

BOEING

Eric John
Boeing Japan President
March 25, 2025

## Airlines will need 43,975 new airplanes over 20 years



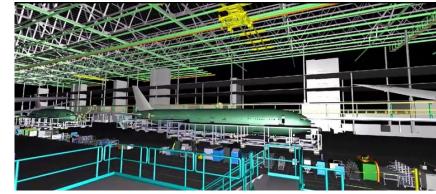
# Future Production System Capabilities

将来の製造システム能力

- Safe to build and maintain 製造と整備の安全性
- First pass quality 初回製品検査合格(初回パス)品質
- Repeatable production 繰り返し生産が可能な製造システム
- Designed for takt, capable of required rate タクトを考慮した設計、必要な生産レートの実現能力







Quality - Reliability - Efficiency - Flow

Safety and Sustainability integrated seamlessly 安全性と持続可能なシームレスな統合

#### Future Production System Focus

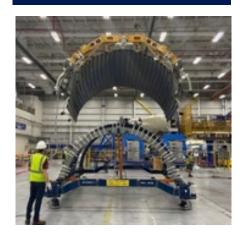
Develop a production system that is **safe**, **sustainable**, **and repeatable**, deliver conforming products on time, with the **quality and cost** that is required

High rate production





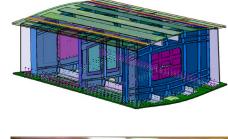
**Precision Assembly** 





**Confined Space** 





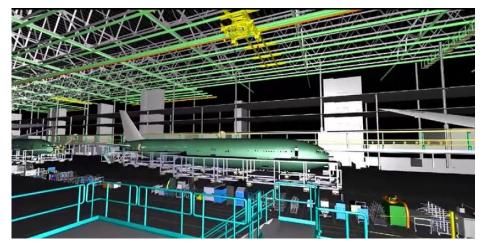


Modular Systems



Takt-based production





## **Future Digital Capabilities**

将来のデジタル活用能力

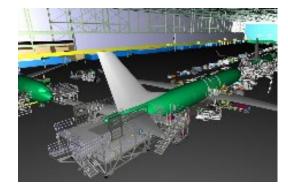
Develop and deploy a digital ecosystem of tools and processes to increase design quality, reduce rework and development flow time

設計品質の向上と手戻り作業や開発期間の短縮を目的とする ツールやプロセスのデジタル・エコシステムを開発し導入する

- Design quality and flow 設計品質及びフロー
- Lifecyle value
   ライフサイクル全体の価値
- Data integrated across airplane, production system, support and services

機体、製造システム、サポート、サービスの全てをデータで統合



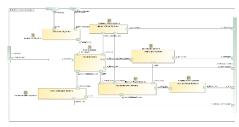


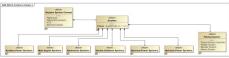


# **Full Digital Lifecycle**

#### **Digital Thread – Single Source of Truth Data**

Digital
Requirements
"As Specified"





**MBSE Modeling** 

Digital System Model "As Designed"



**3DX Design Environment** 

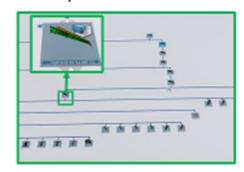


Multi-Physics Simulation/HPC

Digital
Manufacturing
"As Built"



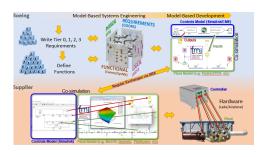
**Shop Floor Simulation** 



Production System Architecture

Digital Test

"As Verified"



System Requirements Verification

Digital Twin

"As Maintained"



Fleet Management



Model-Based Systems
Engineering
Concept / Requirements

Model-Based Design Design / Analysis Model-Based
Production System
Production System Design

Model-Based Verification
Certification / Test

Model-Based Support & Services Maintain & Enhance