How to Avoid Design Transfer Failure

Tips to Ensure that What You Designed is What Gets Manufactured

by Tommy Mitchell

Design transfer involves moving an approved design into production. For most product development initiatives, the process of design transfer is complex with many moving parts, involving partners that are geographically widespread. The pharmaceutical and medical devices industries have a long history of design transfer, complete with detailed definitions and procedure guidelines to help steer the design transfer team, and they still run into issues.

Many of the clients we work with describe past programs where the design transfer process has taken months longer than originally planned. These added months dramatically reduce first-mover advantage, market share, and incremental revenue. How is an industrial manufacturer without a playbook or a list of government guidelines supposed to succeed where hi-tech and big pharma don’t?

There are many planning and logistics decisions that need to be made during design transfer to make sure the process goes smoothly. It’s important to remember that the success of an innovation project should be measured by when the product is on the shelf and sales are recorded. All of the steps to achieve production readiness should walk backwards from that shelf date, in a clear and succinct path. This includes validation, where many companies experience hiccups.

A successful product launch can only be accomplished when the design transfer process is complete and all partners in the product value chain are satisfied that they are ready to execute on the sales and operations plan. Here are a couple tips around people and tools that can help.

Who Should be Part of Design Transfer?

The design transfer process needs to be defined by a team that includes more than just the usual players. In the past it was common to only involve R&D, QA, technical development and marketing in the product development process. Companies who do well with product launch efficiency also include operations, logistics and manufacturing, bringing them into the conversation earlier with defined scale-up, product and process validation plans.

What Tools Should You Use?

Top performing businesses use technology to enable more efficient transfer resulting in earlier qualification runs, better demand improved run scheduling, and a better scale up processes. A faster, smoother path to production readiness is everyone’s goal, so while using a project management tool is great, combining the power of a planning and scheduling with the product data management tool provides all product information in one location, allowing companies to learn from past projects.

How Do You Avoid Failure?

How do you avoid failure when it comes to design transfer? If you were presented with the option to add capability to your organization, what would be your priorities?

Many companies find it helpful to think through an exercise called If I Had $100. How would you allocate $100 to ensure a successful design transfer from R&D to operations? Below are the most common ways we see companies spend to address design transfer challenges.

- Hire more project managers
- Implement a technical solution to manage tasks, workloads and data
- Increase R&D budget to produce more complete prototypes
- Increase staff for planning validation purposes
- Increase operations capacity through added hardware
- Spend more to train current staff
- Invest in a redesign of the current process to become more efficient
How Would You Spend Your $100?

Use the link below to allocate your $100 and add to the conversation. After you submit your answer, you'll be able to see cumulative results from all responses gathered to date. We'll announce the full results soon, and base a series of upcoming articles on leading practices for the areas you identify as top investments.

Survey: If I Had $100 to Ensure Successful Design Transfer

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What's your view? Add your question or comment
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How would you spend $100 to ensure a successful design transfer from R&D to operations?
Take our survey and let us know.