

**Date:** June 23, 2023  
**To:** Richard Smith  
**From:** Tom Mason **TM** suggestions for making  
**Subject:** Forrest Lawn stronger

It has been a pleasure to work at Forrest Lawn as manager for customer service these past several weeks. The hard work and morale among the staff, the expanding customer base, and the opportunities the company offers are fantastic.

I am submitting this report to outline a few improvements that could make Forrest Lawn even stronger as a company. Some of my observations show some potentially concerning arrangements with regard to job functions and duties. The details of these observations are in the report.

Overall, this is a tremendous company with an impressive history and unleashed potential. The issues mentioned in this report show how Forrest Lawn can be improved even more with some minor adjustments to job functions and duties.

### **Executive Summary**

Forrest Lawn has grown in its customer base and its number of staff since it began in 2010. With this growth, the company has also expanded its information technology functions, including taking the following steps:

- establishing a blog on WordPress
- establishing a website on WordPress
- developing a contract with CloudCorps to house employee and customer data

However, **potential problems exist with the current arrangement.** These include the following:

- single points of failure: Only one person at Forrest Lawn has access to the IT functions mentioned above.
  - Sandra Davidson has sole access to the company website.
  - Marsha Nolton has sole access to the company blog.
  - Jared Stone has sole access to payroll information.
  - Jack Johnson has sole access to customer information
- potential abuse of data: Employees could take advantage of their access to sensitive data.
- lack of a vendor agreement with CloudCorps, which could prevent access to data.

- Jared and Jack have logins and passwords for the payroll information and the customer information with CloudCorps.
- If Jared or Jack were to leave the company, CloudCorps cannot share their login and password information with anyone else in the company, leaving the data inaccessible for Forrest Lawn.

**Solutions to these problems include the following:**

- job rotation and cross training
- mandatory vacations
- reorganization of the IT structure, including establishing one WordPress account
- an agreement with CloudCorps on break-glass access to information

If these solutions are implemented, Forrest Lawn will be in a more secure position in its IT functions and will have a solid foundation for further growth.

### **The Problem**

The current arrangement with the blog, website, and the information on CloudCorps' servers leaves Forrest Lawn in a vulnerable situation. The reasons for this vulnerability are as follows:

**Single Points of Failure and Lack of Vendor Agreement for IT Functions and Information**

- Sandra Davidson has demonstrated excellent design and management skills in setting up the company website. The site has served Forrest Lawn well. The problem is that the WordPress account on which Forrest Lawn's website is housed is Sandra's personal WordPress account. In addition, **only Sandra has access** to it. If Sandra were to leave the company for any reason, whether permanently or temporarily, no other employee could update the website.
- Marsha Nolton has done an excellent job in starting the company blog. However, the blog resides on a different WordPress account from that of the website. In addition, Marsha accesses it with her personal email and password. For this reason, **only Marsha has access to the blog**. If Marsha were to leave the company for any reason, no other employee could update the blog.

- Jared Stone made a sound decision in putting the company payroll information on CloudCorps. This move helped Forrest Lawn organize its staff benefits and salaries in one location. It allowed Forrest Lawn to focus on its primary objective: serving customers through landscaping services. However, Jack logs into the payroll information with a login and password provided to him by CloudCorps. CloudCorps has a policy that states it will not share login and password information with anyone else in the company. If Jack were to leave Forrest Lawn for any reason, **no other employee could access the payroll information**. This disruption in access would affect our ability to pay our employees in a timely fashion.
- Jack Johnson has maintained the customer information in a very organized and professional manner, and his step in putting it with CloudCorps helped Forrest Lawn with a logistical problem in housing customer information. The problem is that, like Jared, Jack logs into CloudCorps to update the customer information with a login and password provided to him by CloudCorps. If Jared were to leave Forrest Lawn for any reason, **no other employee could access that data**. Our customer information would be held on CloudCorps' servers with no one at Forrest Lawn able to retrieve it.

### **Potential Abuse of Data**

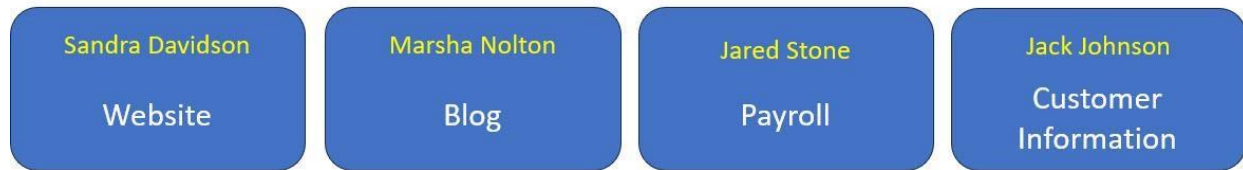
If any employee leaves the company on bad terms or for any reason develops a toxic relationship with the company or individuals in the company, then their sole access to customer data could be used maliciously. For example, customer information could be shared inappropriately. If personally identifiable information on customers is shared publicly, we will have a public relations crisis on our hands. The impact on our business would be immeasurable.

There is no reason to assume this abuse will happen at Forrest Lawn. Nonetheless, it is sound business practice to prevent the possibility of allowing an employee access to information through which they can do damage to the company or to the owners of that information. Fekkether and Morrison (2022) make the case that the possibility of an employee experiencing any emergency that would prevent them from coming to work, along with the need for internal controls within the organization, requires that more than one employee be able to perform certain functions in any office.

The current arrangement at Forrest Lawn is illustrated in Figure 1. The sole access for each function is demonstrated:

### **Figure 1**

*Current IT Organization at Forrest Lawn*



The problem depicted here is a *single point of failure*. If only one person is able to complete a function, then the absence of that one person causes the function to cease. Moreover, the possibility of fraud is increased if an entire process is completed by one person.

### Suggested Solutions

The following three practices can alleviate the vulnerabilities described above:

#### Cross-Training and Job Rotation

Sandra can be trained to update the blog, while Marsha can be trained to update the website. In addition, Jared can be trained on how to access and update the customer information, while Jack can be trained on basic principles of accessing and processing payroll information.

A helpful approach to cross-training is explained by Fettkether and Morrison (2022) as they specifically describe how employees can be cross trained to handle payroll. However, they suggest that all functions for which employees are being cross trained follow this procedure:

Set up a schedule for an accounts payable clerk to help a payroll employee run payroll. Then have them swap roles, so the payroll employee runs accounts payable checks for a cycle. Ensure that the employee who is stepping in leads the process so he or she can identify any steps or details that might have been unintentionally overlooked. (p. 17)

Jared and Jack could learn each other's roles through this process in becoming a team to handle CloudCorps data, and Sandra and Marsha could learn each other's roles through this process in becoming a team to handle Forrest Lawn's web presence.

This cross-training can then allow for job rotation. Marsha can, on occasion, do Sandra's job, and vice versa. Jared can, on occasion, do Jack's job, and vice versa. Thongpapel et al. (2018) point out that "...job rotation allows the rotating employee to better understand the extent of knowledge, its sources, and the correct approach to access the needed knowledge from the right person" (p.1089). They argue that this development enhances cross-functional collaboration in any organization. Forrest Lawn's functions would be more efficient and effective through a job rotation arrangement.

The frequency with which Forrest Lawn employees switch roles can be determined. However, a well-established principle for when to arrange for them to switch roles is during vacations.

## Mandatory Vacations

Forrest Lawn could have a requirement that each of the four individuals take a vacation at different times of the year. Sandra's and Marsha's vacations would not overlap, and Jared's and Jack's vacations would not overlap. This arrangement will ensure that each one, at least once a year, will be performing the other's duties. This ensures that at least one individual in the company has access to the necessary information, knows how to perform the functions for that role, and can take over the role in the event of an emergency. Keng (2018) maintains that mandatory vacations act to ensure employees are properly cross trained and that an organization will "never be reliant on any single individual on a daily basis. Your staff and managers should have an operational plan to cover and manage the business regardless if anyone person is present at the workplace" (para. 6).

If Sandra and Marsha are cross trained for the blog and the website, and if they rotate their functions on occasion, then they can perform as a team and understand how to complete each other's tasks. Moreover, if Jared and Jack are cross trained for the maintenance of the payroll and customer information on CloudCorps, and if they rotate their functions on occasion, then they can perform as a team in updating and accessing information on CloudCorps. The mandatory vacation policy will simply ensure that this cross-pollination of duties takes place.

## Reorganization of the IT Structure and Establishing a Forrest Lawn WordPress Account

Forrest Lawn could reorganize its structure into two teams: **Website/Blog** and **CloudCorps Payroll/Customer Data**. Sandra and Marsha can operate as a website/blog team (handling information on WordPress), and Jared and Jack could operate as a CloudCorps Data team (handling payroll and customer information).

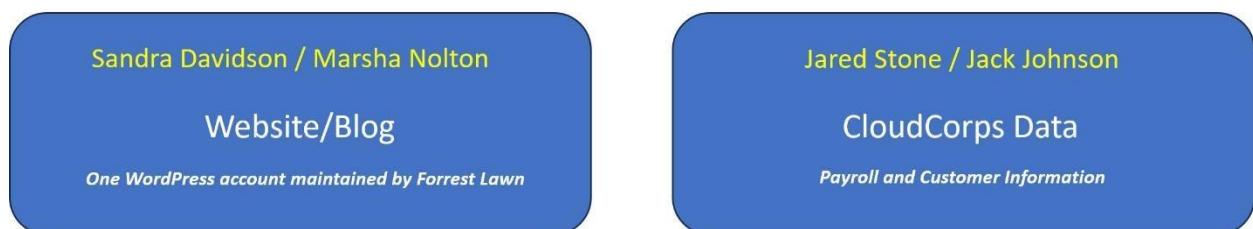
In addition, Forrest Lawn should have one WordPress account for the website and the blog. Forrest Lawn should have its own company WordPress account through which the blog and website are accessed. No personal email addresses should be used to log into the account.

Ideally, you as the company owner would have administrative access to the account, along with Sandra and Marsha. In addition, you would have administrative access to the CloudCorps data, along with Jared and Jack.

Figure 2 shows how this reorganization of the IT structure, along with having one Forrest Lawn WordPress account, would function.

**Figure 2**

*Proposed IT Organization at Forrest Lawn*



## **Vendor Agreement with CloudCorps for Break-Glass Access**

You, as the owner of Forrest Lawn, should establish an agreement with CloudCorps to allow you breakglass emergency access to any information on CloudCorps. Currently, Forrest Lawn maintains a traditional agreement with CloudCorps, one that allows only designated individuals (Jared and Jack) to access the data. This arrangement does not allow for emergency situations in which you might need to access the data on CloudCorps.

Marinovic et al. (2014) explain that traditional access models to secure information prevent certain individuals from accessing data, even in emergencies. They explain: “To overcome this issue, break-glass access control models permit a subject to override an access control denial if he accepts a set of obligatory actions and certain override conditions are met” (p. 1). In the event that, for example, both Jared and Jack experience an emergency and are unable to report to work, you would be in a position to access the data on CloudCorps and ensure that payroll continues unabated and that customer information can be accessed as needed.

## **Conclusion**

Forrest Lawn is a model company in the landscaping industry. It has grown significantly since its founding in 2010. You as the founder and owner, and the rest of the staff, are to be lauded for this exemplary growth and performance.

With Forrest Lawn’s growth has come management strains. One such strain is the organizational structure that has resulted in one individual being the only employee who can perform a pivotal function. Currently at Forrest Lawn, the website, blog, customer information, and payroll information are each maintained by one individual.

Cross-training and job rotation, along with mandatory vacations, will allow for these functions to be performed by more than one individual. A small reorganization with the establishment of two units—Website/Blog and CloudCorps Data—can complete this cross-training effort. Finally, a change in arrangement with WordPress so that Forrest Lawn has its WordPress account, and a change in arrangement with CloudCorps so that a break-glass policy is in place will both serve to ensure that important functions will continue and pivotal data can be accessed in times of emergency.

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