

Department of Chemical Engineering, IIT Hyderabad
CH5036-Industry Lecture Series
Jan-April 2026



Date: 22-04-2026

Time: 04:00 PM (IST)

Speaker: **Sai Sethuraman**

Affiliation: Pharmaceuticals & Biotechnology
professional

Title: **The Human Element: Critical Success Factor
in Product Development & Launch**

Venue: LHC-10

Abstract

Times change. Technology evolves. Life (and business) accelerates. Human element, however, remains the critical success factor in development and launching new products. I will share several stories (case studies) from my experience, spanning 30+ years, 3 industries (chemicals, biotechnology and pharmaceuticals) and 2 continents (USA and India) and dealing with technology as it has evolved during this time.

Chemistry, Biology and Chemical Engineering are essential in development and launch of products in the industries I mentioned. The science is known, engineering principles are fairly well-established, and the processes have been altered (accelerated) by the evolution of technology. For example, experimentation augmented by simulation... or electronic communication accelerating information sharing ... or technology enabling global teams... or work 'following-the-sun'...

As engineers and scientists, we are trained to tackle the toughest technical problems. R&D teams work cohesively (mostly) to resolve the technical challenges and develop the process & product. Manufacturing, similarly, works to solve their technical challenges. And we are all eminently qualified to deal with these problems. However, despite all the advancements, I routinely see that product scale up and launches get tripped up by the same issues even today, as 30+ years ago.

Using case studies, and through lessons learned, we will discuss the watch outs, and essential capabilities we must develop or emphasize, for project success.

Biography

Sai has broad-based work experience spanning over 35+ years in US and India. He has functioned in diverse roles including R&D, Project & Portfolio Management, Operations, Manufacturing, Engineering and Business Development, across several industries – Pharmaceuticals (Finished Dosage, API), Biotechnology, and Specialty Chemicals.

He has built and managed teams in small, mid-size and large organizations, in product-based and service-based businesses, plus external and internal client-facing roles. He had previously worked with several multi-national corporations such as Pfizer, Diosynth Biotechnology (now part of Fujifilm), DSM Pharmaceuticals, UCB and Shasun Pharma.

Most recently, Sai served as Head of Strategy & Operations at Pfizer Small-molecules R&D in Chennai. He managed operations of the drug product development teams and led the India Strategy for Small Molecules Development organization, accountable for site strategy development, facility operations, expansions and external alliances, including academic collaborations.

In the past several years at Pfizer, he built and managed global product development for Sterile Injectables and portfolio management team for Pfizer in both R&D and Operations arenas, including processes and project governance.

Sai is a certified Executive Coach, with passion to develop empowered and independent leadership.

Sai graduated with Bachelor of Technology in Chemical Engineering from Indian Institute of Technology (Bombay), has a Master of Science in Chemical Engineering from Illinois Institute of Technology (Chicago) and a Master in Business Administration from University of South Carolina (Columbia). He has also had active role in the Project Management Institute (US), and IIT Bombay Alumni Association.

Experience areas:

Operations Management	Innovation & product development
Project management	Manufacturing management
Portfolio management	Alliance Management
Engineering & Facilities	Operational Excellence
Digital Strategy / Transformation	Change management
Global Services	Customer Experience / Service