4.2 Centralizing a Service

- This chapter is about the process of taking an existing decentralized service and centralizing it.
- We are proponents of centralization.
- There was no strong policy for centralization, and nobody was allocated to providing and supporting some of these central services.
- If they are infrastructure services, they are candidates for centralization.
- If the service is really specific to one particular group and is unlikely to ever be needed by other groups, it is not a candidate for centralization.

When you have identified a service that is a good candidate for centralization, take the following steps:

4.2.1 Understand the current solution.

- The first phase of centralizing a decentralized service involves understanding the current solution:
 - its features, its strong and weak points, its associated change processes, its users and how they use it, and the reasons the service is currently decentralized.
- It is important to understand the existing situation thoroughly before making the change, because otherwise you run the risk of making the service worse.
- If you fail, that failure will be used as a reason to not move to a centralized service forevermore.
- It is also important to understand the reason that the service is decentralized before you centralize it. It may be due to some technical, procedural, or SLA problems with the central service.
- The reasons for decentralization may vary between the different groups running the decentralized services.
- Their customers and management may have their own reasons for decentralization.
- It is important to understand all these views.

4.2.2 Make a detailed plan for building and migrating to a centralized service.

- Once you understand the current solution(s), the next step is to define what, if anything, needs to change in the centralized service to meet the needs and expectations of the customers of the decentralized services.
- Then, build a detailed plan of all the work that needs to be done, who needs to be involved, and approximately how much of each group's time it will take.
- Consider also the effort and teams who need to be involved in migrating the decentralized services to the centralized service.
- Migrations may involve teams other than those who are running the respective services.
- Change-request tools may need to be switched on migration day, and outstanding tickets migrated from one queue to another.

4.2.3 Get management support and, if necessary, a budget.

- Management support is essential for pushing through a potentially unpopular change.
- Groups that have their own decentralized services often do not want to migrate to a centralized one.
- We need management support and a budget for building or improving the centralized service, and for devoting some resources to maintaining it afterwards.
- Explain the benefits of centralization in terms of how this change will benefit the business and the users.
- Present your detailed plan, timeline, and cost and resource estimates.

• In particular, estimate the cost savings and the anticipated service improvements.

4.2.4 Fix the problems that led to decentralization.

- Once you have management support to proceed with the centralization project, the first thing that you need to do is fix any problems that have been identified with the current service.
- These may be known problems for a service that is in active use.
- These problems may be why other groups have built their own decentralized services.
- Look at your existing list of known issues and anything that you learned during the questionnaire phase to identify and prioritize problem areas.
- There is no point in trying to migrate people to a centralized service when you know that key features are missing, or stability or scaling problems are present.

4.2.5 Provide an excellent centralized service.

- It is important that the new service is significantly better than the service it replaces in ways that are tangible to the direct users.
- Make the centralized service fast, highly reliable, full-featured, automated, and customizable.
- Monitor resource usage, understand how it scales, and know which resources are your limiting factors.
- A centralized service should be cheaper to run and better supported than a series of decentralized ones.
- If the centralized service is really good, and in particular, better than the decentralized services, then most people will want to migrate to it, making the job of centralizing significantly easier.
- Don't move anyone onto the new platform until it has been extensively tested.
- Write automated test suites to test every feature of the new service, and to load test it.

4.2.6 Start slowly and ramp up.

- Start migrating users onto the new service slowly
- Start with those users who will be most tolerant of failures.
- Take some time at the beginning to get experience with the new service with a friendly audience.
- Find and fix any bugs or performance issues.

4.2.7 Look for low-hanging fruit.

- When migrating people to using a centralized service, start by migrating the people who want to migrate, or those who don't currently have this service but want it.
- Those who are resistant to being migrated can be late adopters.
- When migrating people from a decentralized service to a centralized one, start with the simplest case: the users who do not have complicated requirements.
- Find out what their biggest complaint about the old system is, and make sure the new system excels in that area.