Why Multidisciplinary Skills Are Essential in Pharma Lab and Manufacturing Operations

Very specific skills are required to successfully, safely, and profitably run a pharmaceutical manufacturing and laboratory operation. We are in an era of change, however. This means skills requirements are also changing, with multidisciplinary skills coming to the fore.

And when we talk about multidisciplinary skills in a pharmaceutical industry context, we are talking about blended science and technology skills.

The fact is that resources trained and experienced in science disciplines can add greater value to your organization if they also have strong technical skills. The same applies vice versa, where technical resources can maximize their productivity when they also have good manufacturing, laboratory, and/or regulatory expertise.

An example is an IT engineer with strong knowledge and experience in CSV (computer system validation) and CSA (computer software assurance). An IT engineer with this range of skills will not only be able to provide technical development, implementation, and configuration support, but they will also ensure the new system is properly validated according to regulatory requirements.

The Importance of Multidisciplinary Skills in the Pharmaceutical Industry

One of the main factors driving change in the pharmaceutical industry is the increased digitalization of processes. This is often referred to as digital transformation. It involves integrating equipment and systems, making more use of data, and, often, automating or semi-automating processes.

There is also a need for ongoing technical support, both in terms of IT and operational technologies (OT), to optimize performance, maintain system uptime, and maximize ROI from technology investments.

At all stages of the digital transformation and technical journey, your organization will benefit from the involvement of experts with multidisciplinary skills, i.e., **expertise where science and technology come together**.

IT Engineers With Multidisciplinary Skills Specific to the Pharmaceutical Industry

Technical expertise is required in your pharmaceutical facility to develop and implement digital transformation solutions. But developing and implementing a digital transformation solution in the highly regulated pharmaceutical sector is very different from developing similar solutions for companies in other industries.

There are also other factors at play, such as the high-speed, high-volume nature of pharmaceutical manufacturing lines, the complexity of supply chains, and the critical importance of patient safety. Failing to understand any of these factors can cause downtime, supply chain disruption, and compromised patient safety.

Similar risks can also exist with day-to-day technical and IT support when the engineers providing that support have insufficient pharmaceutical industry knowledge or scientific skills.

Multi-skilled IT engineers and digital transformation engineers significantly reduce these risks while also delivering better solutions and results.

Scientific Resources with Advanced Technical Skills

Scientific resources and expertise will continue to be required in the pharmaceutical industry, but the way they operate has changed and will continue to change. Many day-to-day processes are moving from paper to screens, for example. Scientific resources are also performing fewer and fewer manual and repetitive tasks, instead focusing on tasks that are value-adding for the business.

As a result, the use of technology by scientific resources in pharmaceutical operations is increasing. This includes traditional (and new) laboratory equipment, but it also includes computer systems and software applications.

Being able to use technology is increasingly regarded as a baseline minimum. You will get maximum performance from your scientific resources when they are fully confident

and comfortable using modern technologies, with those benefits extending even further when scientific resources also develop more advanced skills. Examples include issue resolution, system configuration, and application optimizing skills.

Westbourne – Where Science and Technology Come Together

At Westbourne, we recognize the importance of multidisciplinary skills in the support of our pharmaceutical industry clients, and we take steps to ensure we deliver a best-in-class service.

This starts by recruiting highly qualified talent to our team, including engineers on the technical side and chemists, lab analysts, and quality control specialists on the scientific side.

We then provide structured training to upskill and cross-skill, enhancing the scientific and regulatory skills of our technical resources and the technical skills of our scientific resources.

This means we can provide the multidisciplinary support that your pharmaceutical operation needs, whether for a specific project or an ongoing requirement. Contact us today to arrange a consultation.