Antonio Scalfaro

Manager of Customer Service, Forest Order

Report to Taylor Smith

**Memo:**

June 20, 2023

To: Taylor Smith

From: Antonio Scalfaro

Subject: Critical Vulnerabilities in Forest Order Employee Structure

I have become aware of potential faults in our employee structure and duties that could hurt the company. Below are the individuals that each represent a single point of critical failure:

1. George – Sole possession of account login information for client database.
2. Sammie – Sole possession of account login information for company website.
3. Mark – Sole maintainer of company blog.
4. Jane – Sole possession of account login information for payroll system.

If any of those four employees and their skills are absent from the company, both Forest Order and its customers are at risk of adverse events.

I recommend immediate action within the company to take steps to implement three changes:

1. Cross-train employees to remove single points of failure.
2. Create a system to track scheduled off days for employees to ensure the company responsibilities can be carried out at all times.
3. If possible, create a master account for all systems for the CEO to be able to have control in a worst-case scenario.

Thank you,

Antonio Scalfaro

Manager of Customer Service, Forest Order

**Executive Summary:**

As the CEO of Forest Order, it is important to be aware of any critical points of failure that the company is exposed to. The biggest dangers to the company are the multiple sources of potential single point failures for critical systems. While George, Sammie, Mark, and Jane are all effective employees and in good standing with the company, they each represent a single point of failure in the company. They are each in sole possession of account login information and are solely responsible for critical machinations of First Order. For example, George is in sole possession of login information for the company’s customer database and is the only employee currently capable of accessing that system. If George, Sammie, Mark, or Jane and their skills are absent from the company for a period of time, it could result in considerable damage to First Order or its customers. To strengthen the company’s resiliency the following are recommended:

* Cross-train employees in auxiliary duties to maintain continuity if any given employee is absent.
* Track employee off days to ensure essential duties will never lapse.
* Create master accounts for the CEO to have access to all systems in case of emergency.

**Table of Contents:**

Title Page ………………………………………………………………..pg 1

Memo ……………………………………………………………………pg 2

Executive Summary …………………………………………………….pg 3

The Problem …………………………………………………………….pg 5

Suggested Solutions …………………………………………………….pg 5-6

Conclusion ………………………………………………………………pg 6

References ………………………………………………………………pg 7

**The Problem:**

Forest Order has done very well as a company over the years and has grown at an excellent pace, however, this growth brings challenges that can pose a threat to the company. During this period of growth, additional employees were brought on board and new sections of the company emerged to accommodate them. These administrative and technical employees are structured in such a way that pose a threat to Forest Order.

The lack of cross training between these administrative and technical employees fosters an environment that could produce an adverse event for the company or for its customers. The current structure relies heavily on individual employees to perform mission critical tasks without the aid of other employees. This can be noted in at least four critical operations of the company.

First, George is the sole maintainer of the customer information database. He is the only employee with access and knowledge of the database. Second, Sammie is the sole employee with access to the company website which is set up through her personal email. Third, Mark is the sole manager of the company blog. Lastly, Jane is the sole employee with access to the payroll system.

If any of these four employees were to quit or be fired, miss extended periods of time with the company, or purposefully attempt to damage the company, they could create a damaging situation for the company or its customers. Knisley, Powell, and Stern pose that to commit fraud on a company, the group must be in control of the duties of authorization, record-keeping, and custody of company assets for a single process (2022). This is seen as the case in four separate facets of Forest Order’s employee structure.

**Suggested Solutions:**

That being said, measures that can be taken by the company to reduce the likelihood of an adverse event include: the CEO maintaining a master account for all systems, introduce cross training to employees who have adjacent skills and ensure accessibility to those systems, create a system to track when employees with critical skills will be absent from the company.

As the CEO of a small company, it will be essential at times to fill the role of an employee who will miss time (Little & Best, 2003). To competently do this at Forest Order, you should maintain accounts for all systems essential to the company. This would include an account with SecureCloud to maintain the database and payroll if George or Jane are ever away and a WordPress account to maintain the company blog and website if Mark or Sammie are ever away. Even without the technical know-how, it is important to have access to these systems.

Cross training employees will allow Forest Order to be more resilient. In the case of one employee being absent, another employee should be trained, have access, and be available to cover the work of the absent employee. Starting with training Mark to maintain the company website through WordPress and teaching Sammie how to complete a blog post is a good idea. Similarly, George and Jane should know each other’s responsibilities and be able to complete each other’s job in case of an absence. Figure 1 is one such structure of cross training. In a study on cross training employees, Cannon-Bowers et al. (1998) found evidence to support the idea cross training also increases overall teamwork.

Create a system to track when employees will be out of the office. This system should ensure that every critical system in the company will have an employee able to perform that function. A system like this would ensure that both Mark and Sammie (once cross trained) would be unable to take vacations that overlap significant time.

**Figure 1:**

CEO

All System access

Mark

WordPress access website/blog

George

SecureCloud access database/payroll

Sammie

WordPress access website/blog

George

SecureCloud access database/payroll

**Conclusion:**

The identified risks to the company pose a legitimate threat if no action is taken. The actions suggested should be implemented as soon as possible to ensure Forest Order maintains the most resiliency possible. Reducing single points of failure through the company will ensure that the company is able to function in the case of a critical employee’s absence or malfeasance. The new employee responsibility and access structure could look similar to Figure 1. While this is not the only arrangement, it is the one that overlaps the employees who use similar systems.

**References**

Adam Little, & Peter J Best. (2003). A framework for separation of duties in an SAP R/3 environment. *Managerial Auditing Journal, 18(5), 419–430*. <https://doi-org.ezproxy.umgc.edu/10.1108/02686900310476882>

Cannon-Bowers, J. A., Salas, E., Blickensderfer, E., & Bowers, C. A. (1998). The impact of cross-training and workload on team functioning: A replication and extention.. Human Factors, 40(1), 92. https://doi-org.ezproxy.umgc.edu/10.1518/001872098779480550

Knisley, R. J., Powell, D., & Stern, M. T. (2022). A Second Look at a Mathematical Formulation of the Effectiveness of “Separation of Duties” as a Preventive Control Activity*. Journal of Forensic Accounting Research, 7(1), 16–29*. <https://doi-org.ezproxy.umgc.edu/10.2308/JFAR-2021-017>