

A woman with short, light-colored hair is wearing a VR headset. The headset's display shows a futuristic, glowing blue cityscape. She is standing in a street lined with buildings that have colorful, illuminated signs and billboards. The scene has a cyberpunk aesthetic with strong neon lights.

Christer Edwards

Tech Fundamentals

1

Roles and Responsibilities

Tech Fundamentals: Week 1



1. Welcome to the course & Introductions
2. Verify access to the **Course Library**
3. Pre-assessment
4. Introduce you at Vandelay Industries
5. Learn Roles & Responsibilities

Week 1 Objectives



A futuristic robot with a large, rounded head and glowing blue lights on its body is riding a hoverboard. It is moving away from the viewer, leaving a trail of blurred lights on the road. The background is a dense city skyline at night, with numerous colorful neon signs in shades of pink, orange, and blue. The overall atmosphere is cyberpunk and futuristic.

Course Library

library.techliterate.co/fundamentals



Week 1 pre-assessment questionnaire.

<https://forms.gle/avA4dN6nJ4axhkh86>

The Scenario







VI

Congratulations
You're hired!

Executive Level

Art Vandelay is the **Chief Executive Officer (CEO)** and **Founder** of Vandelay Industries. He spends his days disrupting the global import / export industries through technological innovation.

Art is known for his friendly demeanor, colorful suits and ties.

(The photographer could only catch him for a moment during a *very* brief lunch break.)

Chief Executive Officer





Marcus is the **Chief Technology Officer (CTO)** for Vandelay Industries. He spends his day doing long-term technology roadmapping, innovation, and R&D for new products and managing the Director of Engineering and the company's technical vision.

His role is ultimately responsible for setting the external-facing product strategy, ensuring the technology is scalable, and driving a culture of engineering excellence.

Marcus has directed his reports to implement a hybrid-cloud strategy for the company. All departments are involved.

Chief Technology Officer

Ezra is the **Chief Information Security Officer (CISO)** for Vandelay Industries. Ezra spends their day doing security risk assessment, compliance auditing, and managing the incident response plan and managing the confidentiality, integrity, and availability (CIA Triad) of the company's data assets.

Their role is ultimately responsible for defining and enforcing the digital security posture, ensuring adherence to regulations, and protecting all customer and corporate data.

This executive is the primary authority on cyber risk and data protection.

Chief Information Security Officer





Liz is the **Chief Security Officer (CSO)** for Vandelay Industries. Liz spends their day doing enterprise risk management, managing workplace safety, and protecting physical assets & personnel and managing the company's digital and physical security strategies.

Their role is ultimately responsible for the holistic security of the organization, including both cyber security and the safety of all facilities and employees.

This executive is the overall leader responsible for protecting all company assets, people, and property.

Chief Security Officer

Joel is the **Chief Information Officer (CIO)** for Vandelay Industries. Joel spends their day doing operational oversight, managing vendor contracts, and planning for business continuity, managing the IT budget, internal information systems and Help Desk teams.

Their role is ultimately responsible for ensuring the stability, efficiency, and uptime of the internal technology that supports all company employees and day-to-day operations.

This executive is the operational leader responsible for keeping the lights on internally.

Chief Information Officer





Quick 5 minute break to get a drink, visit the restroom or simply stand up and stretch your body.

Take 5

Engineering



Vandelay Industries hires only the most talented engineers to build its industry leading import / export logistics software. These talented engineering teams are the people responsible for building the digital infrastructure that powers the company.

Building Vandelay Industries

Karl is the **Director of Engineering** for Vandelay Industries. Karl spends their day doing organizational planning, optimizing engineering processes, and ensuring technical alignment across multiple teams and managing multiple Engineering Managers and their respective teams.

Their role is ultimately responsible for the overall productivity, execution, and technological health of a major segment of the product line, bridging the gap between leadership and the teams.

Director of Engineering





Maria is a **Software Engineering Manager** for Vandelay Industries. Maria spends their day doing people management, career coaching, and removing blockers for the team of 5-10 **Python** Software Engineers.

Their role is ultimately responsible for the well-being, growth, and predictable delivery of features by their assigned team.

This role reports to the Director of Engineering.

Manager, Software Engineering



Nancy is a **QA / Test Engineer** for Vandelay Industries. Nancy spends their day creating detailed test cases, executing both manual and automated tests, and documenting and triaging software defects (bugs) and managing the overall quality for the product and the suite of automated testing tools.

Their role is ultimately responsible for verifying the software is ready for release, meets all functional requirements, and delivers a reliable user experience.

This role works closely with Software Engineers and reports to the Engineering Manager or a dedicated QA Lead.

Quality Assurance Engineer, Lead

Manager, Software Engineering

Kevin is a **Software Engineering Manager** for Vandelay Industries. Kevin spends their day doing career coaching, and removing process blockers for his team of 5-10 **Java** Software Engineers.

Their role is ultimately responsible for the growth and predictable delivery of features by their assigned team.

This role also reports to the Director of Engineering.





Josh is a **Software Engineer** for Vandelay Industries. Josh spends their day writing, testing, and debugging code for new features, participating in code reviews, and collaborating on design specs and managing specific components of the application or system they are assigned to maintain.

Their role is ultimately responsible for the technical implementation and quality of the software, ensuring new functionality meets the defined requirements.

This is the primary role responsible for building the product and reports to an Engineering Manager.

Software Engineer



Taylor is the **Platform Engineering Manager** for Vandelay Industries. Taylor spends their day setting the internal platform roadmap, improving developer experience (DX), and ensuring infrastructure standardization and managing the DevOps Engineers, Site Reliability Engineers (SREs), and internal infrastructure tools.

Their role is ultimately responsible for building the internal 'paved road' that enables application teams to rapidly and safely build, test, and deploy their software with high efficiency and reliability.

This role reports to the Director of Engineering and serves all application development teams.

Platform Engineering Manager

Scott is a **DevOps Engineer** for Vandelay Industries. Scott spends their day building and automating the CI/CD pipelines, writing infrastructure-as-code (IaC) using tools like Terraform, and implementing robust monitoring systems and managing the continuous flow of code from development to production environments.

Their role is ultimately responsible for automating operational processes, improving the speed and reliability of software deployment, and fostering collaboration between development and operations teams.

This role focuses on the automation and speed of delivery and typically reports to an Engineering Manager or the Platform Engineering Manager.

DevOps Engineer





Jonas is a **Site Reliability Engineer (SRE)** for Vandelay Industries. Jonas spends their day minimizing production risk, and using software engineering principles to solve operational problems, managing system reliability, high availability, and the automation of manual operational tasks.

Their role is ultimately responsible for ensuring the product meets specific, measurable targets for uptime and performance, and leading the immediate response to complex production incidents.

This role focuses on performance and reliability measurement and typically reports to an Engineering Manager or the Platform Engineering Manager.

Site Reliability Engineer

Tim is a **Cloud Engineer** specializing in **AWS** for Vandelay Industries. Tim spends their day writing Infrastructure as Code (IaC) using tools, provisioning secure cloud instances, and optimizing AWS service costs while managing the deployment, scaling, and operational excellence of all infrastructure running on the Amazon Web Services platform.

Their role is ultimately responsible for translating application requirements into a secure, scalable, and cost-efficient AWS architecture.

This specialist reports to the DevOps or Platform Engineering Manager.

Cloud Engineer, AWS





Chloe is a **Cloud Engineer** specializing in Azure for Vandelay Industries. Chloe spends their day doing managing Virtual Networks, deploying clusters and managing the deployment, scaling, and operational excellence of all infrastructure running on the Microsoft Azure platform.

Their role is ultimately responsible for translating application requirements into a secure, scalable, and cost-efficient Azure architecture.

This specialist reports to the DevOps or Platform Engineering Manager.

Cloud Engineer, Azure

AI



Introducing
Vandelay AI



Explore Vandelay AI: Lab (20 minutes)



Quick 5 minute break to get a drink, visit the restroom or simply stand up and stretch your body.

Take 5

IT



Vandelay Industries internal IT team provides all the hardware and software to VI employees. Everything from laptops to printers, from email to mobile phones. Support from IT is critical in building technical infrastructure and services.

Supporting Vandelay Industries

Seth is the **Director of IT** for Vandelay Industries. Seth spends their day doing managing the IT department's internal service delivery, prioritizing infrastructure projects, and overseeing technology procurement and managing the System Administrators, Help Desk, and internal network teams.

Their role is ultimately responsible for the reliable and efficient delivery of all internal IT services and systems to employees, ensuring the CIO's strategies are executed day-to-day.

This manager reports directly to the Chief Information Officer (CIO).

Director of IT / Infrastructure





Nick is a **Database Administrator (DBA)** for Vandelay Industries. Nick spends their day optimizing slow SQL queries, managing database security and user access, and ensuring consistent backup and recovery procedures and managing the performance, reliability, and security of all enterprise data storage systems.

Their role is ultimately responsible for the integrity, speed, and high availability of the organization's data, ensuring it is protected and accessible when needed.

This role works closely with Engineering and reports to the Director of IT or an Engineering Manager.

Database Administrator

Monitoring Specialist

Corey is a **Monitoring Specialist** for Vandelay Industries.

Corey spends their day designing dashboards, tuning alerting thresholds, and implementing tools to track application health plus managing the systems that provide real-time performance data across all production services.

Their role is ultimately responsible for ensuring the company is proactively alerted to system issues before they escalate into major incidents, directly supporting the SRE team.

This role is crucial for proactive detection and typically reports to the Platform Engineering Manager or a senior DevOps leader.





Erin is a **NOC Technician** for Vandelay Industries. Erin spends their day doing 24/7 centralized monitoring, performing initial triage on critical infrastructure alerts, and following strict incident escalation procedures and managing the immediate response and accurate reporting for all critical network and system events.

Their role is ultimately responsible for acting as the centralized 'eyes on glass' for the network and core infrastructure, ensuring high-priority alerts are acknowledged and escalated immediately.

This shift-based operational role reports to the Director of IT or a senior Network Operations manager.

Network Operations Technician

System Administrator

Andrew is a **System Administrator (SysAdmin)** for Vandelay Industries. Andrew spends their day managing user access and permissions, applying server updates and security patches, and maintaining server health and managing the reliability of the internal server operating systems (like Linux and Windows) and the underlying hardware.

Their role is ultimately responsible for the stability and security hardening of the internal servers that host applications and user services.

This core operational role typically reports to the Director of IT.





Russ is a **Data Center Technician** for Vandelay Industries. Russ spends their day physically installing new servers and network gear, performing equipment maintenance, and ensuring power and cooling systems are operational and managing the physical hardware, cabling and racking within the company's on-site data centers or colocation facilities.

Their role is ultimately responsible for the physical security and environment (power, cooling, fire suppression) of the infrastructure, serving as the hands-on operational resource.

This core operational role typically reports to the Director of IT or a Data Center Operations Manager.

Data Center Technician

Martin is a **Network Engineer** for Vandelay Industries. Martin spends their day doing configuring routers and switches, managing firewall security policies, and optimizing traffic flow and managing the entire data communication network, including LANs, VPNs, and connectivity to the internet.

Their role is ultimately responsible for ensuring data can move securely and reliably across the organization at optimal speed, guaranteeing network redundancy and performance.

This highly specialized infrastructure role typically reports to the Director of IT or a senior network operations manager.

Network Engineer



Security



Vandelay Industries is a global logistics company dealing in over 40 countries worldwide. Their adoption of a hybrid-cloud platform requires them to follow certain regulatory standards for data collection and privacy.

Securing Vandelay Industries

Director of Security

Director of Security / Head of InfoSec

Dana is the **Director of Security** at Vandelay Industries. She spends her day directing security initiatives within the company.

Dana reports up through the **CSO**.





Compliance & Risk Analyst

Aubrey is a **Compliance & Risk Analyst** at Vandelay Industries. She spend her day ensuring the company is aligned with industry regulations and compliance best practices.

Aubrey works with a range of roles and responsibilities to ensure projects are aligned.

Aubrey reports directly to the **Chief Security Officer**.

Compliance & Risk Analyst

Support



The Vandelay Industries Help Desk employees rarely get the credit they deserve for keeping things running around the office. From the WiFi to the Printers, from forgotten passwords to desktop support. When you're drowning in technical problems, Help Desk is there to rescue you!

Saving Vandelay Industries



Help Desk Technician

Chad is a **Help Desk Technician** at Vandelay Industries. He spends his day supporting corporate employees with IT related issues.

Chad interacts with a wide range of roles and responsibilities to ensure employees are supported.

Chloe reports directly to the **Help Desk Manager**.

Help Desk Technician

Customer Success Engineer

John is a **Customer Success Engineer** at Vandelay Industries. He spends his day improving and securing the Vandelay Industries network.

John reports up through the **Director of Security**.

Customer Success Engineer





From all of us at Vandelay Industries,

Welcome to the team!

What you learned this week:

1. Executives define the strategy (CEO, CTO, etc)
2. Organizational execution by VP / Director level
3. Feature delivery by Engineering teams
4. Production and reliability by DevOps / SRE / Operations
5. Support and enablement handled by Help Desk and CSE
6. Coordination of resources by Project Management

Week 01: Recap



What you'll learn next week:

1. What makes up modern computing hardware.
2. Basic troubleshooting practices.
3. Most common operating systems.
4. Mobile computing privacy for iPhone / Android.

Week 2: Preview





You've bravely started your journey toward not only technical *literacy* but digital **fluency**! Before you know it, all the technical jargon and buzzwords that may as well have been Chinese, will all make sense. Soon you'll look back and see how much you've learned and more importantly how far you've come in pursuing your goals! I'm honored to be a part of that journey. - Chris

You can do this!

Thanks!

If you have any questions:

christer.edwards@gmail.com

385-225-4925

<https://library.techliterate.co>

CREDITS: This presentation template was created by **Slidesgo**, and includes icons, infographics & images by **Freepik**