Week 1: Develop a Knowledge Transfer Program

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# Develop a Knowledge Transfer Program

NCU-F is a large-scale enterprise with ten thousand employees working across several global financial services. The business requires policies and procedures that enable its staff and customers to raise support issues and discover standard solutions. Information Technology can serve those experiences using self-service portals into knowledge databases. When answers are not available, those same systems can escalate requests to product support networks.

# Tiered Support Networks

Without sufficient scalability, the support network becomes prohibitively expensive. One approach to meeting this requirement is through a two pyramid structure (Figure 1). The top inverted pyramid represents members of the product engineering role-family, versus the bottom, consists of the support role-family. Under this model, support tickets flow up and solutions down. There is a strong economic incentive to address issues at the bottom of the structure, as the higher levels require specialized resources.

Figure 1: Tiered-Support Network

Diagram

Description automatically generated

## Support Pyramid

For example, a customer wants to integrate their business process with one of NCU-F’s web services. When customers can quickly discover that information from a blog or wiki, the business must only pay content hosting fees. Otherwise, the request escalates to support staff which must first route the ticket to the least costly junior technicians. After the junior fails to address the issue, they can escalate it to a more experienced peer for review. If the support team requires further assistance, there must be communication channels for escalating to program management.

Specific divisions within NCU-F, like the central DevOps engineering team, have dozens of area owners, creating routing challenges. This situation might necessitate multiple PM-to-PM switching. NCU-F should proactively configure Incident Management software like PagerDuty, or a similar Software-as-a-Service (SaaS) solution. These systems accelerate the search for on-call staff and improve the customer experience through lower time to mitigate.

## Engineering Pyramid

The support PM must then contact the area owner PM on the relevant engineering team. For instance, this specific customer wants to ingest market data from the Trading Platform. In this case, the Trading PM will ask the Engineering Manager for a solution. Unless the manager can resolve the matter, it must escalate to a service engineer. The engineers must halt inflight work and context switch, introducing risks to existing timelines and commitments.

## External Support

Suppose the engineering team cannot mitigate the issue. In that case, the process begins anew with the external vendor or partner. Those third-party providers have similar economic constraints, which forces them into these stacked pyramid structures. This consistency includes knowledge databases, support channels, and customer access to the service team. However, there can be specific scenarios that are not resolvable. In these situations, both the engineering and support program managers need to agree on an appropriate response. Responses can include adding to the backlog, proposing workarounds, among other stopgaps. Lastly, reporting must inform the executive leadership of any business impact to approve future investments into the problem.