1. Record Nr. UNINA9910847090703321 Autore Gorski Filip **Titolo** Advances in Manufacturing IV: Volume 5 - Biomedical Engineering: Digitalization, Sustainability and Industry Applications / / edited by Filip Gorski, Rzvan Pcurar, Joaquín F. Roca González, Micha Rychlik Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 3-031-56456-1 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (234 pages) Collana Lecture Notes in Mechanical Engineering, , 2195-4364 Altri autori (Persone) PcurarRzvan Roca GonzálezJoaquín F RychlikMicha Disciplina 610.28 Soggetti Biomedical engineering Industrial engineering Production engineering Signal processing Biomedical Devices and Instrumentation Industrial and Production Engineering Signal, Speech and Image Processing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Intro -- Preface -- Organization -- Contents -- Adapting Manufacturing Strategies for Future Challenges in Medicine -- The Medical Device Industry in a Kaizen Environment in the year 2050 -- 1 An Introduction -- 2 Research Problem -- 3 Research Method -- 4 Results -- 4.1 Scenario for Medical Devices in Costa Rica -- 4.2 Strategic Foresight to Identify Megatrends for the Year 2050 in the Medical Device Industry in a Kaizen Environmental in Costa Rica -- 5 Discussion -- 6 Conclusions -- References -- Continuous Improvement Programs: Before and After the COVID-19 Pandemic -- 1 Introduction -- 2 Literature Review -- 2.1 Success Factors for CI Programs -- 2.2 The COVID-19 Pandemic Impact -- 3 Research Method -- 3.1 Instrument Design -- 3.2 Sample Size and Selection --

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Sommario/riassunto

The book covers timely topics in digital healthcare and personalized medical products. It delves into the use of digital technologies like image processing, CAD, AI, and 3D printing in healthcare, emphasizing their role in customizing treatment and manufacturing medical products. Based on peer-reviewed contributions to the 8th International International Scientific-Technical Conference (MANUFACTURING 2024) held on May 14-16, 2024, in Poznan, Poland, the chapters reports on achievements from interdisciplinary collaborations between engineers, doctors, and the medical industry. All in all, this book offers a timely guide for researchers and professionals in medical design, manufacturing, and biomedical engineering, and a bridge fostering communication and collaborations

between different stakeholders working on enhancing health interventions through technology.