



***Optimising Revenue and Fleet Utilisation:  
A Strategic Revenue Management  
Framework for BuildMax Rentals  
Group 8 Consultancy***

# Agenda

- 1 Who We Are: Meet Gr8 Consultancy**
- 2 BuildMax Rentals and Key Challenges**
- 3 Methodology**
- 4 Data Findings and Revenue Management Strategy**
- 5 Project Implementation**



***Who We Are:***  
***Meet Gr8 Consultancy***

# Meet the Team

## Project Team



**Rafaela Mauricio**  
Project Manager



**Long Nguyen**  
Data Analyst



**Ishleen Kaur**  
Data Engineer



**Qiyue Zhang**  
Data Analyst

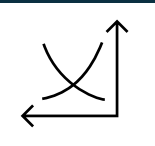


**Yifan Zhu**  
Data Analyst



**Vidit Duggad**  
Data Analyst

## Our Competencies and Expertise



Data Analytics, Engineering and Visualisation



Optimisation and Revenue Management



Machine Learning and Forecasting



Construction, Supply Chain and Network Optimisation



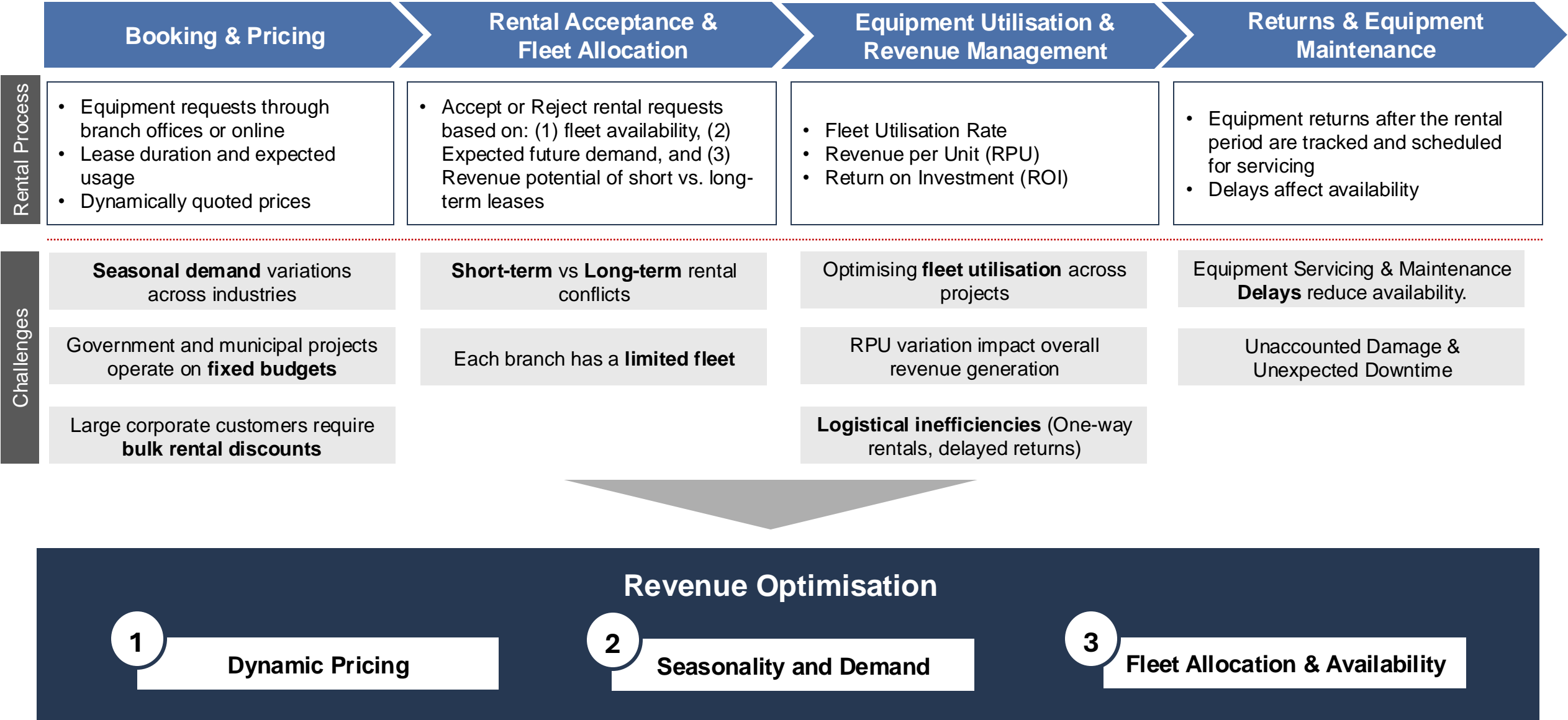
Business Strategy and Implementation



## ***BuildMax Rentals and Key Challenges***



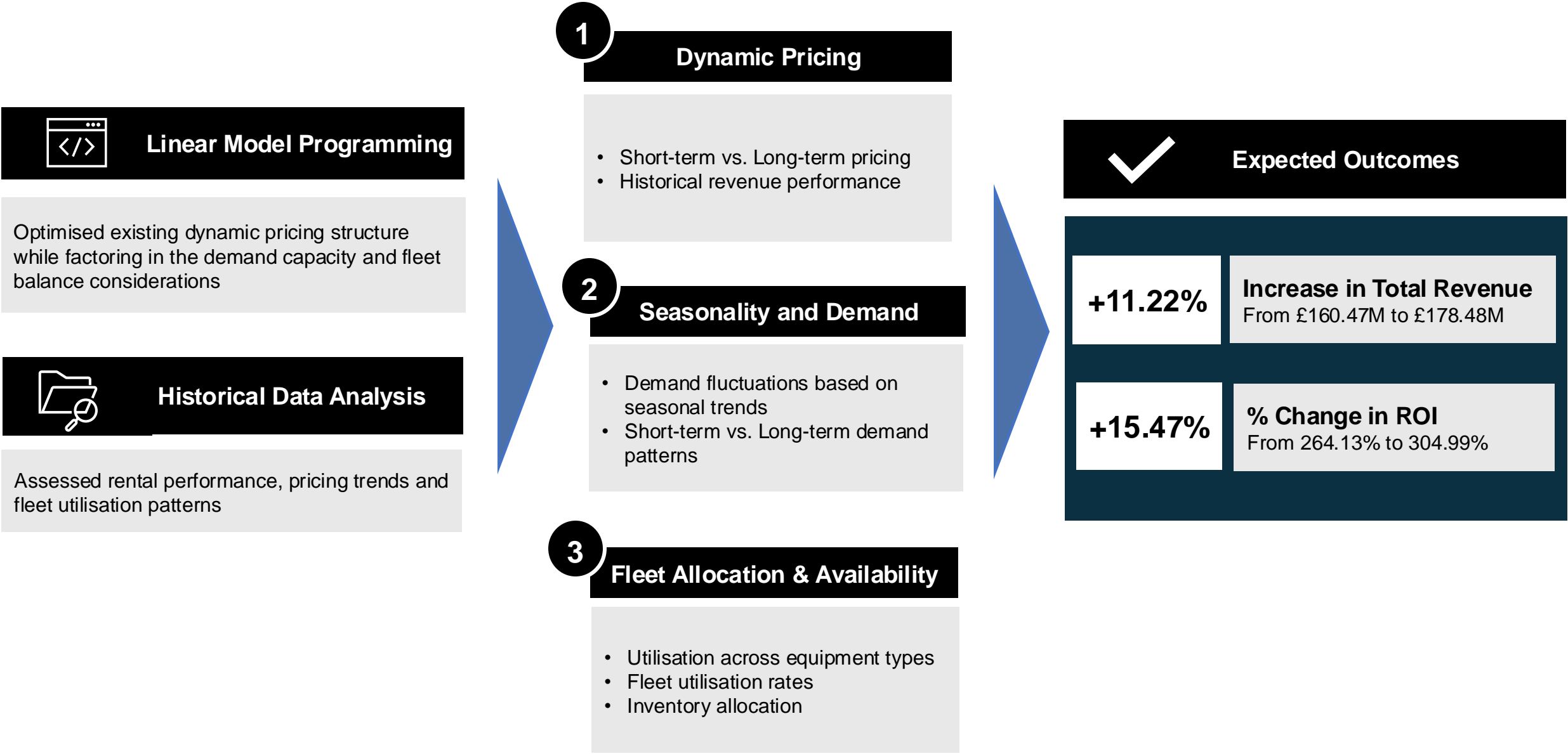
# BuildMax is facing challenges that require an advanced Revenue Management (RM) solution





## ***Methodology***

# Data-driven optimisation to achieve an increase in Revenue and ROI

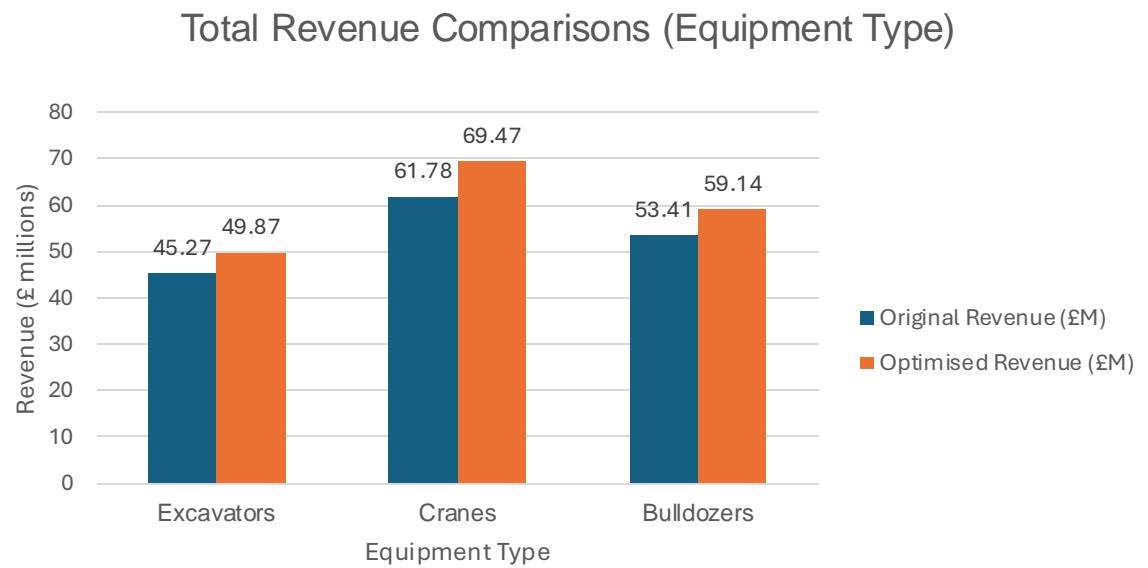






# ***Data Findings and Revenue Management Strategy***

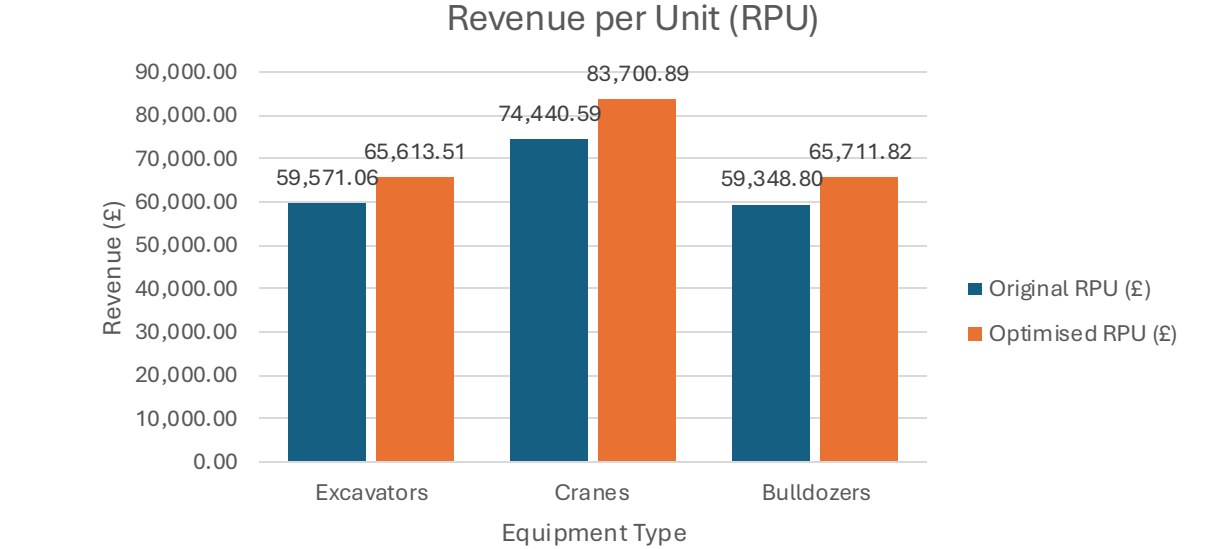
# A deep-dive into the results: What growth potential can BuildMax unlock?



**Overall Optimised Revenue increased by £18 million**

Cranes experienced the highest absolute revenue increase

Attributed as the most profitable asset for this BuildMax Rentals branch



**RPU increased across all types of equipment**

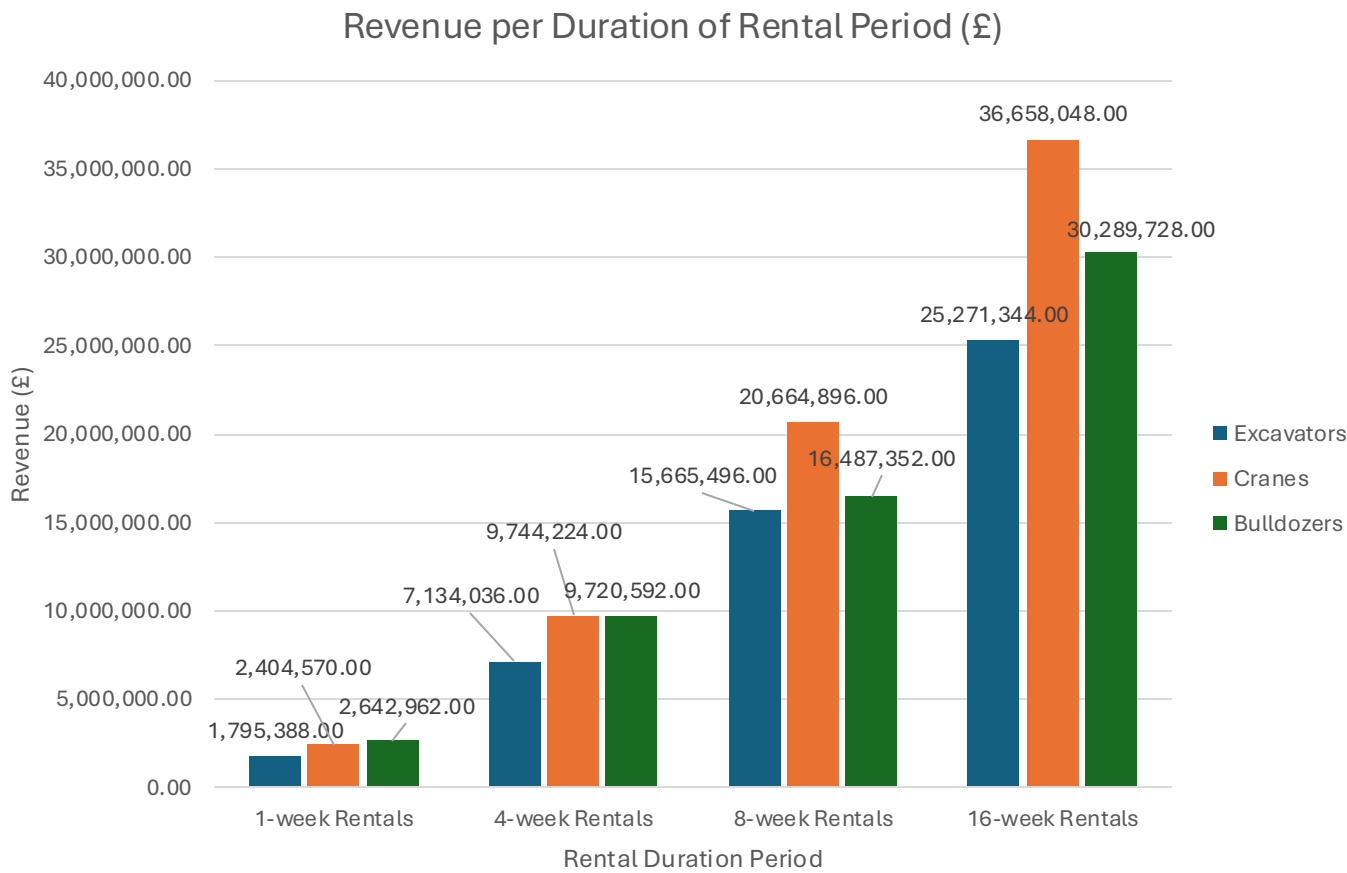
Cranes had an RPU improvement of 12.44%

Considered as premium-value assets, cranes are mostly allocated to long-term rentals

Excavators and Bulldozers also experienced strong RPU growth

Pricing adjustments and response to demand resulted in +10.14% and +10.72% improvement

# A deep-dive into the results: What growth potential can BuildMax unlock?



16-week rentals earn the most revenue due to stability and duration

Cranes consistently generate more revenue in long-term rentals

1-week rentals produce significantly lower total revenue

Long-term contracts and projects stabilise fleet utilisation, but limits allocation to short-term rentals

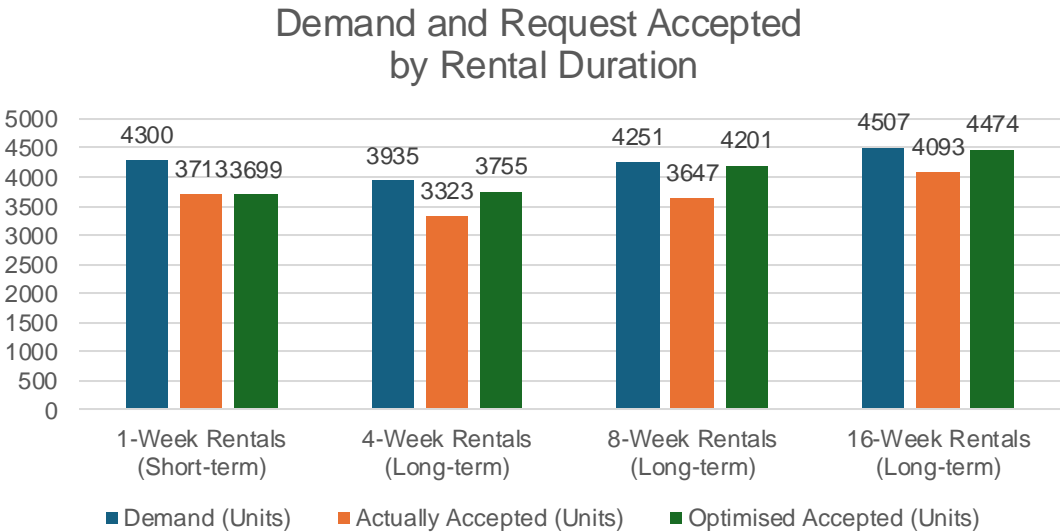
Cranes outperform Bulldozers by 21.05% and excavators by 45.14%

This suggests low demand or adoption due to leveraging on long-term rental periods

Considerations

- Adjust pricing strategies to encourage short-term rental adoption such as introducing corporate promotions or discounts
- Ensure equipment inventory availability for all rental durations

# A deep-dive into the results: What growth potential can BuildMax unlock?



Long-Term contracts drive stability but restrict flexibility

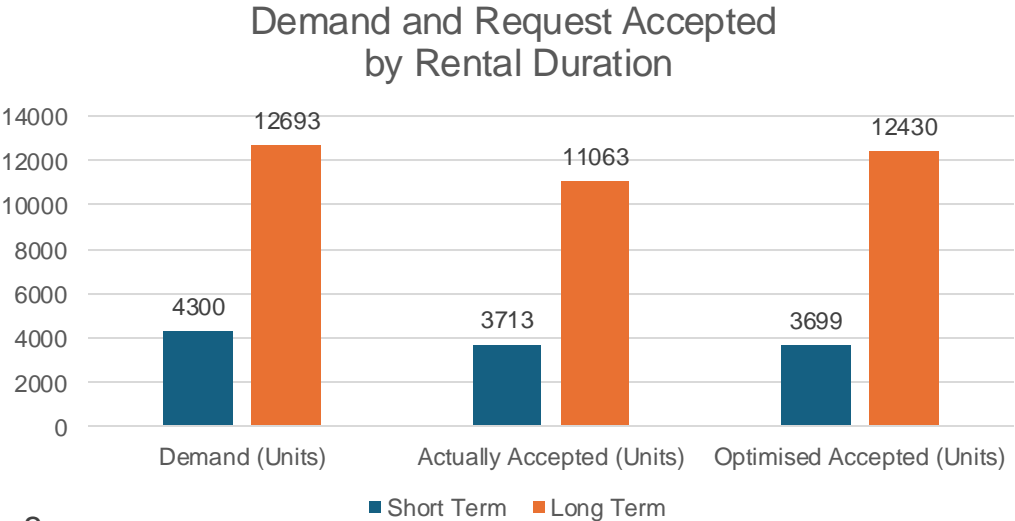
Revenue contributions were dominated by long-term rentals, as the model increased acceptance rates by ~10%

Short-term rentals remain underutilised

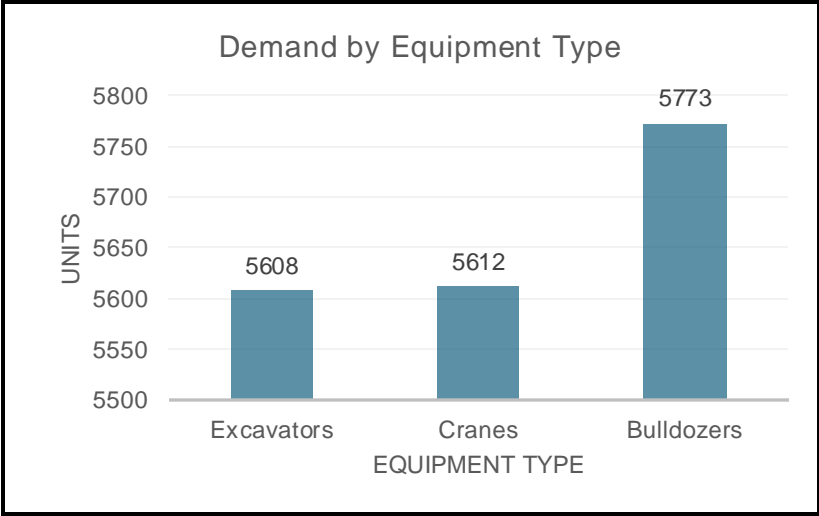
A minimal change of -0.38% in 1-week rentals, indicating limitations in fleet responsiveness

## Considerations

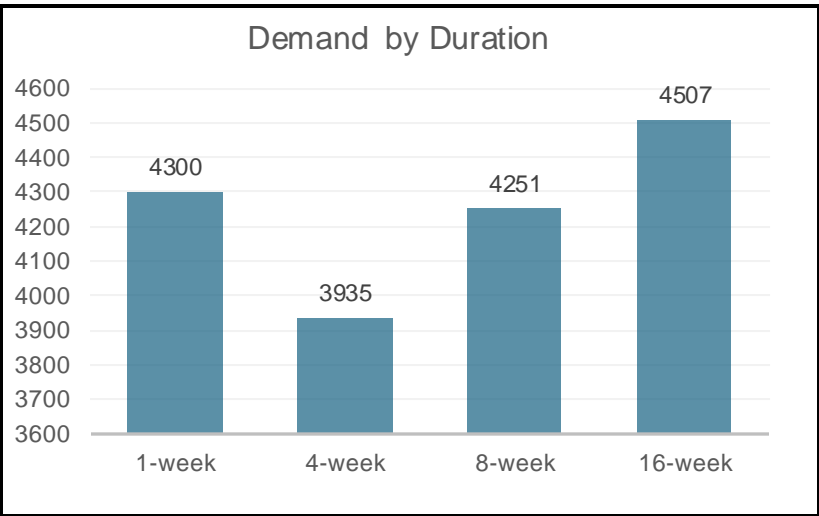
- Establish a well-balanced fleet allocation system to improve short-term flexibility without disrupting long-term revenue stability



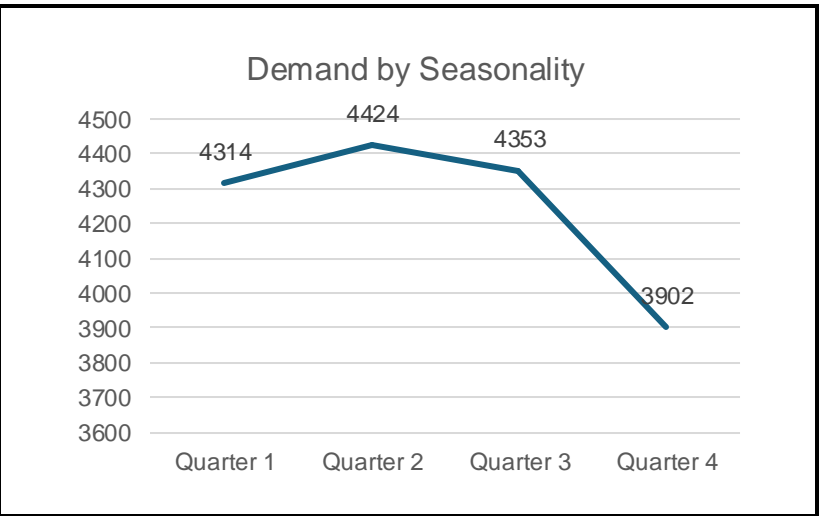
# A deep-dive into the results: What growth potential can BuildMax unlock?



- Bulldozers have the highest demand among equipment types, while Excavators and Cranes have a similar amount of demand



- 16-week has the most demand, followed by 1-week rental durations
- Long-term rental periods are more favoured

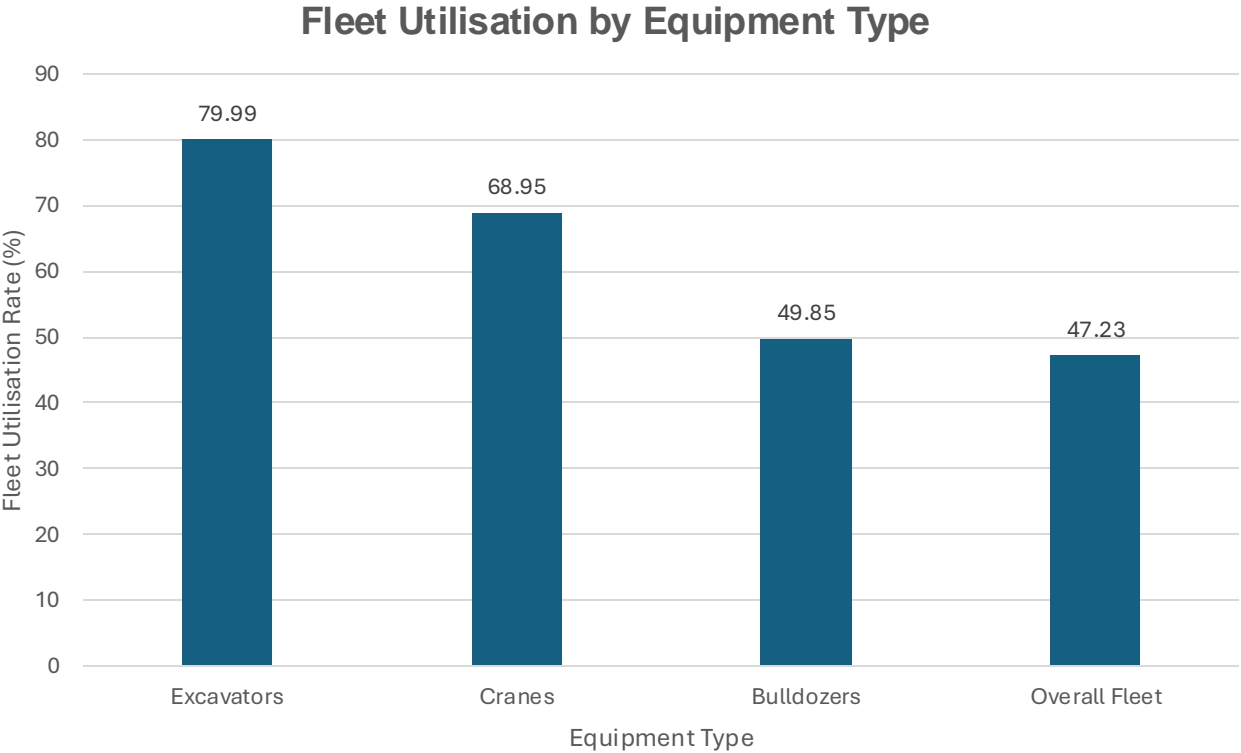


- Evident Q2 and Q3 peaks, while the lowest is during the holiday and winter period

Considerations

- Fleet allocation as supply must match the demand.
- Opportunity to enhance pricing strategy (e.g. Bulldozers are the highest in demand, but they are not the highest in generating revenue)
- Leverage predictive demand forecasting and pricing based on duration and seasonality

# A deep-dive into the results: What growth potential can BuildMax unlock?



Excavators are the most in-demand and used equipment in the fleet

Cranes have a moderate utilization rate, but there's room for improvement in terms of usage.

Bulldozers are underutilised compared to Excavators, suggesting they are less in demand or their availability might not align well with rental needs.

Considerations

- Inventory reallocation
- Continue dynamic pricing practices
- Increase marketing for underutilised equipment
- Introduce promotions or incentives





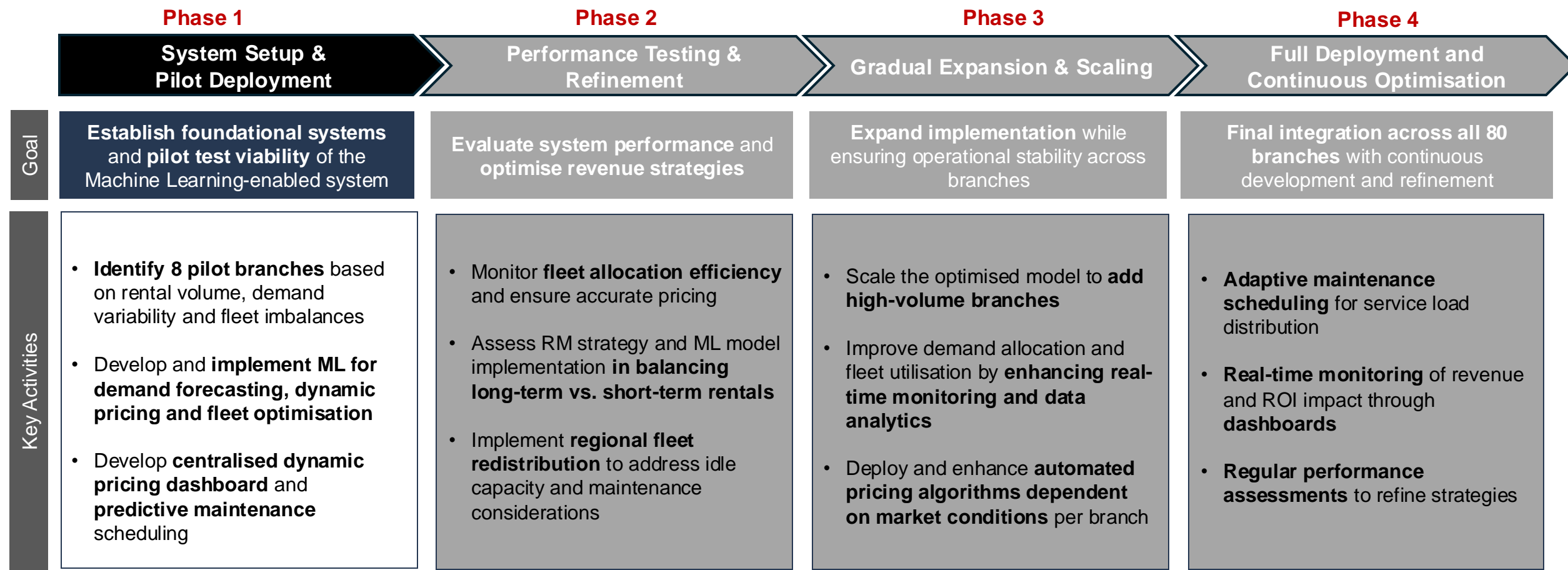
# ***Project Implementation***

*Machine Learning Integration in Revenue Management*

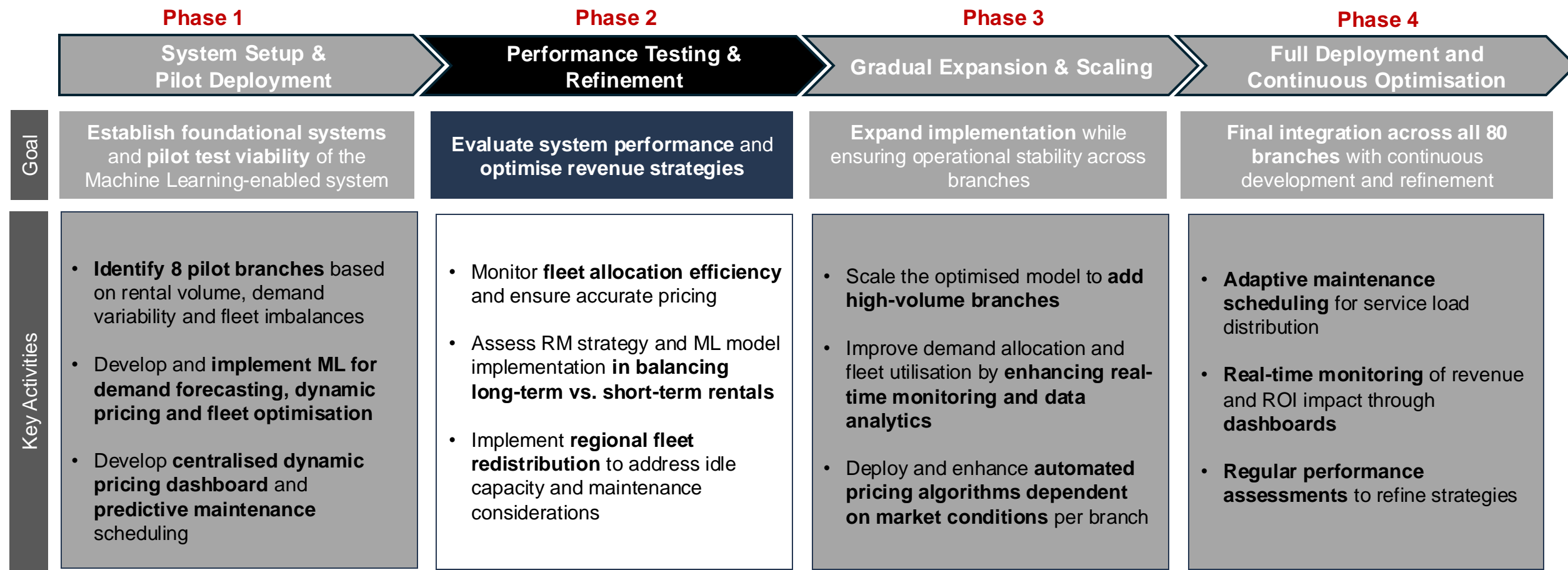
# Challenges BuildMax might face adopting RM solution



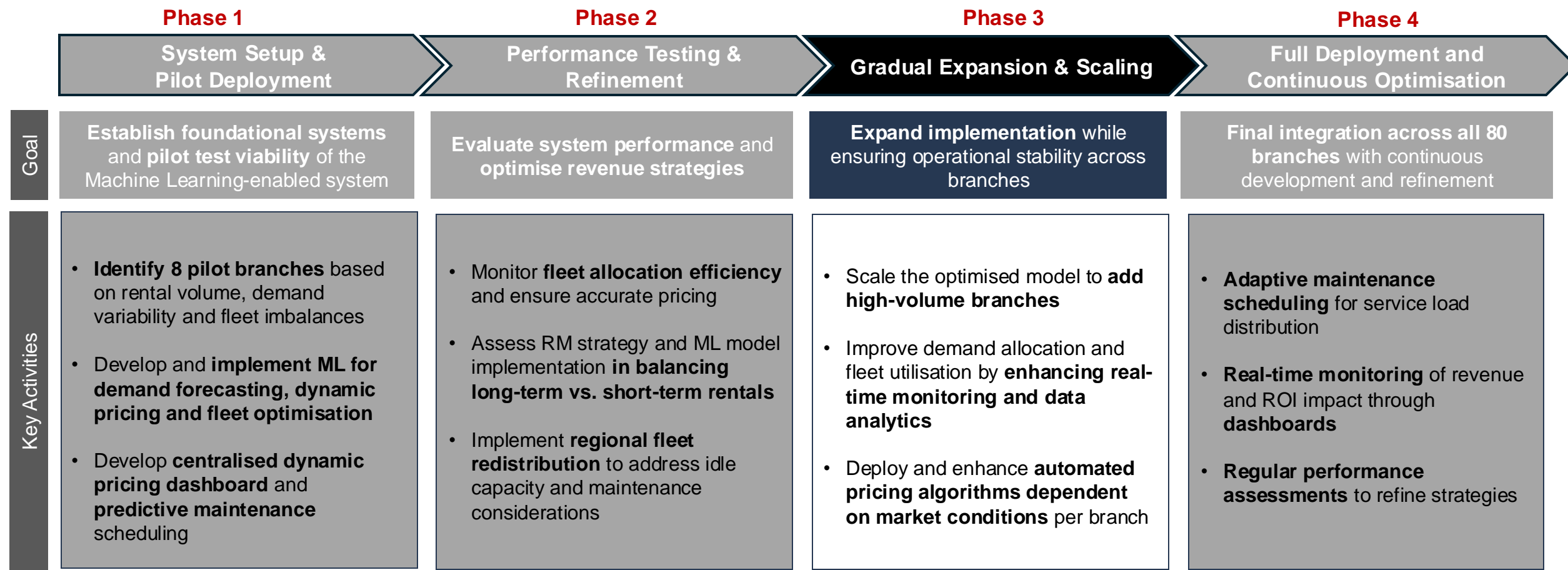
# Implementation of the RM strategy proposed across 4 phases



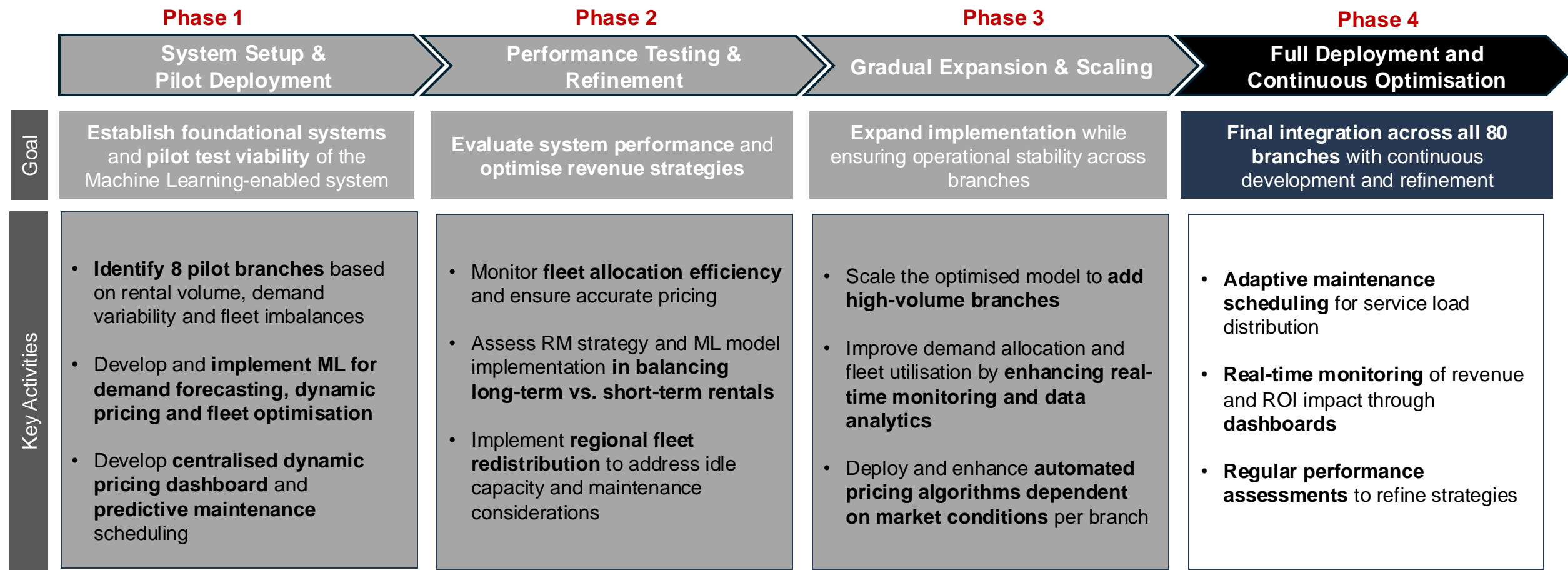
# Implementation of the RM strategy proposed across 4 phases



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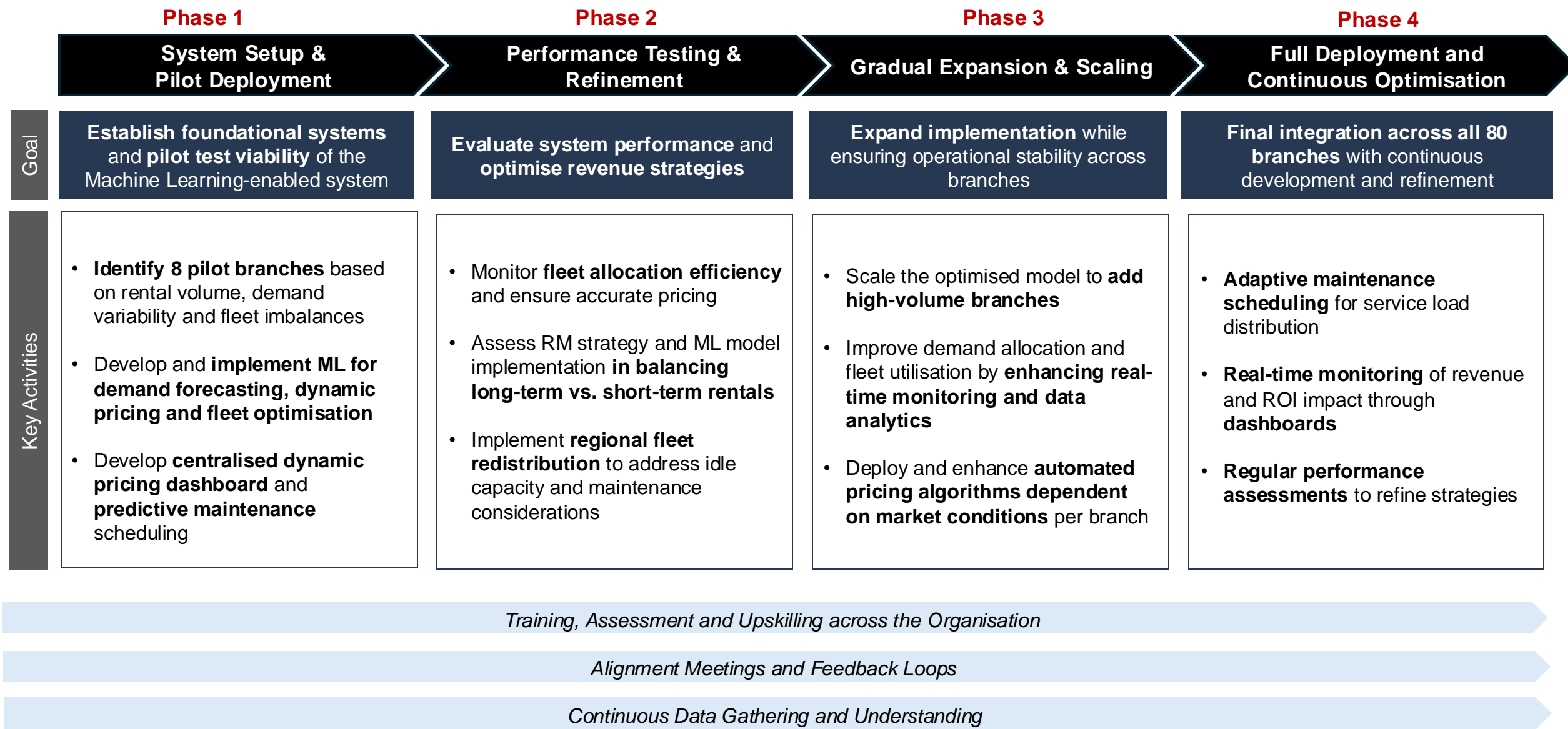


# Implementation of the RM strategy proposed across 4 phases





# Implementation of the RM strategy proposed across 4 phases





***Thank You!***