**Risk Identification Report – Pampered Pets**

**Introduction**

This risk identification report evaluates two scenarios of how the Pampered Pets business will perform its risk assessment. The scenarios include “maintaining the existing business model”, or the “application of Digitalisation”. This report will also evaluate different risks identified, as well as the mitigation of those risks.

**Selected Methodology of Risk Assessment**

Methodology Chosen: OCTAVE-S (Operationally Critical Threat, Asset, and Vulnerability Evaluation). The focus of OCTAVE-Simplified is to assess and prioritize risks relevant to the business objectives. It is particularly suitable to Pampered Pets business as it:

* Reduces the complexity of the original OCTAVE framework, making it manageable for smaller size businesses.
* Avoids the need for technical expertise in the sphere to proceed with risk assessment.

Note: OCTAVE-S is applied for both scenarios.

**Scenario 1 – Maintain current business model**

**Table 1a - Risk and Threat Modelling - Asset Identification**

|  |  |  |
| --- | --- | --- |
| **Physical Assets** | **Information Assets** | **Personnel Assets** |
| Store premises | Customer records | Skilled staff |
| Warehouse facility | Supplier relationships | Supply chain relationships |
| Food preparation equipment | Recipe formulations | Customer relationships |
| Inventory | Financial records |  |
| Delivery vehicles | Inventory spreadsheets |  |
| Computers (Warehouse and Front Desk) |  |  |
| Wireless gateway and hub |  |  |

**Table 1b - Current Vulnerabilities / Risks**

|  |  |  |
| --- | --- | --- |
| **Technology Infrastructure** | **Operations** | **Business Process** |
| Outdated computer systems | Heavy reliance on manual processes | Limited online presence |
| Limited network security | Limited staff redundancy | Limited payment options |
| Basic spreadsheet-based inventory | Basic inventory tracking | Basic customer record  keeping |
| No disaster recovery plan or documented data backup | Limited order processing capability | Limited marketing reach |

**Table 1c - Risk Analysis Matrix**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Risk Category** | **Likelihood** | **Impact** | **Risk Level** | **Current Controls / Limitations** |
| **Supply Chain Risks** | Supplier  failure | Medium | High | High | Multiple local  suppliers |
| Ingredient  quality issues | Low | Critical | High | Direct relationship with farms |
| Delivery delays | Medium | Medium | Medium | Local proximity (10-minutes drive) |
| Price fluctuations | High | Medium | High | None |
| **Operational Risks** | Staff absence | Low | High | High | Limited cross training |
| Quality control issues | Low | High | High | In-house preparation |
| Equipment failure | Low | High | High | Basic maintenance |
| **Technology**  **Risks** | System failure | High | High | High | Limited backup systems |
| Data loss | High | Critical | High | No formal backup process |
| Security breach | High | High | High | No record of system updates or upgrades |
| Network Sniffing from HUB | High | High | High | Hubs broadcast all data to every connected device |

**Table 1d - Risk Mitigation / Recommendations**

|  |  |  |
| --- | --- | --- |
| **Technology Security** | **Operations** | **Business Process** |
| Implement regular data  backup system | Document standard  operating procedures | Document customer service procedures |
| Install basic security  software | Create staff cross-training program | Implement basic marketing strategy |
| Document IT processes | Implement basic quality management system | Implement financial  monitoring system |
| Train staff on security basics | Create backup supplier list | Establish regular supplier reviews |
| Upgrade computer and  network hardware | Create quality control  metrics | Create loyalty program |
| Implement proper inventory software | Implement staff backup plans and supplier agreements | Establish communication protocols |
| Develop disaster recovery plan | Create training  documentation | Implement review  procedures |

**Scenario 2 – Digitalisation**

Digitalisation offers extensive opportunities for businesses to expand operations and improve efficiency. For Pampered Pets, digitalisation will be a pivotal step toward excellent customer experience, with less human errors and wider reaching market. However, this transformation introduces challenges, especially in cyber security and compliance.

**Table 2a - List of Proposed Additions for Digitalisation**

|  |  |
| --- | --- |
| Change | Description |
| E-commerce Website | Online store enabling international and potentially global reach. |
| Implementation of secure payment methods to improve trustworthiness of a business. |
| wERP (Enterprise Resource Planning) System | Improved inventory management, supplier coordination, and financial tracking. |
| Increased efficiency with lower number of manual errors. |
| Online Marketing | Focus on social media,SEO optimisation and email campaigns. |
| Remote data storage and backup | Secure storage for customer, supplier, and operational data. |

**Risk and Threat Modelling**

Critical Assets Identified

• Customer Data • Payment Information • Business Operations Data • Online Marketing and social media • IT Infrastructure and Cybersecurity

**Table 2b - Potential Risks and Threats**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risk** | **Threat Source** | **Likelihood** | **Impact** | **Risk Level** |
| Data Breach | Hackers, insider threats | High | Critical | High |
| Phishing | External attackers, human error | High | Critical | High |
| Payment Fraud | Cybercriminals | High | High | High |
| Software Vulnerabilities | Negligence, lack of updates | High | High | High |
| Reputational Damage | Negative customer feedback online | Medium | High | High |
| Operational Damage | System outages, power failures | Medium | Medium | Medium |
| Regulatory Non-compliance | Lack of GDPR compliance | Low | High | Medium |
| Lack of Staff Training | Untrained employees | Low | High | Medium |
| System Integration Failure | Poor Configuration | Medium | High | High |

**Table 2c - Mitigation Strategies for Identified Risks**

|  |  |  |
| --- | --- | --- |
| **Type** | **Risk** | **What to introduce** |
| Technical Security | Data breach and Payment Fraud | Advanced Firewalls, Intrusion Detection Systems (IDS), End-to-End Encryption for customer and payment data, MFA for sensitive systems, Vulnerability Scanning, Patch Management |
| Phishing or Social Engineering | Regular Staff Training, email filtering |
| Unpatched Software Vulnerabilities | Patch Management Policy, Automated Monitoring Tools |
| Operational Security | System Integration Failure | Testing on ERP, CRM and E-com platform integrations, sandbox environments usage to simulate risky scenarios |
| Operational Downtime | Backup Power Solutions, Disaster recovery plan with regular drills |
| Compliance and Training | Regulatory Non-compliance | Appoint a DPO to oversee GDPR, conduct regular audits |
| Staff Training deficiencies | Structured Training Programs on cybersecurity and system usage, Regular refresher training sessions |
| Reputation Management | Reputational Damage | Monitor online platforms and customer feedback, invest in reputation management tools |

**Recommendations**

Based on the OCTAVE-S risk assessment on both scenarios 1 and 2, we recommend Pampered Pets to implement the **Digitalisation strategy**.

According to Eurostat (2023), the proportion of EU e-shoppers grew by 20 percentage points between 2012 and 2022. Similarly, Sharma (2024), highlights significant benefits of Digitalisation including:

* E-commerce sales have reached $4.28 trillion in 2020
* Lower operational costs
* 24/7 availability

Hence, these benefits directly support the achievement of the 3 business objectives below

* Business growth up to 50%
* Cost reduction by up to 24%
* Avoid losing 33% of existing customers.

With strong corporate governance, fiscal responsibility, and adherence to the proposal for digitisation on Table **2a** and **2c** above, Pampered Pets will achieve set objectives (Lumi, 2020).

**References**

Lumi, A., 2020. The impact of digitalisation on human resources development. Prizren Social Science Journal, 4(3), pp.39-46.

Sharma, K. 2024. The Impact of ECommerce on Operational Cost Efficiency in Modern Businesses. Sachetas, 3(3), 56-62.

Eurostat, 2023. E-commerce continues to grow in the EU. Available from: <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20230228-2>

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