

IT Support – Process Review Document for W.D. Widgets Company

Overview of the Situation

Sales Company: W.D. Widgets is a small company that sells widgets. They're mostly made up of salespeople who work with lots of clients. I have taken over as the sole IT person for this company of 80-100 people. When HR tells me to provision a machine for a new employee, I order the hardware directly from a business vendor. I keep one or two machines in stock, in case of emergency. The users receive a username that I generate for them. I then give them an orientation on how to login when they start. I currently manage all of my machines using Windows Active Directory. The company uses only Windows computers. When a new computer is provisioned, I have to install lots of sales-specific applications manually onto every machine. This takes a few hours of my time for each machine. When someone has an IT-related request, they email me directly to help them. Almost all software is kept in-house, meaning that I'm responsible for the email server, local machine software, and instant messenger. None of the company's services are kept on the cloud. Customer data is stored on a single file server. When a new salesperson starts, I also map this file server onto their local machine, so that they can access it like a directory. Whoever creates a folder on this server owns that folder and everything in it. There are no backups to this critical customer data. If a user deletes something, it may be lost for everyone. The company generates a lot of revenue and is rapidly growing. They're expecting to hire hundreds of new employees in the next year or so, and I may not be able to scale my operations at the pace I'm working.

Current IT Infrastructure Limitations

W.D. Widgets is currently functioning with a delicate and unsustainable IT framework, particularly in light of its growth plans. With nearly 100 employees already onboard and hundreds more anticipated in the near future, the company's manual, on-site infrastructure is a constraint. Below are five essential Improvements to guarantee scalability, reliability, and operational efficiency.

1. Automate Device Provisioning Using Imaging Tools

Problem: The manual setup of sales software on each new computer consumes several hours for each machine.

Improvement: Use a Windows Deployment Services (WDS) or Microsoft Endpoint Configuration Manager (MECM) solution to establish and deploy standardized images for new computers.

Rationale: This reduces provisioning time, ensures uniformity, and enables new devices to be operational within minutes.

2. Transition Key Services to the Cloud

Problem: All services (email, messaging, data) are managed in-house, overworking one administrator and restricting access

Improvement: For email and instant messaging, use Microsoft 365 or Google Workspace. For communication, use Microsoft Teams or Slack.

Rationale: This reduces the load on local servers, enhances uptime & availability, boosts security, and facilitates remote work.

3. Establish a Tiered Backup and Recovery Framework

Problem: Customer data is saved on a single file server with no backup, this leads to a risk of data loss.

Improvement: Setup automations for daily backups and cloud-based replication to a safe offsite location.

Rationale: This safeguards against accidental deletions, hardware malfunctions, and ransomware threats, ensuring business continuity.

4. Create a Role-Based Access Control (RBAC) System

Problem: Folder creators have total control, resulting in disorganized file ownership and the risk of data loss.

Improvement: Enforce access control policies on shared drives utilizing Windows Active Directory group policies.

Rationale: This guarantees proper data access, secures sensitive client information, and streamlines management.

5. Introduce an IT Helpdesk/Ticketing System

Problem: IT requests are managed through direct emails, complicating tracking and prioritization.

Improvement: Implement a helpdesk system (e.g., Zendesk, Freshservice) for tracking Problems and managing workflows.

Rationale: This enhances response time, maintains a record of IT history, and allows for more effective workload distribution as the company expands.

Conclusion:

Given the rapid growth of W.D. Widgets, there is need for IT strategies that will support scalability. The listed Improvements will tackle time inefficiencies, data risks, and service availability. By automating processes, relocating essential services to the cloud, and developing fault-tolerant systems, IT operations will be enabled to scale without sacrificing reliability or security which is typical of a small software enterprise.