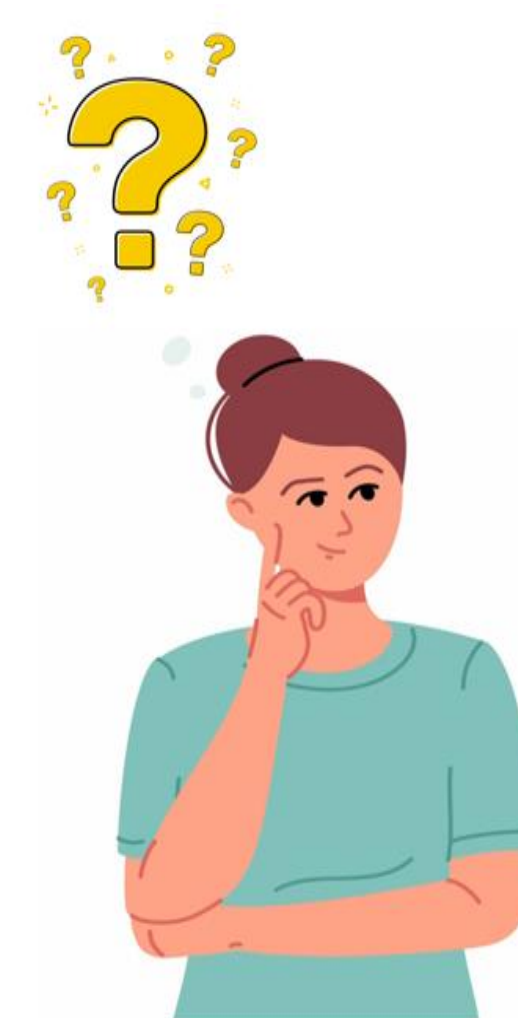


Abstract

Programmers come with varying levels of experience. How do we develop and retain experienced programmers in the pharma industry? We tend to mainly focus on the development of new programmers, building their early experience of our industry and watching them develop in the years that follow. However, once a programmer is experienced in clinical programming, their development tends to slow and many experienced programmers feel that they have achieved their potential and that opportunity to develop no longer exists. Many perceive the only way to progress is into management and therefore leave the industry or convert to contractors, with the industry losing this wealth of knowledge and permanent staff. The goal of this poster is to make programmers aware that there is life beyond moving into management by expanding their potential sideways.



Background

- Cost implications to companies in terms of training and resourcing
- Losing study and technical knowledge gained over time
- Starting over with new, less experienced programmers loses time and efficiency while getting up to speed with project work and processes
- Management is seen as the only way to advance on the career ladder

Programmers who seek additional learning opportunities are curious people and curious people make for better programmers



Challenges

- Changing the mindset of programmers to adopt a growth mindset outside of programming for growth opportunities
- There will be a learning curve which may be off putting for those looking for new opportunities within companies as it takes them out from their comfort zone
- Stakeholders should understand the development needs of experienced programmers is crucial, and must balance their needs with the needs of new starters

Solutions

- Providing strategic, scientific and programming support within therapeutic area
- Managing people, training, performance, and motivation
- Responsible for day-to-day business operations
- Accountable for financial aspects
- Driving continuous improvement on large-scale projects in own function and across R&D unit



- Mentoring programmers with the aim of building experience in-house
- Study programming oversight
- Working end to end on programming activities from start-up until submission
- Subject matter expert
- Involvement with work streams activities
- Learn new programming languages/ software

Examples at AstraZeneca:

Work streams: **Programming Metrics/ Key Performance Indicators, Communications, Programming Process, Sourcing Strategy and ADaM Specifications**

Subject matter expert: **Programming Standards, R language, Automation Process using Macros, Scientific/ Statistical Concepts and CDISC Programming Languages/ Software: SAS, Python, R and Microsoft Power BI to create visual displays and dashboards**

Conclusion

- Experienced programmers, gaining new skills within the organisation will help retain the high quality talent in addition to increasing the internal capabilities
- It is important that organisations have a balance of programmers at different levels of experience within study teams
- Managers should create an open safe environment where the programmers are able to speak up about development opportunities
- Programmers should have a realistic approach to opportunities that are present and drive their own development
- Avoid being absorbed by titles as programmers gain experience and look forward to developing skill sets
- Upskilling or reskilling employees involves investing in what and who you have, rather than starting from scratch
- Value current programmers and invest in their future success