

# PRODUCT ENGINEERING

AN INTRODUCTION  
SECOND EDITION  
BY  
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A tale from the Pet Clinic multi-verse

*Foreword by Dr. Padma Roy*

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The team, now faced with the challenge of improving Product Engineering practices within the Universal Imports Group, are considering applying the techniques learnt during the workshop to help scale Product Engineering practices across the Universal Imports Group.

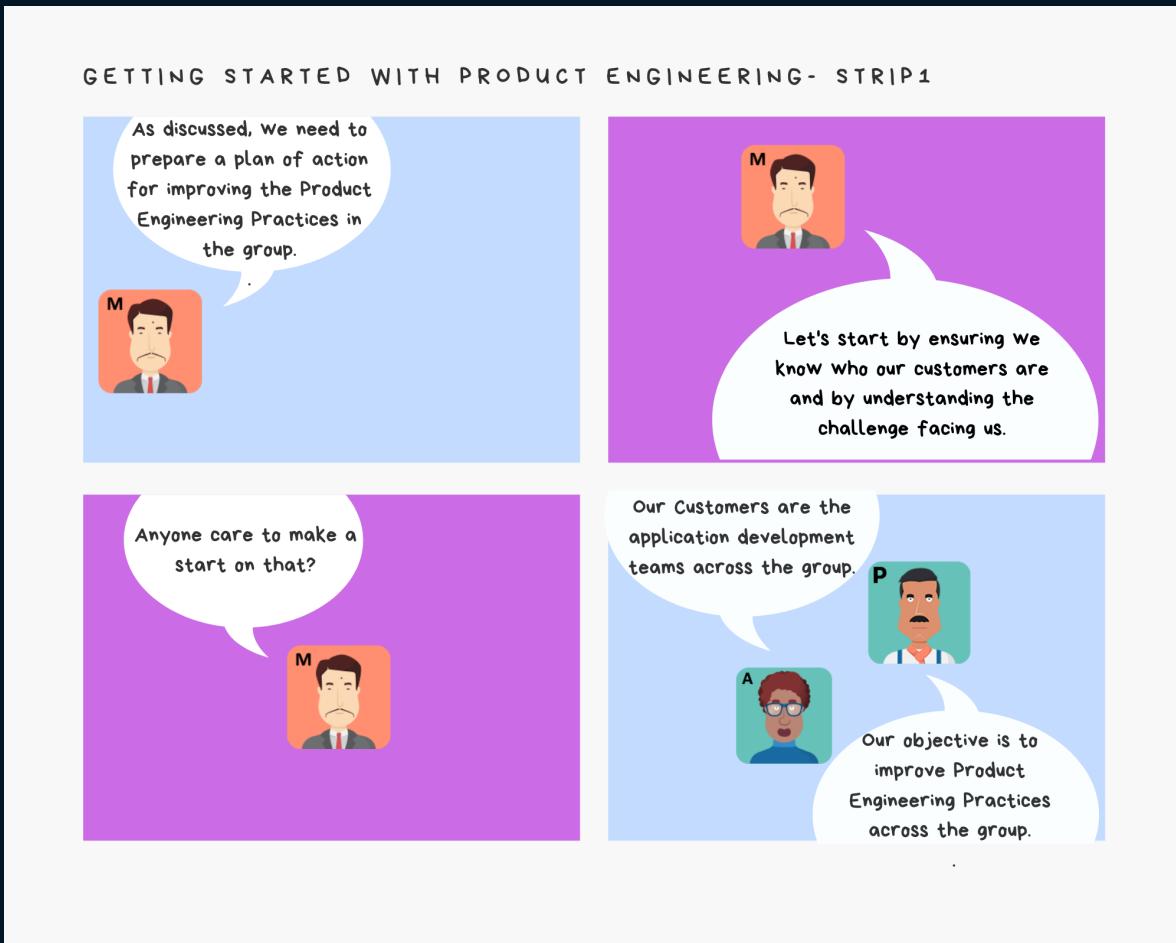
This chapter covers the ensuing discussions and the actions arising from those discussions.

The team involved in the discussions are

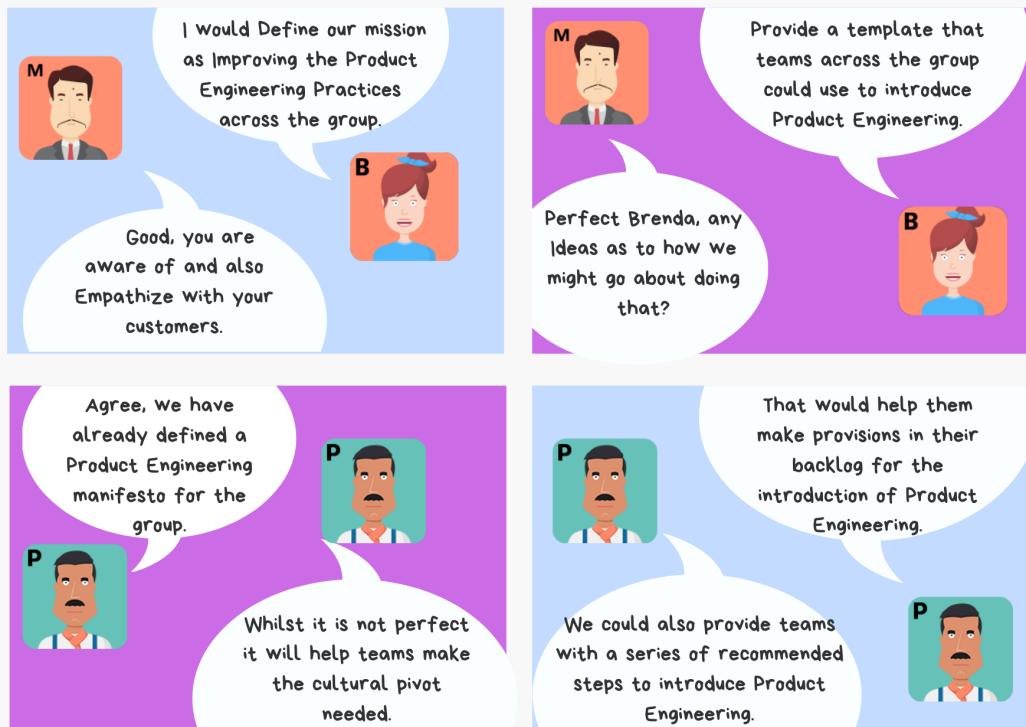
 M	<b>Miyagi</b> Product Engineering Coach and Mentor, tasked with increasing the use of Product Engineering within the Universal Imports Group.
 P	<b>Pennyworth</b> Project Manager from The Daily Mentioner National Newspaper tasked with chairing the effort.
 A	<b>Adriana</b> Architect from the InGen Space Exploration Company lending her expertise to the Product Engineering effort.
 P	<b>Paulo</b> Product Owner for the Pet Clinic Application.
 B	<b>Brenda</b> Business representative from the Pet Clinic, who was the main Business champion of the DevOps transformation.

# Improving Product Engineering Practices at Scale

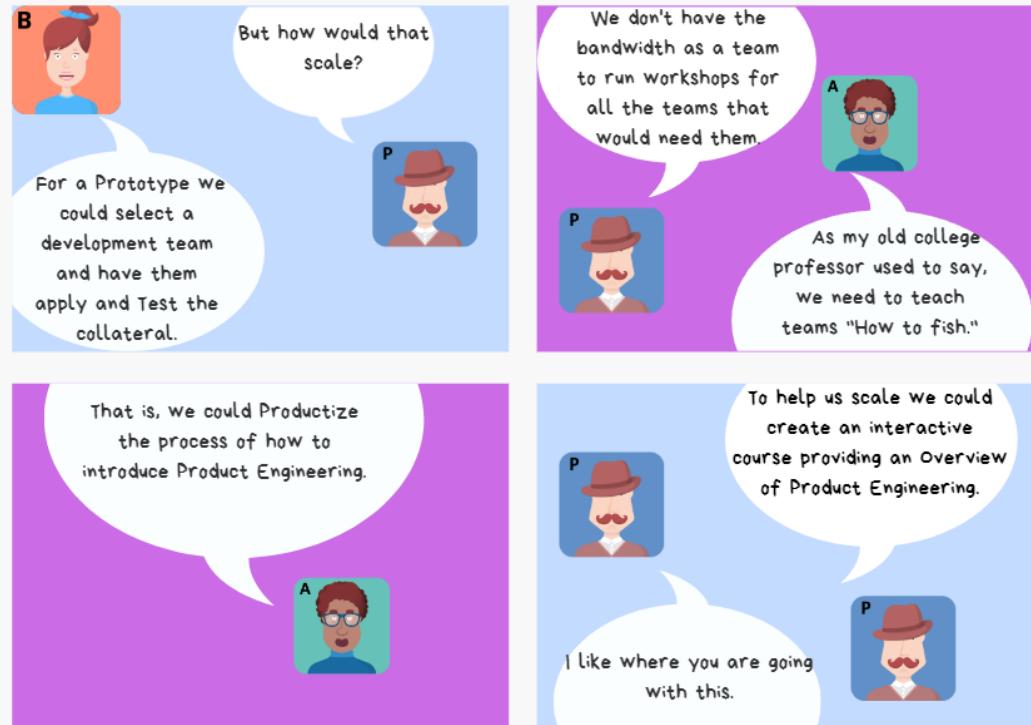
The team discusses how to scale the improvement of Product Engineering practices in the Universal Imports Group.



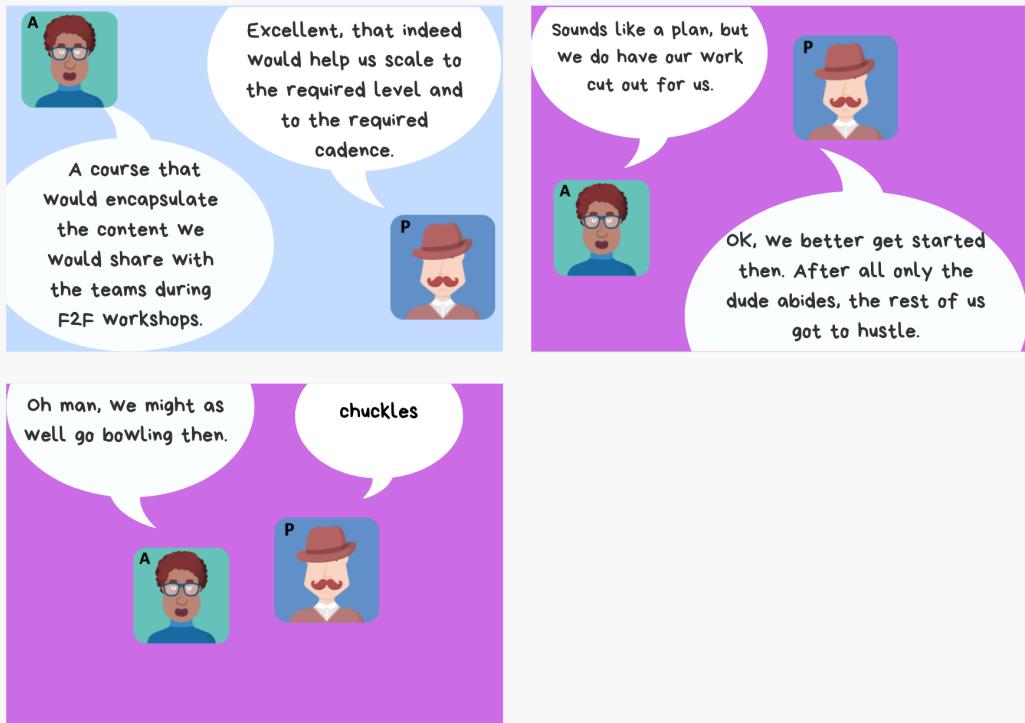
## GETTING STARTED WITH PRODUCT ENGINEERING- STRIP 1



## GETTING STARTED WITH PRODUCT ENGINEERING- STRIP1



## GETTING STARTED WITH PRODUCT ENGINEERING- STRIP1



## Build Product Squads



We in the Universal Imports Group want to build the best possible products.

To do that I suggest we should first invest time, energy and budget in to building the best engineering teams that we can. Then we need to make additional investments to support those teams ensuring we foster accountability, creativity and also encourage experimentation.

Simply put stronger engineering teams will build better products.

Miyagi any suggestions as to how we might go about doing this?



The structure and culture I recommend for Product Engineering teams is known as the "Product Squad" a concept popularized by Spotify.

Product squads are cross-functional teams comprised of a small number of developers and a product owner. Product squads own a complete product or a specific functional area of a product line, they are also responsible for developing domain expertise in support of an organizations product portfolio.



I am sure you are thinking that sounds remarkably similar to Agile scrum teams.

# Conclusion

You have now finished the **Product Engineering: An Introduction** book. Thank you for making the time to read it.

If this book has been your introduction to Product Engineering we hope that it is just the start of your foray into Product Engineering.

We trust you have enjoyed the book and as promised in the Welcome chapter the next time you have need for that bigger  you are better positioned to Product Engineer it accordingly.

We further hope that you will apply your learnings from this book in the teams you work with and on the products you work on.

This is the way!

However before you turn off the electronic device you used to read this book.

There follows an assessment for you to take to allow you to validate your learnings from the time you invested in reading **Production Engineering: An Introduction** should you be so inclined.

# **Appendix 1 - Assessment**

## Purpose

The primary objective of the **Assessment** is to help you verify the knowledge gained from reading this tome on **Product Engineering**.

The answers are out there  ...

# **Questions**

## **Question 1**

**Who was appointed as the coach and mentor for the adaption of Product Engineering in the Universal Imports Group?**

- [ ]Charlie
- [ ]Paulo
- [ ]Miyagi
- [ ]Adriana
- [ ]Brenda

## **Question 2**

**In the Product Engineering Manifesto, which of the following is valued?**

- [ ]Theory over Practice
- [ ]Standards over Guidelines
- [ ]Culture over Tooling

## **Question 3**

**What is the name given to a squad member empowered and willing to lead the Introduction of Production Engineering in their squad?**

- [ ]Champion
- [ ]Mentor
- [ ]Product Owner

## **Question 4**

**What is the first phase of the Product Engineering Lifecycle being adapted by the Universal Imports Group?**

- [ ]Architecture and Prototyping
- [ ]Product Delivery
- [ ]Ideation and Conceptualization

Product Engineering - A Tale from the Pet Clinic multi-verse

The novelization of the Product Engineering Dojo