

1. Record Nr.	UNINA9911006978303321
Autore	Quigley Jon M.
Titolo	Modernizing product development processes : guide for engineers // by Jon M. Quigley, Amol Gulve (PACCAR)
Pubbl/distr/stampa	Warrendale, Pennsylvania : , : SAE International, , [2023] ©2023
ISBN	9781523155682 152315568X 9781468605426 1468605429 9781468605433 1468605437
Edizione	[1st ed.]
Descrizione fisica	1 online resource (1 PDF (xi, 217 pages)) : illustrations ; ; cm
Soggetti	New products Technological innovations - Management TECHNOLOGY & ENGINEERING / Industrial Design / Product TECHNOLOGY & ENGINEERING / Inventions Technical design Product design Inventions and inventors
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (pages 206-207) and index.
Nota di contenuto	Contents -- Preface -- Acknowledgements -- Chapter 1. Product development the gap -- Chapter 2. Learning -- Chapter 3. More than engineering -- Chapter 4. Front loading -- Chapter 5. Readiness level -- Chapter 6. The right solution -- Chapter 7. Benefits of multiuse and reuse -- Chapter 8. System of systems -- Index -- About the authors.
Sommario/riassunto	Product lifecycles have shortened due to competition, rapidly changing markets, emerging technology, and regulation. Modernizing Product Development Processes: Guide for Engineers provides a foundation to focus on giving engineers, entrepreneurs, and innovators a guide to developing products with a new approach instead of a traditional

product development cycle. Using the fundamental pillars of this book, the authors demonstrate how to bridge the gap in today's product development cycle to improve "time to market" needs in a fast-paced environment. These pillars include:

- Learning from failures and doing
- Harnessing creativity (out-of-the-box thinking)
- Front loading (develop concepts early)
- Explore multiple possible solutions
- Technology/Manufacturing readiness level
- Modularity (integrate common solutions)

In addition, the authors prepare engineers to scale up production to meet customer demands in a dynamic environment by demonstrating how to establish strategies and road maps with a stage gate approach focused on harnessing creativity to build concepts/technologies in early phases. In today's era of innovation, rapid technological growth, and high consumer demand, engineers must adapt and deliver products with reasonable, engineered solutions and this book shows them how.
