

Robust IT upgrade for XYZ Corp,

IT Consulting





Upgrading the Technological Infrastructure of XYZ Corp.

- Expansion within XYZ should incorporate diverse changes and technological upgrades to various departments in XYZ including;
 - IT
 - Sales
 - Marketing
 - HR
 - Finance
- Each department within XYZ Corp should have workstations tailored to specific requirements within each workstation. The following slides will showcase the importance of the expansion including two solutions for procuring and provisioning workstations.



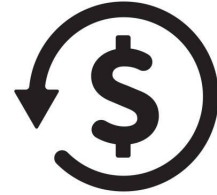
Solution 1: Workstations with Custom Configuration

- This solution requires each department's specific workstations to be designed for high performance and will allow significant customization control within the environment of each department.
- Each department will include specific hardware and software that fits the needs.

Solution 1: Workstations with Custom Configuration



Sales:



Hardware:

- **Workstations:** Dell XPS Desktop with Intel i7 processing, 32GB RAM and 1TB of storage.

Software:

- **Operating System:** Windows 11 Pro
- **Office Suite:** Microsoft 365 or Google Workspace
- **Customer Relationship Management Software:** Ex: Hubspot, or Sale force
- **Antivirus and Anti-Malware:** McAfee Total Protection
- **Firewall Solutions:** Advanced firewall protection with VPN support. Ex: Cisco ASA, Palo Alto
- **Browsers:** Google Chrome, Firefox, Brave, Microsoft Edge, etc

Solution 1: Workstations with Custom Configuration

Marketing:



MARKETING

Hardware:

- **Workstations:** HP- Envy Desktop- Intel Core i7 processing, 32GB RAM, with NVIDIA GeForce RTX 4060 graphics.

Software:

- **Operating System:** Windows 11 Pro
- **Office Suite:** Microsoft 365 or Google Workspace
- **Adobe Creative Cloud:** for designing tasks and needs
- **Antivirus and Anti-Malware:** McAfee Total Protection
- **Firewall Solutions:** Advanced firewall protection with VPN support. Ex: Cisco ASA, Palo Alto
- **Browsers:** Google Chrome, Firefox, Brave, Microsoft Edge, etc

Solution 1: Workstations with Custom Configuration

Human Resources:



Hardware:

- **Workstations:** Lenovo ThinkCentre Neo 50s Gen 4 with Intel Core i5 processing, 16GB RAM, 256GB SSD

Software:

- **Operating System:** Windows 11 Pro
- **HR Management Tools:** EX: Rippling, Bamboo, Deel, ETC.
- **Antivirus and Anti-Malware:** McAfee Total Protection
- **Firewall Solutions:** Advanced firewall protection with VPN support. Ex: Cisco ASA, Palo Alto
- **Browsers:** Google Chrome, Firefox, Brave, Microsoft Edge, etc

Solution 1: Workstations with Custom Configuration

Finance:



Hardware:

- **Workstations:** Dell XPS Desktop with Intel i7 processing, 16GB RAM and 512GB of storage.
- **High Resolution Monitor for data analysis**

Software:

- **Operating System:** Windows 11 Pro
- **Accounting Software:** Intuit Quickbooks, Xero, etc.
- **Antivirus and Anti-Malware:** McAfee Total Protection.
- **Firewall Solutions:** Advanced firewall protection with VPN support. Ex: Cisco ASA, Palo Alto.
- **Browsers:** Google Chrome, Firefox, Brave, Microsoft Edge, etc.

Solution 1: Workstations with Custom Configuration



IT:



Hardware:

- **Workstations:** Dell XPS Desktop *with Intel i7 processing, 16GB RAM and 512GB of storage.*
- **Backup Storage**

Software:

- **Operating System:** Windows 11 Pro
- **IT Software:** Developmental and monitoring software such as SysAid, JIRA, Zendesk, etc.
- **Antivirus and Anti-Malware:** McAfee Total Protection.
- **Firewall Solutions:** Advanced firewall protection with VPN support. Ex: Cisco ASA, Palo Alto.
- **Browsers:** Google Chrome, Firefox, Brave, Microsoft Edge, etc.

Solution 1: Workstations with Custom Configuration



Administration:



Hardware:

- **Workstations:** Lenovo ThinkCentre Neo 50q Gen 4 Tiny with Intel i5 processing, 8GB RAM, 256 GB of storage.
- **Single monitor** setup for office tasks.

Software:

- **Operating System:** Windows 11 Pro.
- **Admin Software:** Standard productivity software EX: ADP, Culture, etc.
- **Antivirus and Anti-Malware:** McAfee Total Protection.
- **Firewall Solutions:** Advanced firewall protection with VPN support. Ex: Cisco ASA, Palo Alto.
- **Browsers:** Google Chrome, Firefox, Brave, Microsoft Edge, etc.

Solution 1: Workstations with Custom Configuration



Support & Scalability:

- **Support**

- Utilizing in house IT team to ensure regular maintaining and support from the IT department for each departments within the company.
- **Vendor Support:** Extending warranties for devices and softwares and service contracts for hardwares.

Scalability:

- Workstations being upgraded with additional RAM, storage and or graphic cards as needed for each department.



Solution 2: Using Cloud-Based Workstations

- This solution enables employees to access their work environment from any device with internet access.
- Provides Up-to Date software
- Reduces Energy Consumptions

Solution 2: Using Cloud-Based Workstations



Hardware:

- Provides minimal hardware with minimal desktop and workstation specs for each department. Each department consisting of the same workstation requirements and devices.
- **Workstations:** Lenovo ThinkCentre M60q Chromebox Enterprise with Intel Celeron, 4GB RAM, 64GB of storage.
- Operating System: Chrome OS

Solution 2: Using Cloud-Based Workstations



Software:

- **Operating System:** Windows 11 virtual displays
- **Cloud Services:** Amazon WorkSpaces as hosting virtual machine
- **Office Suite:** Microsoft 365 or Google Workspace
- **Security:** Azure Active Directory

Solution 2: Using Cloud-Based Workstations



Support and Scalability

- **Cloud Support:** Vendor support for enhanced performance.
- **In-House IT Support:** Assisting with troubleshooting, training, quality control and user management.
- Allows for easier scale up or down based on each user needs. Adding new users can be installed easily.
- Adjusting the CPU, Ram, Storage, etc

Solution 2: Using Cloud-Based Workstations



System Configuration:

- Virtual desktops that are tailored with the equipped software and setting for each department within XYZ.
- Using Group Policy Objects to enforce security compliance
- Providing network configurations for remote access for employees.



System Configuration & Setup:

User Account features & Security

- **Confidentiality and ensuring security within accounts:** Prevent unauthorized access to sensitive data and information which also helps to reduce the risk of breaches
- Control user permissions, Log user activity for auditing purposes helping to solve security incidents and breaches.
- **User Account Creation:** Ensuring RBAC otherwise known as role-based access control for user roles depending on permission of job functions and tasks.
- **Password Management and account review:** Conducting multiple password changes and enforcing strong passwords for users with minimum lengths and requirements.



System Configuration & Setup:

Setup Plan for Safety and Healthy Work Practices

- **Ensuring Ergonomic Workspace:**

- **Monitor Placement:** Positioning monitors at eye level in preventing strain and or discomfort for employees while ensuring monitors are at the appropriate length for the users eyes.

- **Cable Management:** Keeping cables and wires organized to prevent from tripping hazards and creating proper airflow for devices.

- **Lighting:** Providing the appropriate lighting on monitors and within the office.

- **Temperature Control:** Maintain a comfortable and safe working temp within the workspace around 70°F



Enhanced Troubleshooting & Support

- **Check Hardware connections:** Making sure all cables are secured and properly connected with devices being turned on.
- **Verifying network connections:** Provide up to date checks on secure wifi connections
- **Software up-keep:** Installing and maintaining updates and patches for software, antivirus ,etc
- **Performance up-keep:** Performing regular maintenance and checking cleaning up unnecessary files and or tools on devices. Using system resource monitors in indefinite issues that arise within the CPU and system functionalities.
- **Online Support Resources:** Utilizing Microsoft support, TechNet and other comprehensive help for windows and or applications.



Data Management and Software Licensing:

- **Compliance and Legal Protection:** Avoiding fines and legal action while ensuring we comply with legal agreements regarding software usage, adhering to software agreements.
- **Access to updates and Support:** Adhering to licensed software that includes updates, security patches, customer support and more.
- **Proprietary Licenses:**
 - *Single User License:* Allowing one user to install and use software.
 - *Volume License:* Permits multiple installations within our organization
- **Subscription-Based Licenses:** Users and or the company is paying for monthly subscriptions for softwares Ex: Microsoft 365, Adobe, etc.
- **Freeware and Shareware:** Software for free but with restricted usage rights, and software paid for within the company.

Cost Analysis:



Cost:Solution 1:Workstations with Custom Configuration:

- **Sales:** (5 Workstations) Hardware = **\$6,000**
- **Marketing:**(3 Workstations) Hardware = **\$4,500**
- **HR:**(2 Workstations) Hardware = **\$1,600**
- **Finance:**(2 Workstations) Hardware = **\$2,400**
- **IT:**(2 Workstations) Hardware = **\$4,000**
- **Admin:**(3 Workstations) Hardware = **\$2,400**

Software costs: \$13,930, Training + IT Setup: \$3,500

Total Cost of Solution 1= \$40,230

Cost:Solution 2: Using Cloud-Based Workstations:

- **Hardware:** **\$6,800**
- **Cloud Services:** Virtual Desktop Infrastructure **\$10,200**
- **Software:** Operating systems, Department specific Software **\$9,000**
- **IT Setup & Support:** Setup and configuration **\$3,000**

Total Cost of Solution 2= \$31,500



Conclusion:

Using the Cloud-based solution it is to be found **\$8,680** less than Customized Workstations solution. Choosing the Cloud-based system would be more efficient for upfront costs, system managing, and more scalable as the company continues to grow. Using the Customized Workstations solution gives greater control and accessibility to each departments software and hardware needs. This decision varies on the XYZ Corp Budget, expectations of the company and operational preferences.