## Risk Identification Report

## Group 1:

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Safer Security Consultancy understands that your business, Pampered Pets are considering digitalization to enhance internal processes and expand internationally. Therefore, our security risk management team have researched the best way to grow the business and have conducted a risk assessment to evaluate the potential risks with digitalization and as well as maintaining the current status quo.

The digitalization of your business can significantly enhance your operational efficiency and responsiveness to meet the growing demands. For instance, the system will extend your business reach beyond the local catchment area, allowing customers from different areas to access your products online. This broader market exposure can most certainly lead to increased sales and revenue growth (Matalamäki and Joensuu-Salo, 2021). In today's digital age, many consumers prefer the convenience of online services, such as online shopping, account management, and customer support. Therefore, if a business fails to adapt to these preferences, it may risk losing customers to competitors that offer more convenient online features (Zaki, 2019). With changing to an international supply chain your businesses can also capitalize on cost savings. By obtaining supplies from countries with more affordable labour and production expenses, your business can streamline their operations for increased cost-effectiveness. However, whilst there are many advantages of the digitalization of a business, the process also comes with its own set of threats and challenges.

Due to the limited amount of data available from Pampered Pets, we have decided to use a Qualitative Risk Assessment as it is often used in situations where there is limited data available. Qualitative risk assessments often involve identifying potential risks and assessing their probability or likelihood and impact based on historical data, expert opinion, and other qualitative factors. According to Buijs and Zimmermann (2018), qualitative risk assessments are beneficial for identifying and prioritizing risks, as well as developing effective risk management strategies. They allow organizations to identify potential vulnerabilities and evaluate the effectiveness of existing controls and mitigation measures.

After analysing the business model of Pampered Pets, we have identified several potential risks that could impact the business should the business becomes digital with an online presence and international supply chain operation. However, if correct risk mitigation is applied as part of this transition, this could represent a huge opportunity for Pampered Pets. These risks include:

1. Online Security Risks: an online presence will make Pampered Pets vulnerable to online security threats such as hacking, phishing, and other cyber-attacks. This could potentially result in a loss of customer information or financial data. To mitigate this risk, Pampered Pets should invest in robust cybersecurity measures such as firewalls, antivirus software, and regular security audits. The staff should be trained on how to identify and avoid phishing scams and other cyber threats. The website should be secured with SSL encryption and payments should be processed through a secure payment gateway. In addition to this, Threat Modelling techniques such as the STRIDE (Spoofing, Tampering, Repudiation, Information).

disclosure, Denial of service and Elevation of privilege) model can also been incorporated to Identify and address potential security vulnerabilities and the risks they entail in a targeted and appropriate manner (Shevchenko et al, 2018).

- 2. Supply Chain Risks: an international supply dependent business will face risks such as increased shipping costs, customs issues, and potential delays in delivery. This could lead to a decrease in profitability and customer satisfaction. Pampered Pets should research and carefully select suppliers who can offer competitive pricing and reliable delivery. The business should also develop contingency plans to address potential issues such as supply chain disruptions, customs issues, and other logistical challenges.
- 3. Customer Retention Risks: If the business does not provide online features, it may lose customers over time as customer preference to online shopping has been growing and will continue to grow in the years to come. This could potentially lead to a decline in revenue and profitability. A recent study by Statista found that global e-commerce sales amounted to \$4.2 trillion in 2020, up from \$3.5 trillion in 2019. In 2021, retail e-commerce sales amounted to approximately 5.2 trillion U.S. dollars worldwide. This figure is forecast to grow by 56 percent over the next years, reaching about 8.1 trillion dollars by 2026 (Chevalier, 2022). This growth can be attributed to several factors, including the increasing availability of high-speed internet and mobile devices, the convenience of online shopping, and the ability to compare prices and products easily. To mitigate this risk, Pampered Pets should create an online presence that includes features such as online ordering, delivery

services, and customer support. The business should also consider creating a loyalty program to incentivize repeat business.

4. Operational Risks: If the business decides to digitalize its internal processes, it may face risks such as data loss, system failures, and other technical issues. This could disrupt operations and impact customer satisfaction. To mitigate this risk, Pampered Pets should invest in reliable hardware and software, and ensure that regular backups are performed to prevent data loss. The staff should be trained on how to use the new technology and follow best practices for data management.

In conclusion, the process of digitalization presents both significant opportunities as well as security risks. Our qualitative risk assessment highlighted within this report, has pinpointed key areas that require strategic planning and consideration to mitigate the identified security risks, ensuring the seamless operation of Pampered Pets' digital platform. By proactively addressing the identified risks and proceeding with the idea of digitalization, allows for the business to embrace the evolving landscape, thrive in an increasingly competitive market, maintain customer retention, and save costs. Therefore, Safer Security Consultancy remains committed to supporting Pampered Pets through this transition ensuring a secure and safe platform.

## References

- Buijs, P. and Zimmermann, J. (2018). Qualitative Risk Assessment. In: T. Bedford, R. French, D. Neal, and R. Walls, eds., The Handbook of Risk Management, Wiley, pp. 181-198
- Chevalier, S. (2022). Global retail e-commerce market size 2014-2023. [online]
  Statista. Available at: https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/#:~:text=In%202021%2C%20retail%20e%2Dcommerce.
- Matalamäki, M.J. and Joensuu-Salo, S. (2021). Digitalization and strategic flexibility a recipe for business growth. *Journal of Small Business and Enterprise Development*, ahead-of-print(ahead-of-print). doi:https://doi.org/10.1108/jsbed-10-2020-0384.
- Shevchenko, N., Chick, T. A., O'Riordan, P., Scanlon, T. P., & Woody, C.
  (2018). Threat modeling: a summary of available methods. Carnegie Mellon University Software Engineering Institute Pittsburgh United States.
- Zaki, M. (2019). Digital transformation: harnessing digital technologies for the next generation of services. *Journal of Services Marketing*, 33(4). doi:https://doi.org/10.1108/jsm-01-2019-0034.