

PRODUCT ENGINEERING

AN INTRODUCTION
SECOND EDITION
BY
TOM HALPIN

A tale from the Pet Clinic multi-verse

Foreword by Dr. Padma Roy

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Opening Scroll

Charlie, the CEO of the Universal Imports Group of companies, sponsored a DevOps Transformation in the Pet Clinic.

The Pet Clinic's DevOps Transformation is starting to deliver results including:

- Improvements in the development team's culture, process and tooling.
- Requested features being made available sooner to the business.
- Increases in quality and operability of the business features deployed.
- Stronger links between business and IT teams.
- Improved experiences for customers with a resulting increase in customer satisfaction.

A recent workshop was held to facilitate the group leaderships' desire to see the learnings from the Pet Clinic's DevOps Transformation applied to the other companies in the Universal Imports Group.

Amongst the attendees were

- Paulo and Brenda from the Pet Clinic transformation team 🐱🐶🐹🐰🐹🐴🐹🐰🐹
- Adriana from InGen, the group's Space Exploration Company 💥💥💥🚀💥💥💥🚀
- Pennyworth from The Daily Mentioner, the group's national newspaper 📰📰📰📰

The purpose of the meeting was to brief the representatives from the other companies in the Universal Imports Group on the Pet Clinic's DevOps Transformation, with a view to having them champion similar transformation efforts in their respective companies.

One of the main outcomes from the meeting was the general recognition how Lean principles were applied to a relatively complex development environment. This enabled the Pet Clinic team to document, analyze, and improve the processes involved in the delivery of the Pet Clinic application to their customers in the business.

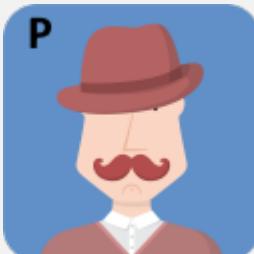
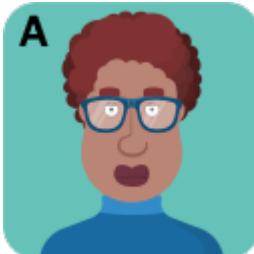
The resulting process improvements helped the Pet Clinic team to identify and

eliminate waste in their processes.

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

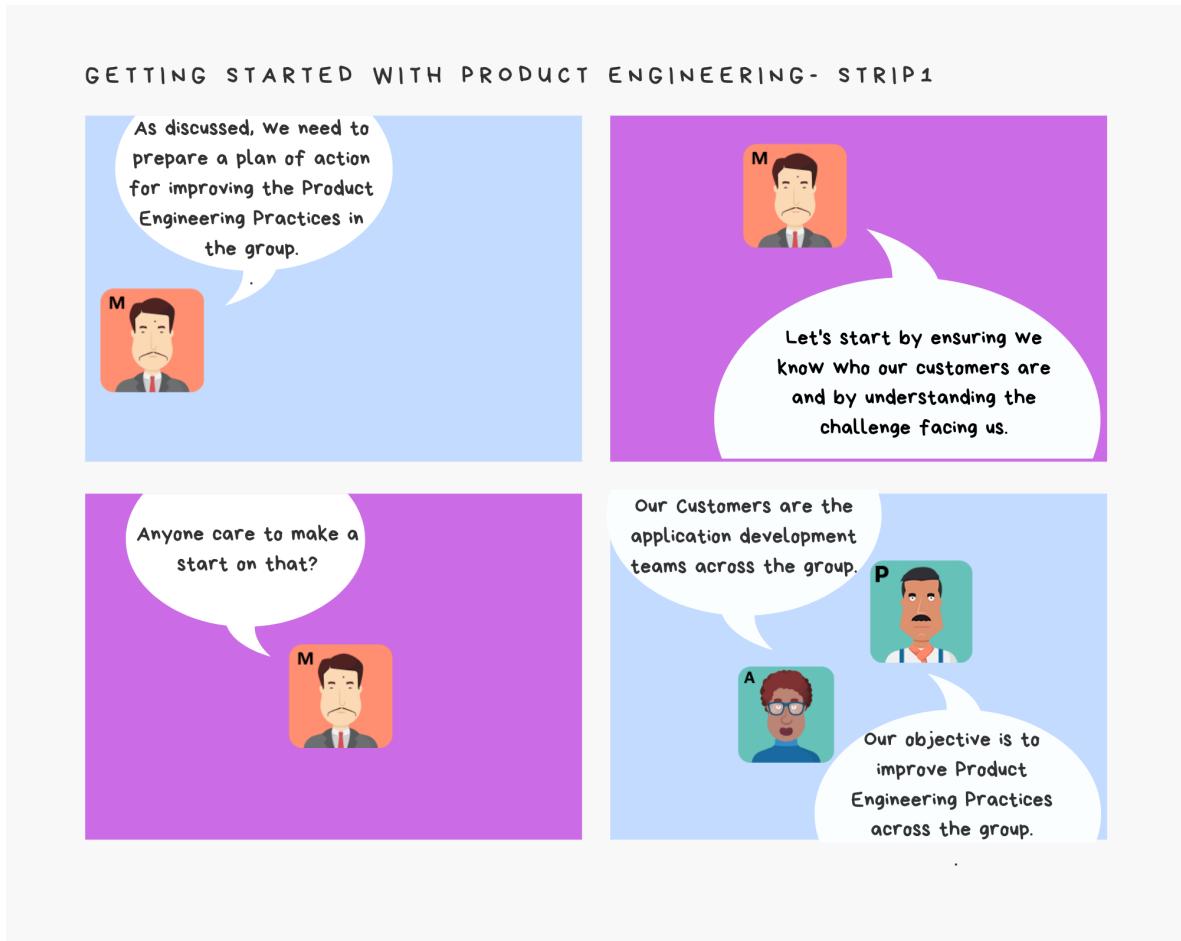
 A cartoon character with brown hair and a mustache, wearing a suit and tie. Above his head is a large letter 'M'.	Miyagi Product Engineering Coach and Mentor, tasked with increasing the use of Product Engineering within the Universal Imports Group.
 A cartoon character with a mustache and a brown fedora hat, wearing a brown sweater over a white shirt. Above his head is a large letter 'P'.	Pennyworth Project Manager from The Daily Mentioner National Newspaper tasked with chairing the effort.
 A cartoon character with curly brown hair and glasses, wearing a blue turtleneck. Above his head is a large letter 'A'.	Adriana Architect from the InGen Space Exploration Company lending her expertise to the Product Engineering effort.
 A cartoon character with short dark hair and a mustache, wearing a white shirt with a red bandana around his neck. Above his head is a large letter 'P'.	Paulo Product Owner for the Pet Clinic Application.



Brenda Business representative from the Pet Clinic, who was the main Business champion of the DevOps transformation.

Improving Product Engineering Practices at Scale

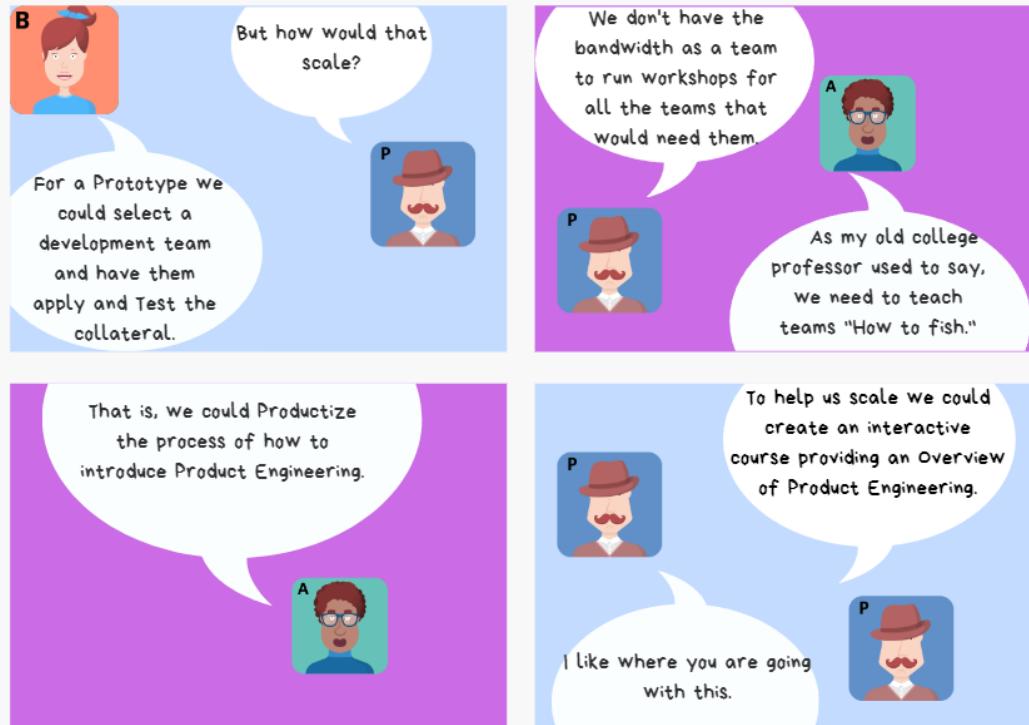
The team discusses how to scale the improvement of Product Engineering practices in the Universal Imports Group.



GETTING STARTED WITH PRODUCT ENGINEERING- STRIP 1



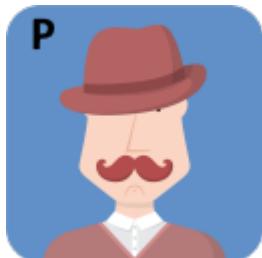
GETTING STARTED WITH PRODUCT ENGINEERING- STRIP1



and formed a

- Product Engineering Guild

The next steps are to work with the teams to help them introduce Product Engineering across the Universal Imports Group.



I love it when a plan comes together. I can't wait to see this start to get rolled out across the group.

Thanks to all, for all your contributions.

Conclusion

Thank you for reading the **Getting Started** chapter.

You now should be able to:

- Access your current Product Engineering practices.
- Understand "*Universal Imports Group's*" recommended Product Engineering practices.
- Introduce or improve your teams' Product Engineering practices.
- Create an environment which enables your team to better influence the products they are responsible for.

Call for curious readers for curious students .

We trust having completed this chapter that you have a better understanding of the importance of the need to improve your teams' Product Engineering practices and how you can start to improve your teams' Product Engineering practices.

If that is the case then there is an optional challenge awaiting you.

The challenge is to set some time aside on your teams' calendar to review your approach to Product Engineering, to document that approach and to compare it with the Universal Imports Group's recommended Product Engineering practices.

We wish you well with the challenge, should you decide to accept it. Hopefully it will help you identify and in time make significant improvements to the Product Engineering practices applied in your teams' applications and services.

Afterword

The **Product Engineering: An Introduction** eBook is intended to enhance the understanding and application of product engineering practices to software development; through the use of storytelling and real-world scenarios involving a fictional team. The hope being to make learning process engaging and practical.

In closing, this collection of chapter summaries and key takeaways revisits the core insights and lessons presented throughout the book.

Chapter Summaries and Key Takeaways

Chapter 1: Welcome

Synopsis:

The welcome chapter sets the stage for the eBook by introducing its purpose, structure, and the fictional team that will be used to illustrate key concepts. It outlines the main objectives of the book and what readers can expect to learn.

Key Takeaways:

- Understanding the scope and goals of the eBook.
- Identifying the intended audience.
- Setting expectations for the learning journey.
- Overview of the structure and content.
- Introduction to the concept of Product Engineering.

Chapter 2: Introduction to Product Engineering

Synopsis:

This chapter introduces the fundamental concepts of product engineering, emphasizing its importance in modern software development. It covers the lifecycle of product engineering from ideation, design, development, testing, deployment and maintenance.

Key Takeaways:

- Understanding the holistic nature of product engineering.
- Key principles and practices involved.

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

The novelization of the Product Engineering Dojo