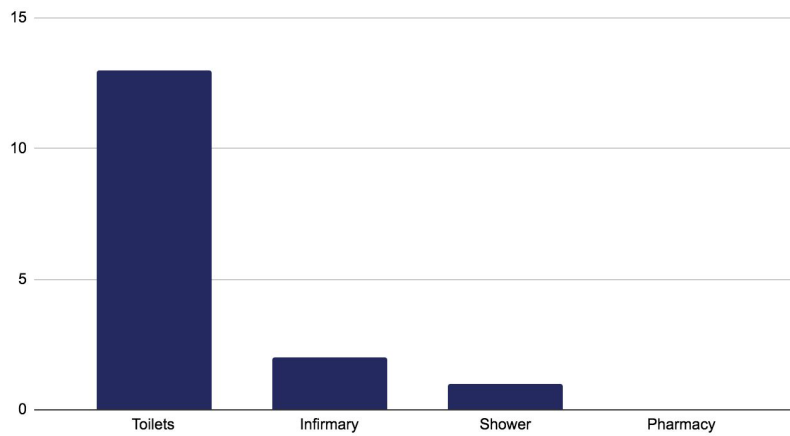
3. Did you have a menstrual cycle or spotting at any point during the menstrual product pilot from Fem.Friendly (October 22 - December 20, 2019)?



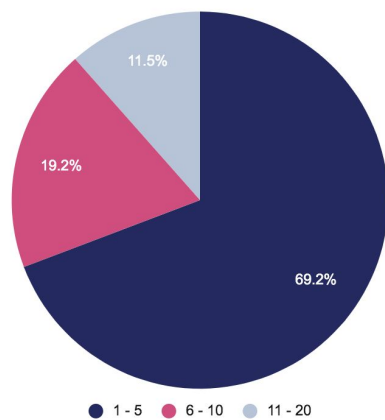
4. Did you use any Fem.Friendly-provided products (Organ(y)c brand) during this time?



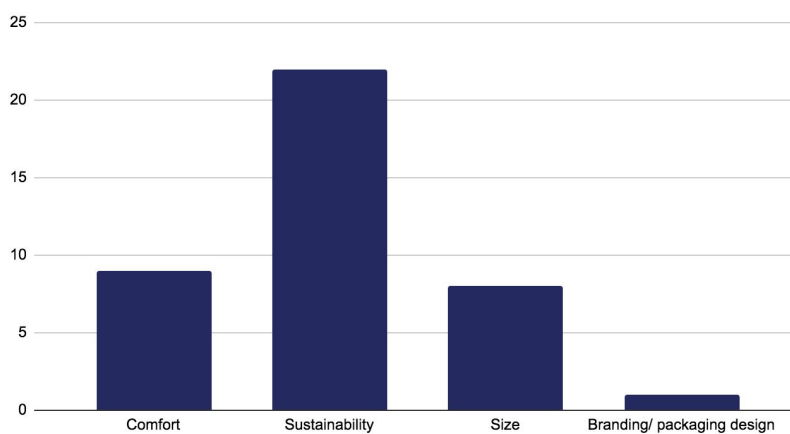
5. From where did you take products? *Only presented to Tdh location



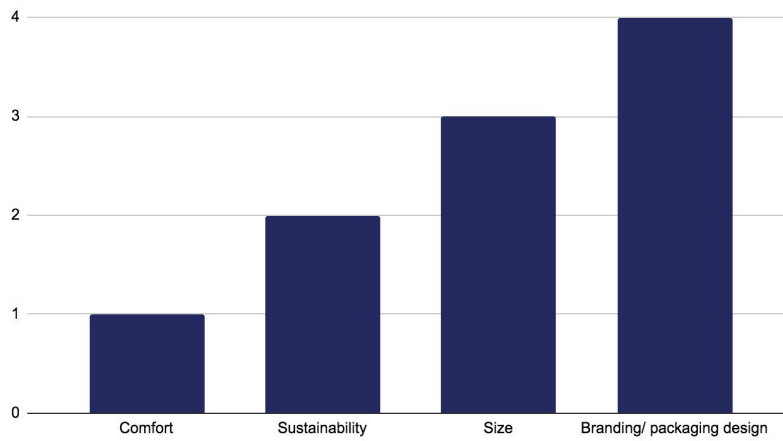
6. Please estimate the number of total products you took during this time.



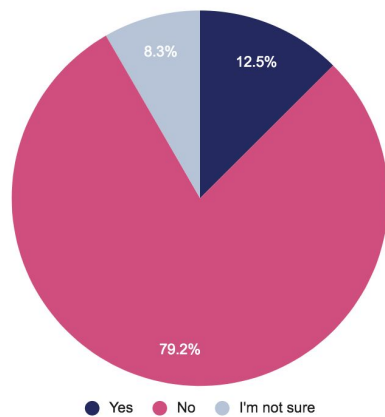
7. What do you like about the Organ(y)c products provided by Fem.Friendly? Select all that apply.



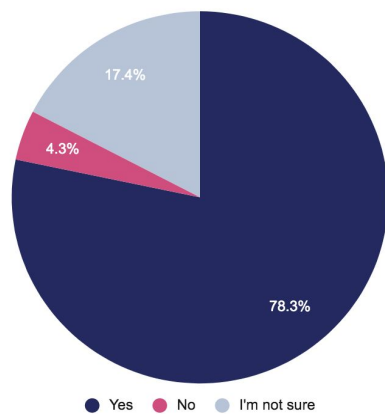
8. Is there something you do not like about the Organ(y)c products provided by Fem.Friendly?



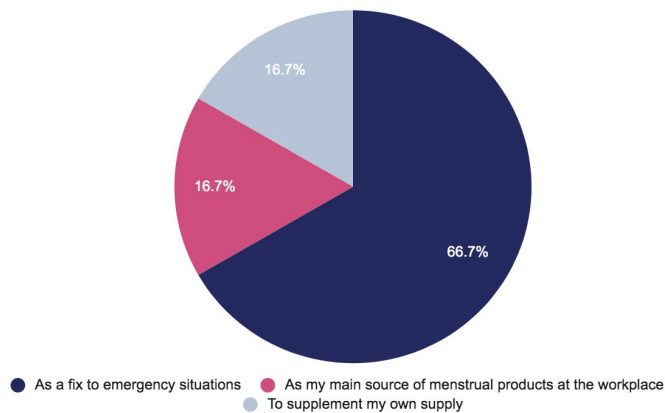
9. Have you previously used Organ(y)c products?



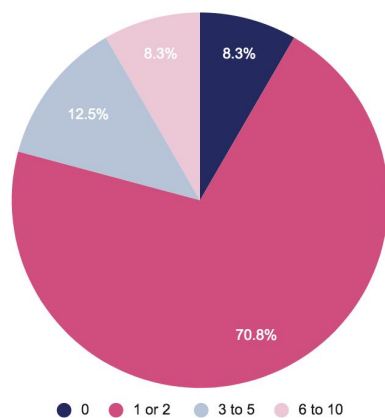
10. Would you choose to use Organ(y)c products again in the future based on your experience?



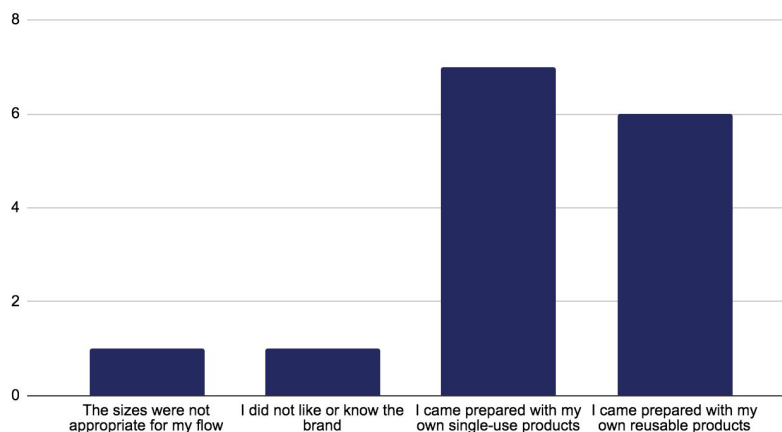
11. Please choose which is more accurate. I used Fem.Friendly-provided products:



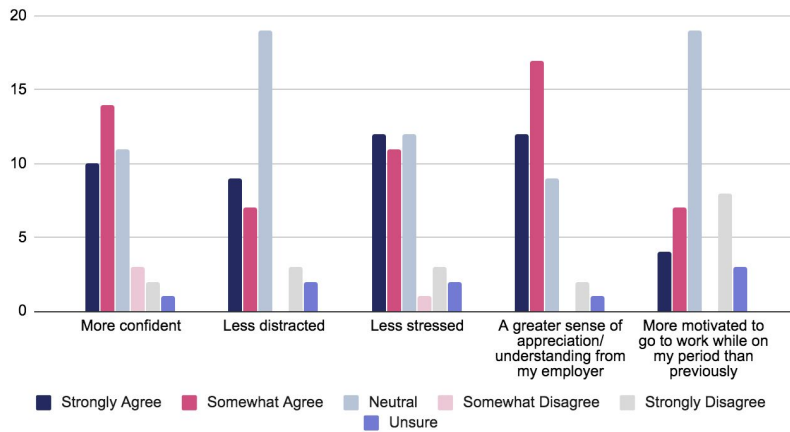
12. Without Fem.Friendly, how many period emergencies might you have had during this time period?



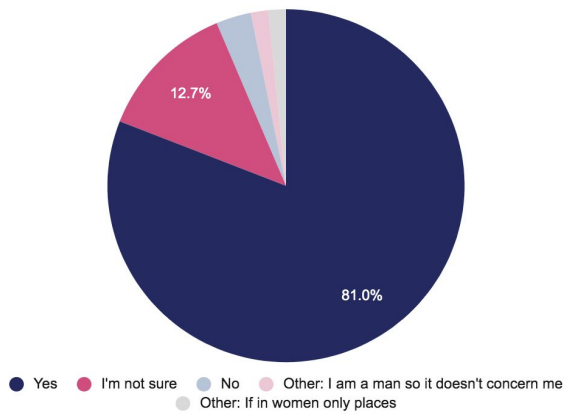
13. If applicable: Why did you not use the products provided by Fem.Friendly? Please select all that apply and use "Other" to write in any additional reason.



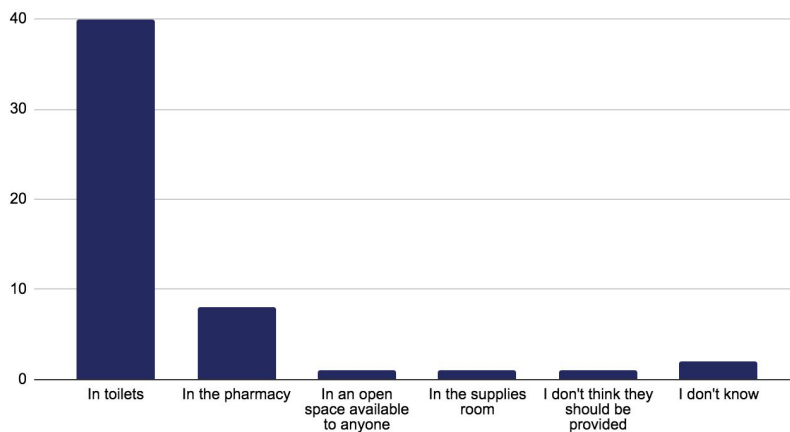
14. Please rate your agreement with the following. The Fem.Friendly Service made me feel:



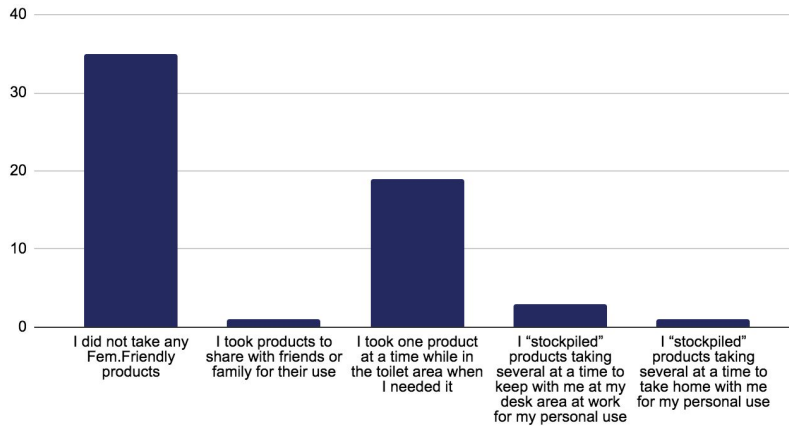
15. Do you feel comfortable with menstrual products being visible at the workplace? Use "Other" to give any more details you wish.



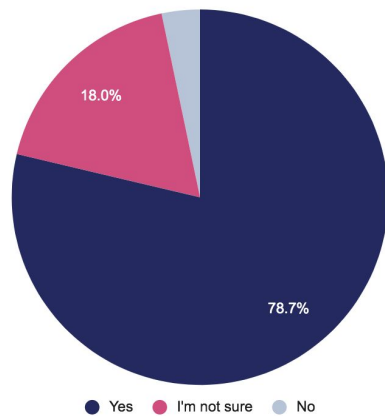
16. Where do you think menstrual products should be provided at the workplace? *Note that the answer option "In the pharmacy" was only available to Tdh employees*



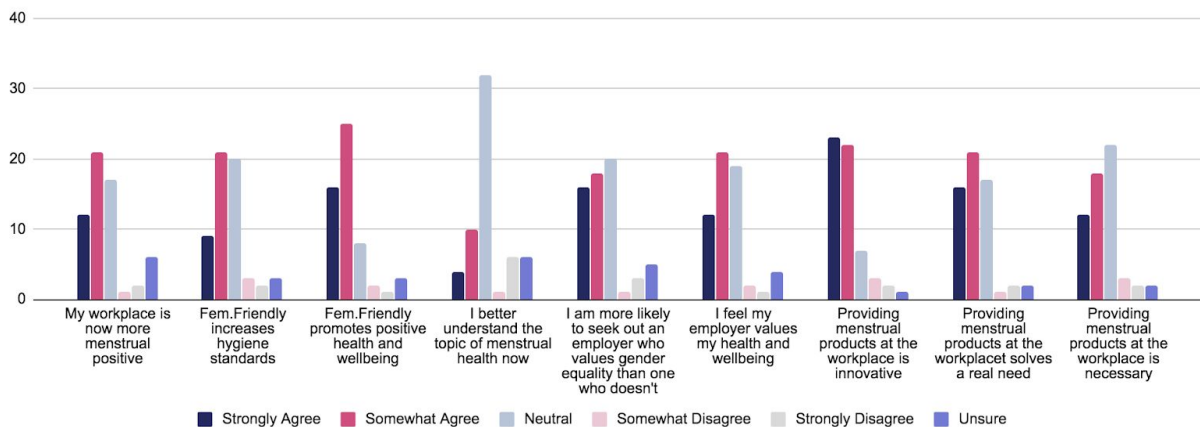
17. We would like to know about how (or if) you utilized the menstrual products provided by Fem.Friendly. Please be honest and select all options that apply to you.



18. Would you recommend a service like Fem.Friendly be adopted by other employers or businesses in Switzerland?



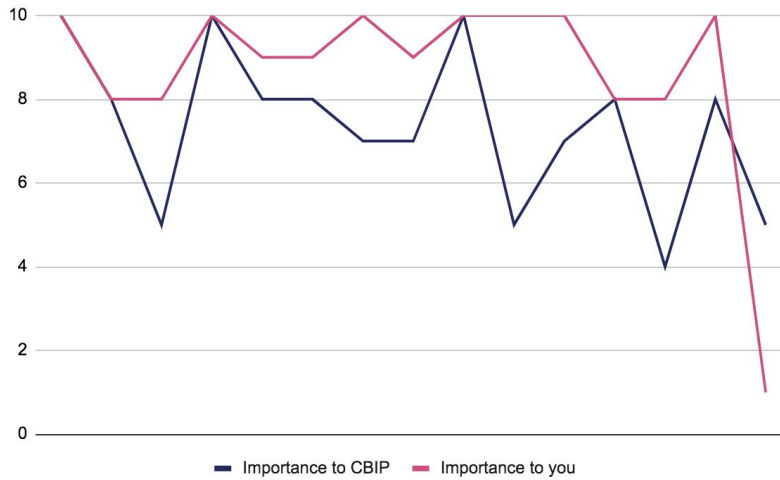
19. Please rate your agreement with the following:



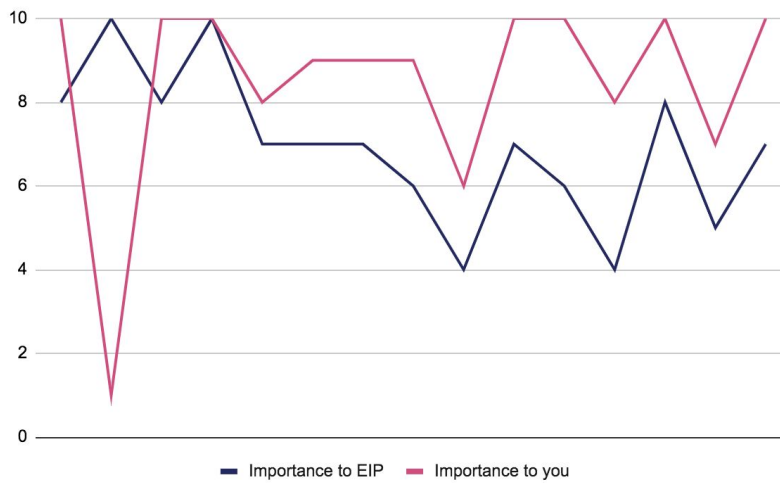
20. On a scale from 1-10, how important do you think gender equality is to CBIP / EIP / your employer (Tdh)?

21. On a scale from 1-10 how important is gender equality to you?

CBIP:



EIP:



Tdh:



6 DISCUSSION

The pilot results presented in the preceding section showcase the promising validity of the hypothesis and assumptions formulated in this work, ultimately proving that the outlook for a B2B menstrual product provision service in Switzerland is positive. Menstruators in Switzerland continue to grapple with repeated period emergencies in their work environment, resulting in common related feelings such as heightened stress, distraction and panic. Furthermore, as offices are not fully equipped to help menstruators during these times of need, many rely on colleagues to supply them with emergency products or leave their place of work in search of these items. While providing menstrual products at the workplace is not a singular solution to the deep-rooted issues surrounding MHM, it is one measure that brings value at both the individual and organizational levels. Pilot results indicate that stronger educational components should accompany a service of this sort to ensure menstrual knowledge is improved and a special attention should be placed on how to best tackle the existing gender-divide on the topic. Despite creating a better understanding of menstruation among pilot participants, the positive implications of menstrual product provision are plenty. When menstruators have access to products like tampons and pads in their workplace toilets, they experience decreased period emergencies, an increased sense of importance by their employers⁴ towards gender equality, increased health and wellbeing outcomes, decreased loss of productivity and more appreciation by and towards their employers. Ultimately, data suggests that organizations are seeking solutions to improve intersectional thematic areas relating to menstrual injustice such as gender equality and social sustainability and that most users would recommend the service be replicated in other organizations across Switzerland.

This chapter follows with a breakdown of assumptions and related verifying results firstly related to Hypothesis 1 on the need and problem, followed by those related to Hypothesis 2 on the value creation and interest of the service presented.

⁴ It is important to note that while Tdh employees were asked about their employers, participants based at CBIP and EIP, were asked about these respective organizations, not their direct employers. For simplicity of explanation, the thesis follows using the term ‘employer’ to refer to all three organizations where Fem.Friendly was present for the pilot incubation period.

6.1 Hypothesis 1

The first hypothesis that *there is a need to improve the overall menstrual health management environment in Switzerland including infrastructures and practices, particularly at Swiss workplaces* is one that has been thoroughly verified not only through background Fem.Friendly research via toilet mapping with EpiCollect and previous surveys, but also strongly with the pilot results. As can be seen in Table 6.1, four of the five related assumptions have been verified, while one (the expected ratio of product use) has not.

Table 6.1: Hypothesis 1 Assumption Verifications

Assumption	Verification	Related Data Collection
1. Menstruators in Switzerland are experiencing period emergencies while at work and the consequences are negative	✓	Survey 1: Questions 6, 7, 9 & 10 Survey 2: Questions 12 & 14
2. Provision of Organ(y)c brand tampons and pads will meet workplace MHM needs and the ratio of use will be around 40% pads to 60% tampons	✓, ✗	Survey 1: Questions 3 & 5 Survey 2: Questions 7, 8 & 10 Manual Product Count
3. Menstrual products will be well-utilized when placed in toilet areas (including at least one MVP box accessible to all genders)	✓	Survey 2: Questions 15 & 16 Manual Product Count Data

As outlined, it is evident that providing menstrual products in the workplace through a business model such as Fem.Friendly is a service that solves a real need. Out of the end users posed this question, 37 somewhat or strongly agreed, while only 3 somewhat or strongly disagreed (17 remained neutral and 2 were unsure). The reason why so many agree that providing menstrual products does in fact solve a real need is surely linked to the fact that a large percentage of people experience period emergencies with frequency while at work and that the resulting related experiences are not positive. From the pilot results, an approximate 70.3% of menstruating respondents have experienced prior period emergencies at the workplace in Switzerland. This is

consistent with similar research in other countries that shows that around 86% of menstruators have experienced period emergencies (Free the Tampons, 2013). It is important to note that while other research shows a slightly higher occurrence of experienced period emergencies, this is likely due to the fact that that research is looking at the occurrence of all period emergencies while menstruators have been out in public, while the one presented here only asked about period emergencies specifically in workplace settings. To the knowledge of the author, this is data that has not been previously collected. The problem of period emergencies is further exacerbated by the fact that around half of menstruating respondents who experience period emergencies are experiencing frequent period emergencies. Of those who experience frequent period emergencies, most have them around 3 times per year (34% of respondents) while an additional 9.4% experience a moment without the menstrual products they need at least 12 times each year. These numbers fall lower than other existing research that suggests the average menstruator in the U.S. has two leaks per cycle (Sadlier, 2019). This difference could potentially be due to the cultural or linguistic change in definition as to what a period emergency or leak constitutes.

Granted that experiencing a period emergency is something immediately negative as it by definition is an unexpected unpreparedness, the negative consequences of menstrual unpreparedness extend and are multifold. Although around 17% of survey respondents stated that they handle period emergencies with ease, the majority do not. Menstruators overwhelmingly cited feeling a sense of unsettledness or embarrassment most commonly when experiencing a period emergency, followed by feeling anxious, distracted, panicked and as two respondents wrote in, “stupid that I forgot” and “annoyed for having again forgotten my products”. These responses suggest that like other researchers point out, society expects menstruators to be solely responsible for MHM, without recognizing it as a collective issue that is “part of the necessary reproductive life cycle” (Johnson, 2019, p. 2).

While the study demonstrates that period emergencies are a real problem, data also shows that providing tampons and pads as the primary products to help with MHM through this service is suitable to meet the needs of most. When asked which menstrual products respondents generally

use for their personal menstruation management, the most popular answer was tampons (~34%), followed by pads (~28%), pantyliners (~18%), menstrual cups (~14%) and other reusable products (~7%). These results and the resulting product use that was manually counted differed slightly from the 60% tampon and 40% pad ratio calculated in previous work with the project. From the manual data collection of products used (Table 5.1), it can be seen that the actual ratio of total products used at the three pilot locations was closer to 36% tampons to 64% pads. While these results were not expected, it is possible that the previous survey that formulated the 60/40 hypothesis was not generalizable to the larger Swiss market. Alternatively, reasons shown through the data for people not liking or not using the products might help explain why less tampons were used than expected. Respondents most frequently cited not liking the packaging and size of the tampons specifically. One respondent said they would prefer to have tampons with applicators while several mentioned the difficulty they experienced when opening the exterior plastic on the tampons. Additionally, it was noted that the regular size of tampons was not suitable for many people as they were too small. Additional plausible reasons for the larger proportion of pad use could be associated with the higher unit price of pads in Switzerland or the possible use of pads for additional phenomenon beyond menstruation such as incontinence. While size and packaging were things some people did not like about the products, most liked them for many reasons citing most commonly for the product sustainability, comfort and size. Moreover, a majority of survey respondents said they would choose to use the Organ(y)c brand again, despite most not having used Organ(y)c products before.

In regard to where to supply tampons and pads, the data suggests that toilet spaces are indeed a viable location. Survey respondents overwhelmingly agreed that toilets are the best location to stock provided menstrual products. Tdh employees were also offered the answer option of pharmacy, which was the second most popular response. Recognizing the importance of inclusivity and structural intersectionality for menstruation, as explained in the literature review, it was important that Fem.Friendly also offer products in at least one gender-neutral area at each pilot location. These consisted of gender-neutral toilets and open-space areas such as hallways. While the data for these locations showed they were some of the hot spot MVP boxes, with

proportionately larger amounts of products being taken from these locations, not everyone was satisfied with the idea of visible menstrual products in their workplace settings. Three percent of final survey respondents said they were not comfortable with menstrual products being visible at the workplace at all (a majority 81% said they were) and one male respondent said they think they should be in women-only areas specifically. Additionally, the author was asked to move one MVP box located in an open-area hallway to a more enclosed area nearer to a toilet after a senior employee noted that ‘even in the home space these products are ones that should be kept private, and that it is no different at the office’. Reactions such as these echo the sentiments from society that menstruation is something the menstruator is expected to keep hidden (especially from men) or else they will experience negative backlash (Roberts et al. as cited in Johnson, 2019; Segran, 2016; Mac Court, 2019, etc.). Overall these answers show that while toilets are indeed a good location for products, there is a risk that having products solely in enclosed areas accessible only to females is not only not inclusive to trans menstruators but might also allow for an unintended perpetuation of menstrual taboos and injustices.

6.2 Hypothesis 2

Like the first hypothesis and assumptions presented above, the second one that *the Fem.Friendly service (as proposed) is valuable to individuals and organizations and the outlook for adoption of the service is positive* and the corresponding assumptions formulated throughout the Geneus process have also been mostly verified through the pilot results (see Table 6.2).

Table 6.2: Hypothesis 2 Assumption Verifications

Assumption	Verification	Related Data Collection
4. Period emergencies will be limited	✓	Survey 2: Questions 11 & 12
5. Working environments, employers and employees will become more menstrual positive and knowledgeable on MHM	✓, ?	Survey 2: Question 19
6. Providing menstrual products at the	?	Survey 1: Questions 12 & 13

workplace shows a commitment to gender equality		Survey 2: Questions 20 & 21
7. Employee health and wellbeing outcomes will improve	✓	Survey 1: Question 14 Survey 2: Questions 14 & 19
8. Loss of productivity due to MHM will be lessened	✓	Survey 1: Questions 7, 10 & 11 Survey 2: Questions 12 & 14
9. Employees will feel better appreciated by and a greater satisfaction with their employers	✓	Survey 2: Question 14
10. The adoption of service is encouraged by organizations having related pain points and users recommending replication of business model	✓	Survey 1: Questions 9, 10 & 11 Survey 2: Question 18

As disclosed in the results, most employees using products provided during the pilot said they were using them mostly for emergency situations (not as their main supply) by taking one product at a time when in the toilet area. Furthermore, while difficult to quantify precisely as the question was hypothetical, survey respondents were asked to estimate the amount of period emergencies that might have been avoided thanks to the provision of Organ(y)c products through the Fem.Friendly pilot. While 8.3% said it was unlikely they avoided any period emergencies, a majority 70.8% said that they likely avoided 1-2 emergencies, while 12.5% said they likely avoided 3-5 emergencies and a final 8.3% said they likely avoided as many as 6-10 period emergencies during the two months of the pilot. Although it was out of the scope of this study, and the author is unaware of any formal research that quantifies average corporate time lost due to period emergencies, when people have to physically leave their place of work to find the materials they need to manage their menstruation, it is inevitable that working time will be lost.

The provision of menstrual products not only inhibits period emergencies, but it can also be a general way to increase menstrual positivity in the workplace. However, while the data collected shows some indication that menstrual positivity has been increased, in line with the related assumption, it is difficult to fully verify this as additional collected data offers somewhat

contradicting results. While a majority of respondents agree that their workplace became more menstrual-positive after the pilot, most did not feel they understood the topic of menstruation better, with a majority responding neutrally to this question. This result was somewhat unexpected. The author distributed additional informational materials (as discussed in the Pilot Methods section of this work) in an effort to supply an added educational component to the pilot. Additionally, at Tdh, an introductory brown-bag lunch was held, as well as a discussion series on menstrual health during which the author elaborated on the topic of menstruation and the importance of MHM at the workplace. While all Tdh employees were invited to attend both of these events, one event saw approximately 15 attendees (with only one male) and the second had only 1 attendee in person and a few others connecting from global offices. While these opportunities were available, they either did not provide sufficient information to allow for improved menstrual knowledge outcomes, or they were not offered in a way that was intriguing for or accommodating to survey respondents. Interestingly there exists a larger percentage of males that answered that they did not understand the topic of menstruation better after the pilot. Furthermore, of the 15 attendees at the first meeting with Tdh only 1 was male and while the second involved more males, it was still predominantly female (despite the general demographics being more gender-balanced). This trend is mimicked overall in the responses received from the survey, with significantly more responses received from females, despite the encouragement for all to participate. These results should be taken into account when considering how to bridge the gender-divide in future educational components to allow for an equal and shared understanding of a topic that more directly impacts females over males.

The divides related to gender are also evident when looking at the survey questions that asked respondents to rate how much they value gender equality and how much they think their employer values gender equality. In all three locations both before and after the pilot, the majority of people responded that they valued gender equality more than their employer does. The highest average difference at a single location was 3.14 points (out of 10) followed by 2.17 and 1.03. However, study limitations and conflicting data make it impossible to draw a conclusion from the results on whether providing menstrual products directly shows a

commitment to gender equality. After the pilot, the data collected from two of the three locations did suggest a minimization of the difference between how much employees say they value gender equality and how much they think their employer does. However, the third location experienced a slight increase. As will be highlighted in the conclusion chapter to follow, this unexpected increase might be due to the limitation of different sample populations answering the surveys before and after, and therefore, it is difficult to compare changes from the start to the end of the pilot.

While the results on a potential increase in gender equality commitment is not extremely clear, the data collected through surveys does clearly showcase the validity that the improvement of MHM workplace standards can be a tool for improving health and wellbeing. These conclusions align with existing research such as that by Sommer et al. (2016). When directly asked if the Fem.Friendly service promotes positive health and wellbeing, a large majority of respondents either somewhat or strongly agreed. Without a doubt, the sense of increased health and wellbeing is linked to the additional fact that a majority of respondents also agreed that they found themselves less stressed, less distracted and more confident with the Fem.Friendly service. When respondents were asked what it meant to them to have free, organic products available to them, many answers alluded to the wellbeing benefits that they felt the service would bring. With responses ranging from “it means one less worry!” to “less stress” to “it’s reassuring” to “it brings me comfort”, it is easy to see that worrying about often unpredictable menstrual bleeds when unprepared is something that can have a great negative impact on menstruators.

Beyond worrying, it is also evident that the productivity of menstruators can be negatively impacted when they experience period emergencies. While it is extremely difficult to numerate productivity loss or gains related to the absence or presence of menstrual products, the study does demonstrate a correlation between menstrual product provision and improved MHM practices and productivity. This is in line with research by Nancy Kramer (Segran, 2016) as well as Sommer et al. (2016) who note that while there has not been a previous analysis on the cost implications for unsupportive MHM in workplace environments, it is clear that there is a link to

loss in productivity among other negative consequences. As these authors suggest, some may choose to miss work when dealing with their periods in difficult environments, a phenomenon also indicated in the pilot survey data. Results indicate that missing work due to the menstrual cycle is something that 33.3% of respondents are familiar with. Around 12% miss work due to their cycle less than once per year on average, 8% around once per year, 10.7% 2-3 times per year, and 1.3% 6 and 12 times per year, respectively. While the research scope did not include a further investigation as to why respondents miss work during these times, unsupportive MHM environments and infrastructures that do not cater to menstruating people could be to blame. With the improved MHM environments provided, more respondents agreed than disagreed that they felt more motivated to go to work while on their period than prior to the menstrual product provision. This is likely linked to the negative feelings people experience when they have a period emergency and the positive feelings of comfort and security that respondents expressed as a result of having access to the menstrual products they need at their workplace.

An important indication ascertained from the results is that along with having feelings of gratitude and comfort for the availability of menstrual products at the workplace, respondents translated this gratitude to their space provider (for CBIP and EIP) or employer (Tdh). A majority 70.7% agreed that they felt a greater sense of appreciation and understanding from their employer, while 24.3% felt neutral or unsure and a minority 4.8% disagreed. These results are not surprising. With many employers worried about employee satisfaction and searching for ways to better support employees, it is no surprise that employees will feel more appreciated when their employer supports their natural bodily functions at the workplace. Although this is something that is already thoroughly being supported through provisions such as toilet breaks, toilet paper, allocated breastfeeding time, sick leave, etc., current initiatives and policies largely ignore menstruation needs.

When people are not prepared for their menstruation and there are no products available to them in their workplace, they must find an alternative solution. Results indicated that while a large proportion of respondents ask a colleague for a product or make a temporary “product” from

toilet paper, an equal amount leave their workplace to either go to the store or go home in search of the products they need. This data mimics that previously found in the United States (Free the Tampon, 2012) and by the author in Switzerland. Furthermore, as previously highlighted, around one-third of menstruators also miss work with some frequency due to their period. The assumption is that with a service like Fem.Friendly these inappropriate or time-consuming alternatives could be avoided, as all employees would have access to the products they need when they need them. After experiencing the service, users were asked if they would recommend a similar service to other organizations across Switzerland. The large majority (78.7%) said yes, while 18% said they were not sure and 3.3% said no. Interesting to note, is that these results also have a strong correlation to the gender-divide previously noted. While around only 16% of the respondents to this question were male, 100% who said they would not recommend were male as were approximately 73% of those who said they were not sure if they would recommend.

While many employers are not always aware of the impact MHM can have on employees, they are often aware of their intentions to bolster gender equality and sustainability initiatives at large. One organization served by the pilot was previously considering hiring a gender consulting firm to improve internal gender relations, but ultimately decided against doing so after evaluating the cost. Additionally, when Tdh constructed their Gender and Discussion series looking at intersectional topics particularly relevant to gender and inclusion in the workplace, there was an expressed interest to cover the topic of menstruation. As a service of this type is new to the Swiss market and is based on a highly-stigmatized topic, it may not necessarily be an obvious choice to organizations. However, it is likely that if one can prove the connections between improved MHM workplace policy and infrastructures and gender equity and social sustainability (as has been the intention here), there is opportunity for positive adoption of the service. Ultimately, all three pilot locations were eager to implement the pilot, but as the products were provided for free, it is difficult to determine if negotiations and adoption would run similarly in a paid scenario.

7 CONCLUSION

As just discussed, one of the major limitations of the study included the free nature of the service. As the author was offering to provide the service for free, it was difficult to understand what the reaction might be like in a situation where customers would be expected to pay for the products. It is also plausible that some abuse of product use (taking many products at once to stockpile) also happened because the products were free. While it is likely that abuse would taper out over time, the duration of the study was not long enough to see any downward trend in product use. Future research should investigate willingness of businesses to adopt such a service when payment is required alongside investigating alternative solutions to any aversion to adoption due to cost by looking at the potential for government aid for such a business model or service. Additionally, product provision studies could run for longer to investigate how product use might “normalize” or become predictable over time in different types of locations.

Additionally, despite being a natural process that will impact nearly all female employees during their time at the workplace, the taboo of menstruation is largely inhibitive. As difficult as introducing a new product or service to a market already is, the fact that the topic brings deeply-ingrained feelings such as embarrassment, shame and disgust (Brantelid, Nilvér and Alehagen, 2014) is quite limiting. To address the stigmatized nature of menstruation, additional research could also investigate which educational approaches or facts are most impactful to drive quicker adoption rates and limit the gender divide on MHM understanding. Developing stronger correlations between negative outcomes and poor MHM at Swiss workplaces, in particular quantifying things such as related productivity or economic loss, would be useful for strengthening the case for improved MHM practices in the workplace.

Finally, because the sample size was limited to specific groups and there were different respondents answering the first and second surveys, the generalizability of survey results is inhibited. Although the survey and pilot materials were provided in both French and English, they were only distributed to locations in the cities of Geneva and Lausanne and thus should not be taken as a generalization for all of Switzerland. Future researchers might consider

comparatively studying the topic by investigating the market needs and interest in the different Swiss regions to see which area might have the highest potential for business success.

Despite the limitations, the study is significant because it presents findings on the impact of MHM in the workplace for working females, a topic area that is largely lacking in evidence with most prior research on things like productivity or absenteeism instead focusing on girls and school settings (FSG, 2016). It additionally adds to the more limited body of evidence concerning MHM in more developed countries, and even more specifically, to the extremely limited research on MHM practices in Switzerland. Finally, despite being a highly-stigmatized topic and a new-to-market service, the author managed to test assumptions formulated with the Geneus internship through the pilot period and gather data to mostly validate the studied hypotheses.

It is also important to discuss how Fem.Friendly might continue as a sustainable business opportunity, one of the ultimate outcomes of the Geneus process. The data collected from the pilot and previous work strongly prove the pain and value points for the end consumers or “beneficiaries”. It is clear that employees are having period emergencies and that they feel a service like Fem.Friendly brings an array of benefits. While the pain points of beneficiaries and the value creation of Fem.Friendly have been proven, next steps must further consider customer development. This will ensure that the project can smoothly transition from idea to viable and scalable business model. Specifically, work needs to be done in regard to customer creation and finding out what triggers a willingness or need to pay for such a service by company decision makers and who might be these potential paying customers. Convincing customers that the Fem.Friendly solution will fulfill their needs will be easier with the collected pilot data, but it is important to focus on what types of customers can be targeted first. This might be customer segments with the most urgent need, those with the highest growth potential, those with the highest ability and willingness to pay, those who are easiest to reach, etc. Furthermore, it will be important to look at who might be the early adopters to understand how first revenues might develop and how the business can transition to a larger customer market afterwards. As this

service is a new model in the Swiss market, it will be helpful to look at similar existing business models elsewhere and how they have developed their go-to-market strategies. Just as has been done through this internship work focused on beneficiaries, next steps involve defining what the main hypotheses are around potential customers and what tests must be designed to prove that there is not only a need, but also a willingness and ability to pay for the solution. The VPC and BMC tools are a first step in this process that should be built upon and further tested to advance the Fem.Friendly business model.

Beyond progressing the customer development strategy, there are some additional practicalities to be considered for advancing the Fem.Friendly project. It will be important to secure links with supporting organizations in the Swiss market that can help the team progress the business development. Local organizations such as ImpactHub, who have a strong community and international network, or Innosuisse, who offer business coaching and courses, are two such examples. Furthermore, it is important that the financing and logistics methods be strengthened. Funding opportunities might first come from seed financing channels such as innovation/startup competitions or accelerators (i.e. VentureKick or the SDG Accelerator). Additional financial channels might include government support through subsidies, as well as entities or foundations interested in supporting social-impact projects with grants and donations. It will also be vital to strengthen connections with existing grassroots organizations and activists working in the topic area of menstruation within Switzerland (such as l'Escouade Genève or Rowena). This may help to spark public debate surrounding the still taboo theme and nudge organizations into including the topic into their decision making. All of these determinants will be instrumental to ensuring that the validated business model can be executed with ease.

In conclusion, there is still much to be done to build the overall evidence base around MHM in Swiss workplaces and bring Fem.Friendly to a point of full operability. However, this study shows that the evidence supporting both the market need and value creation of a B2B service providing menstrual products to employees in Switzerland is promising. Furthermore, it proves that the Geneus innovation process is one that can be successfully used to advance SDG project

agendas by testing assumptions that are formulated using a wide range of innovation tools. It is the author's hope that this work can serve as inspiration for what possibilities exist at the intersection of entrepreneurship, innovation, human development and sustainability. From where she is sitting, the rose-colored glasses have never been more bloody red!

REFERENCES

- Blank, S. (2015, May 6). Why build, measure, learn - isn't just throwing things against the wall to see if they work - The minimal viable product. *Steve Blank*.
<https://steveblank.com/2015/05/06/build-measure-learn-throw-things-against-the-wall-and-see-if-they-work/>
- Blank, S. & Dorf, B. (2012). *The startup owner's manual: The step-by-step guide for building a great company*. K & S Ranch.
- Bobel, C. (2019). *The managed body: Developing girls and menstrual health in the global south*. Springer Nature Switzerland.
- Brantelid, I., Nilvér, H., & Alehagen, S. (2014). Menstruation during a lifespan: A qualitative study of women's experiences. *Health Care for Women International*, 35(6), 600-616.
<https://doi.org/10.1080/07399332.2013.868465>
- CB Insights. (2019). *The 20 reasons startups fail*.
<https://www.cbinsights.com/research-reports/The-20-Reasons-Startups-Fail.pdf>
- Esposito, E. (2018, May 29). Low-fidelity vs. high-fidelity prototyping. *InVision*.
<https://www.invisionapp.com/inside-design/low-fi-vs-hi-fi-prototyping/>
- Free the Tampon. (2013). *The Murphy's Law of menstruation*. [Infographic]. Free the Tampon Foundation.
http://www.freethetampons.org/uploads/4/6/0/3/46036337/ftt_infographic.pdf
- FSG. (2016). *An opportunity to address menstrual health and gender equity*.
https://www.pseau.org/outils/ouvrages/fsg_an_opportunity_to_address_menstrual_health_and_gender_equity_2016.pdf
- Garner, B. (2015, February 19). 5 common mistakes to avoid when using the value proposition canvas. *Strategyzer*.
<https://www.strategyzer.com/blog/posts/2015/2/19/5-common-mistakes-to-avoid-when-using-the-value-proposition-canvas>
- Griffith, E. (2014, September 25). Why startups fail, according to their founders. *Fortune*.
<https://fortune.com/2014/09/25/why-startups-fail-according-to-their-founders/>
- Gruber, M & Tal, S. (2017). *Where to play: 3 steps for discovering your most valuable market opportunities*. Pearson.
- Hennegan, J., Shannon, A. K., Rubli, J., Schwab, K.J. and Melendez-Torres, G. J. (2019). Women's and girls' experiences of menstruation in low- and middle-income countries: A systematic review and qualitative metanalysis. *PLoS Medicine*, 16(5), E1002803.
<https://doi.org/10.1371/journal.pmed.1002803>
- Johnson, M. E. (2019). Menstrual justice. *UC Davis Law Review*, 53, 1.
- Kane, J. (2017, December 6). Here's how much a woman's period will cost her over her lifetime. *Huffington Post*.
https://www.huffpost.com/entry/period-cost-lifetime_n_7258780

- Kane-Hartnett, L. (2018, July 19). Integrating menstrual hygiene management to achieve the SDGs. *International Women's Health Coalition*.
<https://iwhc.org/2018/07/integrating-menstrual-hygiene-management-achieve-sdgs/>
- Kuhlmann, A. S., Bergquist, E. P., Danjoint, D. & Wall, L. L. (2019). Unmet Menstrual Hygiene Needs Among Low-Income Women. *Obstetrics & Gynecology*, 133(2), 238-244.
<https://doi.org/10.1097/AOG.0000000000003060>
- Lieberman, A. (2018, July 23). Menstrual health, while excluded from the SDGs, gains spotlight at UN political forum. *Devex*.
<https://www.devex.com/news/menstrual-health-while-excluded-from-sdgs-gains-spotlight-at-un-political-forum-93137>
- Mac Court, S. (2019, May 14). Overcoming period stigma in the workplace. *The DPG Blog*.
<https://www.dpgplc.co.uk/overcoming-period-stigma-in-the-workplace/>
- Magistretti, B. (2019, January 25). Fem.Beat: Period poverty is a thing, even in the U.S.. *Forbes*.
<https://www.forbes.com/sites/berenicemagistretti/2019/01/25/fembeat-period-poverty-is-a-thing-even-in-the-u-s/#4a3ec559569e>
- Menstrual Health Hub. (2019, June 26). *Menstrual Health Hub Menstrual Memo*. [Infographic]. Mailchimp. <https://mailchi.mp/mhhub/doubleshotwdandsmcr2019>
- Montano, E. (2019). The bring your own tampon policy: Why menstrual hygiene products should be provided for free in restrooms. *University of Miami Law Review*, 73, 370.
- Osterwalder, A. & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. OSF.
- Patkar, A., Aidara, R. & Winkler, I. T. From taboo to empowerment: menstruation and gender equality. *WSSCC*.
<https://www.wsscc.org/2016/05/27/taboo-empowerment-menstruation-gender-equality/>
- PHS Group. (2019). *Lifting the lid on period equality: Period equality research*.
<https://www.phs.co.uk/media/2475/period-equality-whitepaper.pdf>
- Roberts, T., Goldenberg, J., Power, C., & Pyszczynski, T. (2002). "Feminine Protection": The Effects of Menstruation on Attitudes Towards Women. *Psychology of Women Quarterly*, 26(2), 131-139. <https://doi.org/10.1111/1471-6402.00051>
- Sadlier, A. (2019, November 27). New research reveals how much the average woman spends per month on menstrual products. *SWNS Digital*.
<https://www.swnsdigital.com/2019/11/new-research-reveals-how-much-the-average-woman-spends-per-month-on-menstrual-products/>
- Schechtman, L. (2015, May 9). Why tackling the stigma around menstruation is key to gender equality. *World Economic Forum*.
<https://www.weforum.org/agenda/2015/05/why-tackling-the-stigma-around-menstruation-is-key-to-gender-equality/>
- Schmitt, M. L., Clatworthy, D., Ogello, T. & Sommer, M. (2018). Making the Case for a Female-Friendly Toilet. *Water*, 10(9), 1193. <https://doi.org/10.3390/w10091193>

- Segran, E. (2016, July 25). Bleeding on the job: A menstruation investigation. *Fast Company*.
<https://www.fastcompany.com/3061417/bleeding-on-the-job-a-menstruation-investigation>
- SIWI World Water Week. (2019). *MHM: Health and dignity for all*.
<https://www.worldwaterweek.org/event/8443-mhm-health-and-dignity-for-all>
- Sommer, M., Chandraratna, S., Cavill, S., Mahon, T., & Phillips-Howard, P. (2016). Managing menstruation in the workplace: An overlooked issue in low- and middle-income countries. *International Journal for Equity in Health*, 15(1), 86.
<https://doi.org/10.1186/s12939-016-0379-8>
- Sommer, M., Vasquez, E. & Worthington, N. (2013). *WASH in schools empowers girls' education: Proceedings of the menstrual hygiene management in schools virtual conference 2012*. UNICEF and Columbia University.
https://www.unicef.org/wash/schools/files/WASH_in_Schools_Empowers_Girls_Education_Proceedings_of_Virtual_MHM_conference.pdf
- Strategyzer. (2019). *Canvases, tools and more*. <https://www.strategyzer.com/canvas>
- Tjon A Ten, V. (2007). Menstrual hygiene: A neglected condition for the achievement of several Millenium Development Goals. *Europe External Policy Advisors*.
<https://www.ircwash.org/sites/default/files/Tjon-A-Ten-2007-Menstrual.pdf>
- UN DESA. (2018). *Sustainable Development Goals knowledge platform*.
<https://sustainabledevelopment.un.org/sdgs>
- UNICEF. (2019). *Guidance on Menstrual Health and Hygiene*.
<https://www.unicef.org/wash/files/UNICEF-Guidance-menstrual-health-hygiene-2019.pdf>
- UNICEF, WaterAid and WSUP. (2018). *Female-friendly public and community toilets: a guide for planners and decision makers*. WaterAid.
washmatters.wateraid.org/female-friendly-toilets
- UN Women. (2018). *Agreed conclusions on the 2018 Commission on the Status of Women*.
<https://www.unwomen.org/-/media/headquarters/attachments/sections/csw/62/csw-conclusions-62-en.pdf?la=en&vs=4713&la=en&vs=4713>
- WHO. (1994). *Recommendations of the second meeting of the WHO Collaborating Centres in Occupational Health, 11-14 October 1994, Beijing, China*.
https://www.who.int/occupational_health/publications/globstrategy/en/index2.html
- WHO & UNICEF. (2012). *Consultation draft: Long list of goal, target and indicator options for future global monitoring of water, sanitation and hygiene*. WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation.
<https://washdata.org/sites/default/files/documents/reports/2017-06/JMP-2012-post2015-consultation.pdf>

Wilson, E., Haver, J., Torondel, B., Rubli, J. & Caruso, B. A. (2018). Dismantling menstrual taboos to overcome gender inequality. *The Lancet Child & Adolescent Health*, 2(8), E17. [https://doi.org/10.1016/S2352-4642\(18\)30209-8](https://doi.org/10.1016/S2352-4642(18)30209-8)

APPENDICES

Appendix I: SDG target links to MHM

SDG 1: No Poverty
<p>1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</p> <p>1.B Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions</p>
SDG 3: Good Health and Well-being
<p>3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</p> <p>3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being</p> <p>3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes</p> <p>3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</p> <p>3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination</p>
SDG 4: Quality Education
<p>4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations</p> <p>4.A Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all</p>
SDG 5: Gender Equality
<p>5.1 End all forms of discrimination against all women and girls everywhere</p> <p>5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation</p> <p>5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences</p> <p>5.C Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels</p>
SDG 6: Clean Water and Sanitation
<p>6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all</p> <p>6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations</p> <p>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</p>

6.B Support and strengthen the participation of local communities in improving water and sanitation management
SDG 8: Decent Work and Economic Growth
8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
SDG 9: Industry, Innovation and Infrastructure
9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
SDG 10: Reduced Inequalities
10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard 10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
SDG 12: Responsible Consumption and Production
12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
SDG 14: Life Below Water
14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
SDG 16: Partnerships for the Goals
16.B Promote and enforce non-discriminatory laws and policies for sustainable development

Appendix II: Fem.Friendly Pilot Informational Leaflet



Challenging the status quo, one toilet at a time

Fem.Friendly is a student-led project with a vision for a world where everyone has access to quality menstrual products when and where they need them most. **Period.**



We are happy to offer you free Organ(y)c tampons and pads* until December 20, 2019.

Why Switzerland?

9 in 10 Swiss menstruators have not had a tampon or pad when they needed one while at school or work and have reported feeling anxious, distracted, panicked and ashamed because of it.

Fem.Friendly seeks to change this.

*Menstrual products should be changed every 4-8 hours or as needed. The products we provide are 100% biological and the pad packaging is 100% biodegradable. If you have any questions about this service please contact the Fem.Friendly team at hello@femfriendly.com

www.femfriendly.com

ACKNOWLEDGEMENTS

I would like to firstly thank my internship advisor, Ingeborg for this unique learning opportunity and for encouraging me to complete the pilot. Your insight and leadership throughout the Geneus process has helped to shape not only Fem.Friendly, but also my personal relationship with entrepreneurship and innovation.

Thank you also to my thesis advisor, Jose. You have always seen the value in Fem.Friendly and the data that has been collected. Thank you for all of your guidance and time spent helping me to progress Fem.Friendly and this thesis work, it is greatly appreciated.

Thank you to my colleagues Coline, Ludovica, Tina, Miriam, Samsam and Cassandra, who were there with Fem.Friendly from the idea stage. Without you this journey wouldn't have been anywhere near as fun as it was!

Generally, thank you to all who have in any way supported and encouraged the development of Fem.Friendly. You have made me realize that a dream can become reality with a little bit of work and brilliant collaboration.

Finally, thank you to my family, especially Alberto. Your altruistic and unwavering support of my dreams and successes is the reason this accomplishment is possible. THANK YOU!