



expanding **human possibility**®

People on the fly – mieć 4.0 czy być 4.0?

Rola ludzi w transformacji cyfrowej

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PUBLIC

120 + YEARS OF HISTORY

1962

Four-sided clock tower is first illuminated in Milwaukee, WI.



1985

Rockwell International® purchases the Allen-Bradley Company.

2001

Company renamed to Rockwell Automation.

2011

Rockwell Automation acquires **Lektronix**, a leading industrial automation repairs and services provider.

2019

Rockwell Automation and Schlumberger co-found **Sensia** as a joint venture to overcome the performance challenges of oil & gas companies.

2020

Microsoft and Rockwell Automation expand its partnership to simplify industrial transformation.

2022

Rockwell Automation completes the acquisition of **Cubic**, a company that specializes in modular systems for the construction of electrical panels.

2023

Rockwell Automation purchases **Knowledge Lens**, a services and solutions provider that turns data into useful information, combining digital technologies; and **Verve**, a cybersecurity software and services company that focuses specifically on industrial environments.

1903

Lynde Bradley, Dr. Stanton Allen and Harry Bradley fund Rheostat Company and in 1909, the company is reincorporated as the Allen-Bradley® Company.



1923

Octagon logo debuts as the Allen-Bradley brand trademark.



1969

NASA chooses Allen-Bradley components and went to the moon with Apollo 11 mission.



1992

First Automation Fair event in Philadelphia, PA.

2013

First cloud-based mobile access to plant floor data via smartphone.

2016

Rockwell Automation acquires **Maverick Technologies**, a leading systems integrator with expertise in key process and batch applications.

2020

Rockwell Automation purchases **Fiix Ins.**, **Oylo**, **Kalypso** and **Avnet** increasing its eco-system of acquisitions, industrial automation repairs and services.

2021

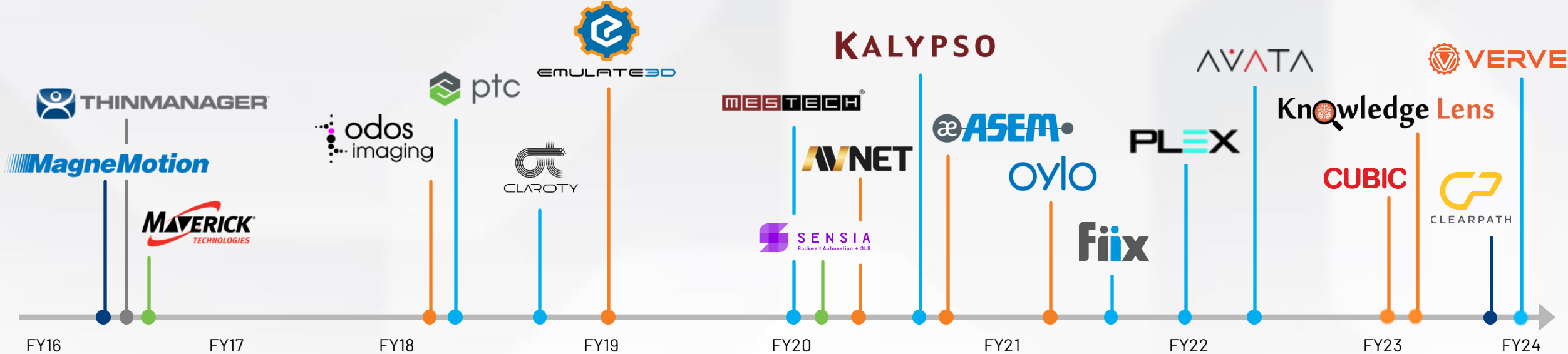
Rockwell Automation purchases **Plex System**, a cloud-native smart manufacturing platform operating at scale.

Present

Bringing **The Connected Enterprise®** to Life.



Supported by innovations driven through acquisitions over the past decade



● Process Expertise ● Information Solutions / Connected Services ● Market access in Europe / Asia ● Advanced Material Handling

Autonomous Operations Technology delivered by Rockwell brands

Manufacturing Execution Systems (MES)

track and document the transformation of raw materials into finished goods, providing real-time production management to drive enterprise-wide compliance, quality and efficiency.

Distributed Control Systems (DCS)

use decentralized elements to control dispersed systems, such as automated industrial processes or large-scale infrastructure systems.

Computerized Maintenance Management Systems (CMMS)

help organizations track and manage maintenance and repair activities for their facilities, equipment and other assets in one place.

Asset Performance Management (APM)

combines process, operational and machine-level data through dashboards to monitor machine and plant health.

Design & Visualization

tools transform raw ideas into intuitive HMI and immersive VR simulations for smarter, faster production.

Power Control drives continuous flow of valuable process and diagnostic data that informs the design environment, visualization systems and information software.

Industrial Control Systems

improve processes and production quality at every stage of your operation and provide seamless data exchange.

Smart Devices are self and system-aware assets that acquire, process and monitor operating data.

Production Monitoring provides seamless connectivity to machines on the plant floor, delivering transparent, real-time operational KPIs like Overall Equipment Effectiveness (OEE).

Enterprise Resource Planning (ERP) automates front- and back-office processes across business management and related functions.

Supply Chain Planning (SCP) combines data from multiple departments to sync demand and supply forecasting to improve inventory accuracy and production management.

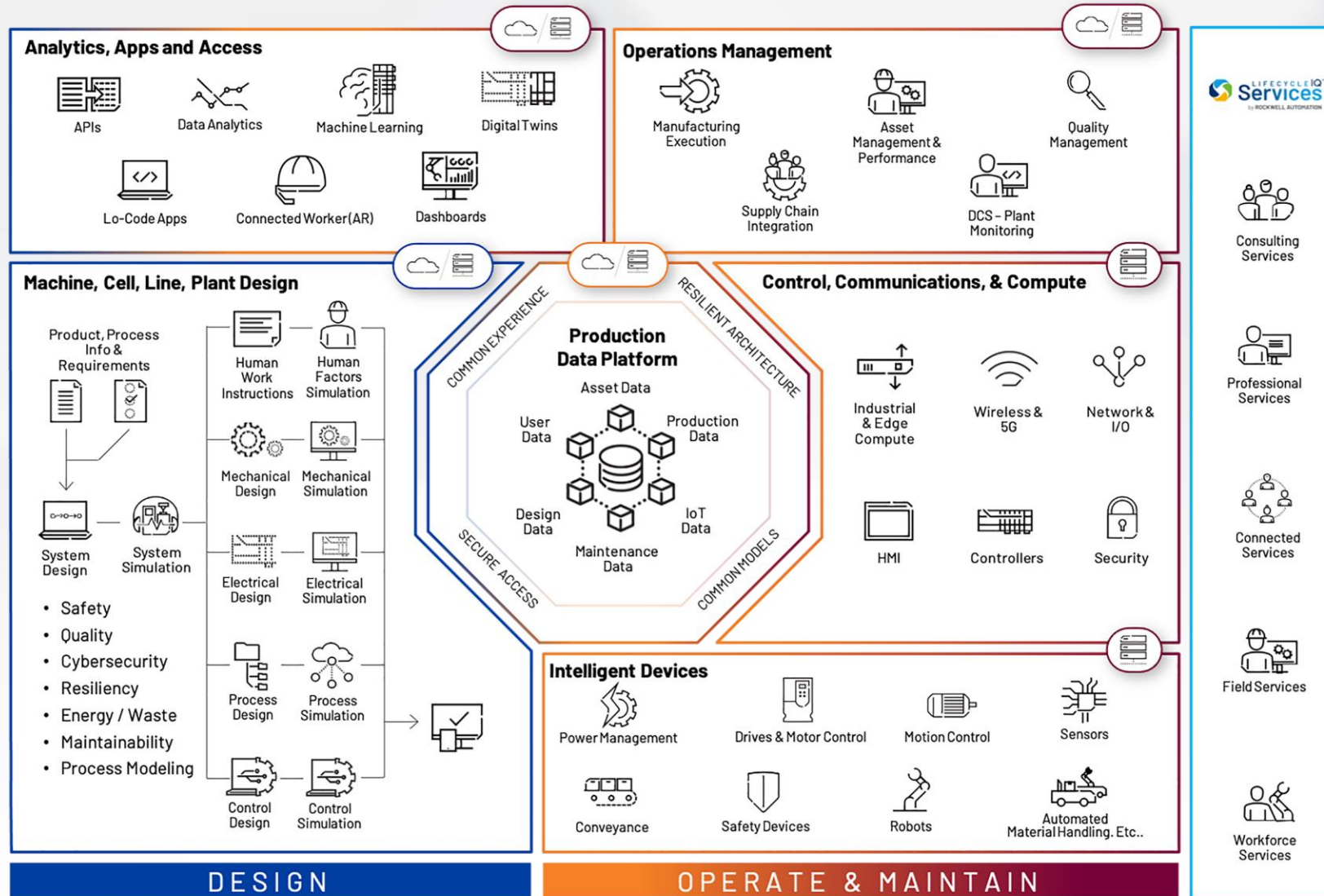
Quality Management Systems (QMS) standardize and automate quality documentation, processes and measurements.

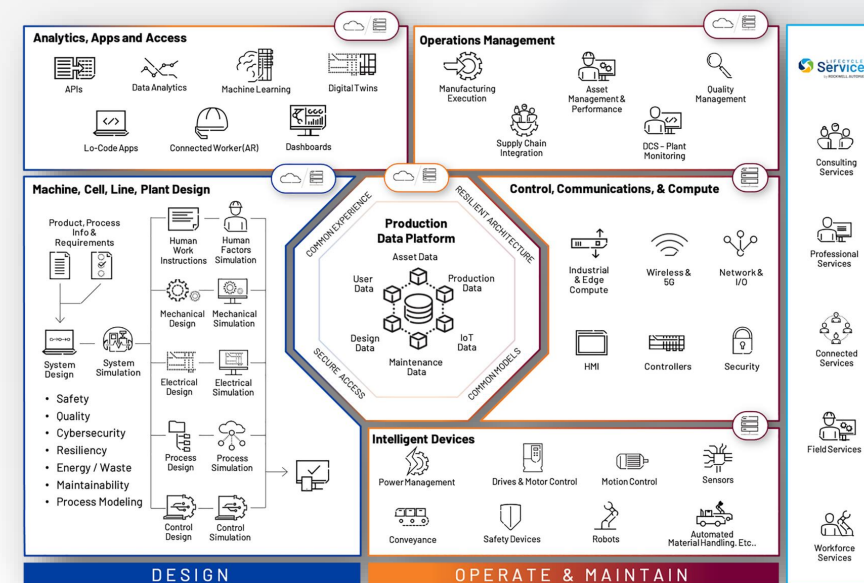
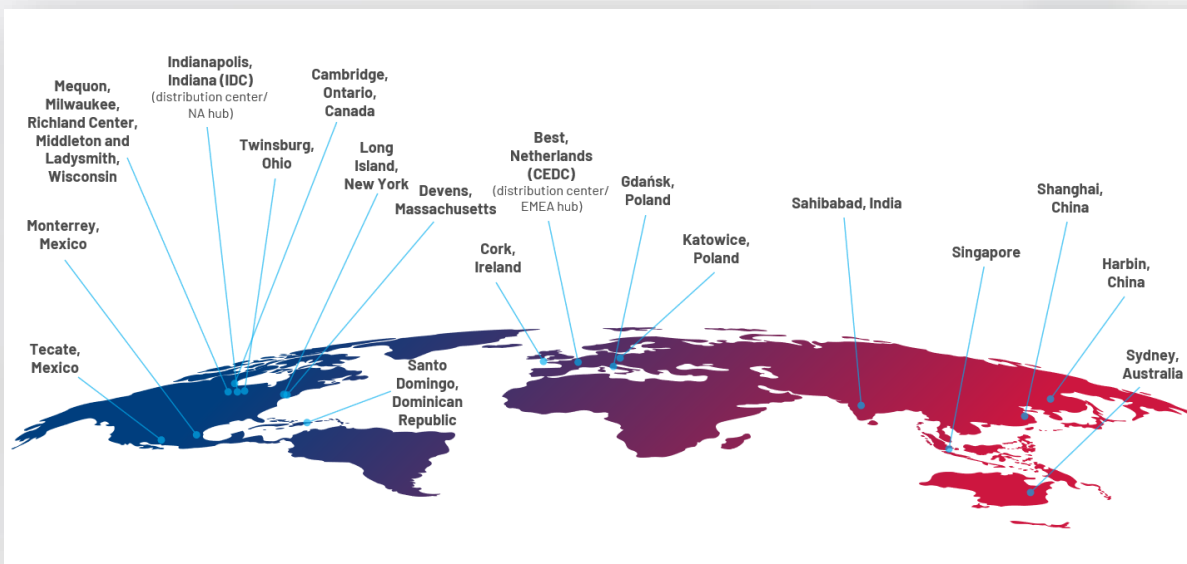
Production Logistics delivers an orchestrated, agile, zero touch material flow through manufacturing operations.

Analytics use data to solve manufacturing bottlenecks, optimize output and quality and provide new insights, tapping into the power of Industrial AI.

Robotics accelerate autonomous / semi-autonomous operations and contribute to systems that are more intelligent, intuitive and flexible.

Production System





people 4.0

Jakie masz wyzwania?

Chcesz mieć 4.0



Chcesz być 4.0

Najpierw była / jest... DŻUNGLA

DATA JUNGLE



Świadomość

DATA STRUCTURE



Standaryzacja

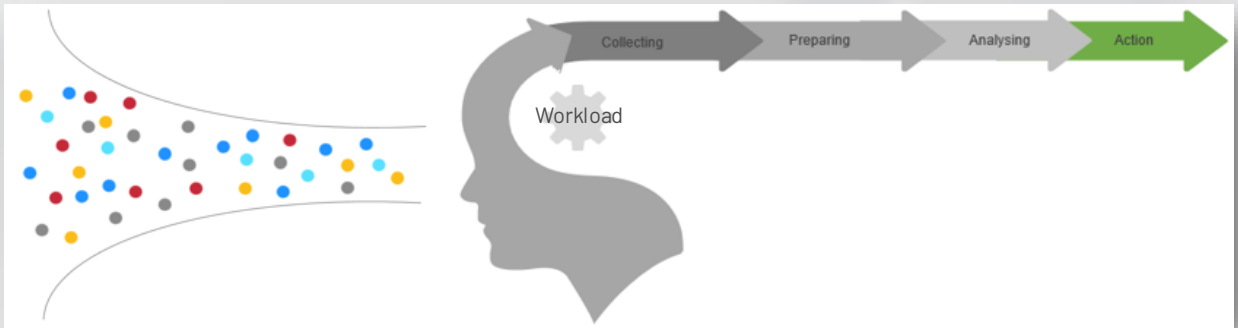
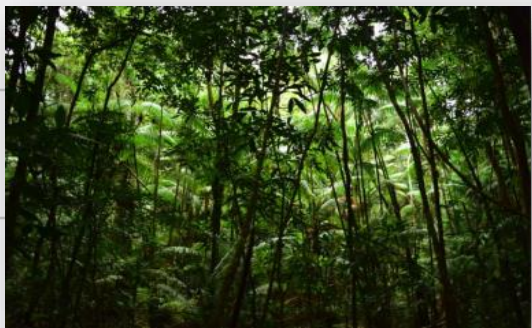
DATA LAKE



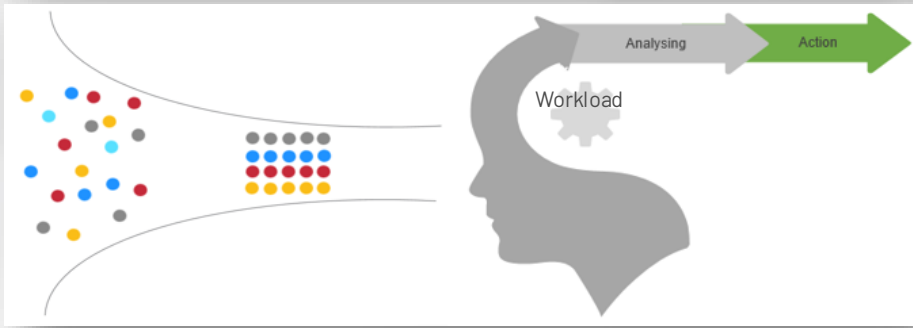
Cyfryzacja

Aspekt ludzki – wpływ dżungli

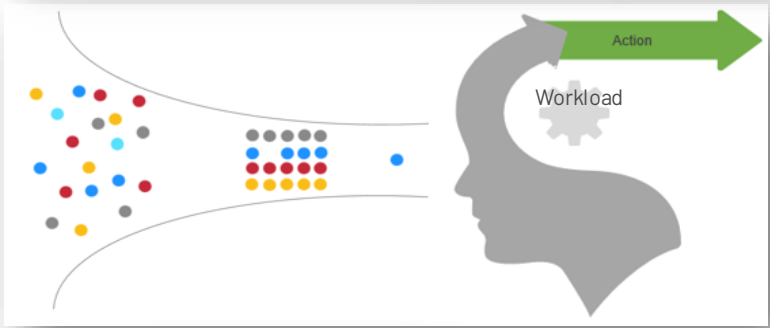
Industry ?.0



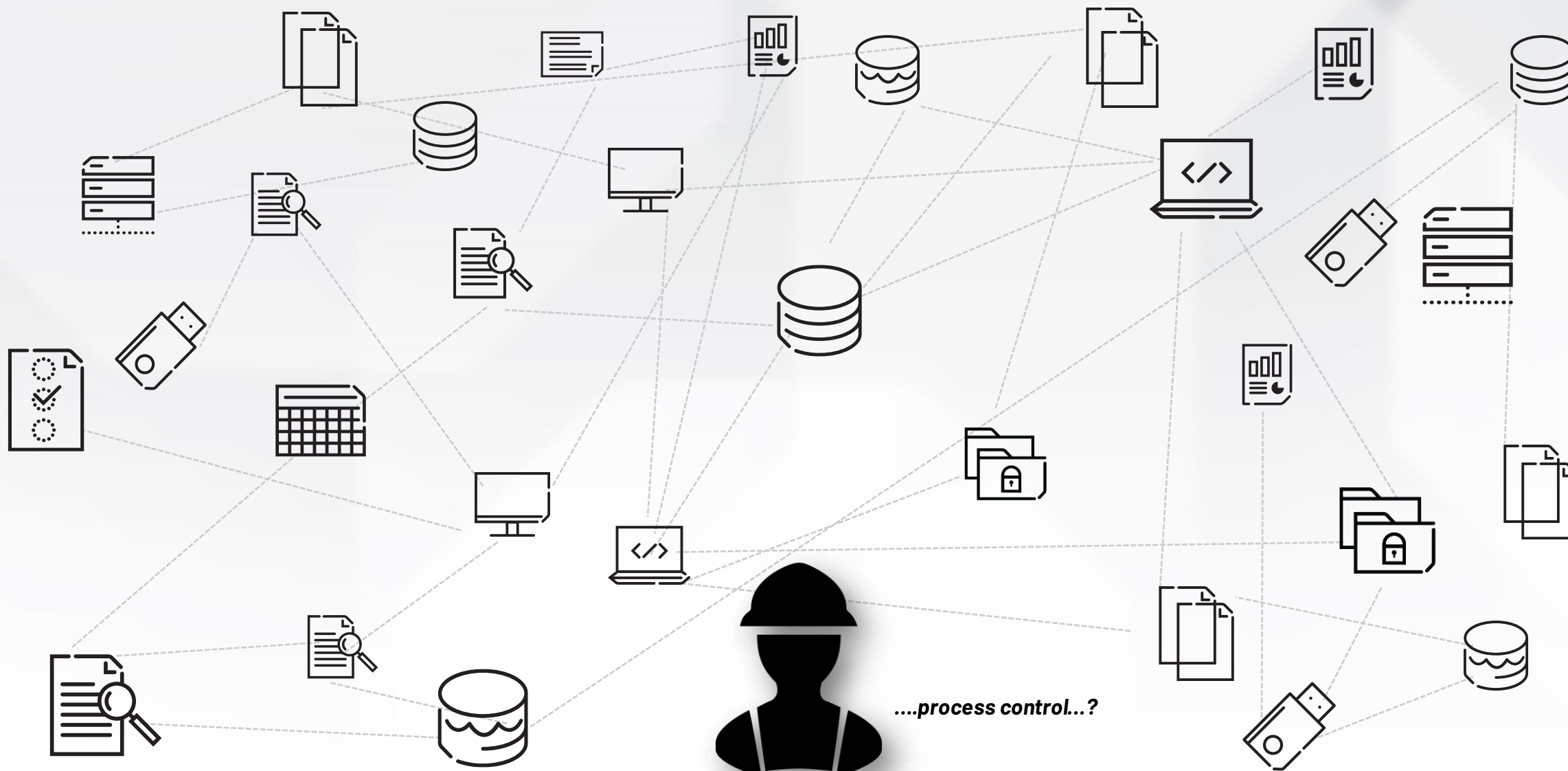
Faza 1



Faza 2

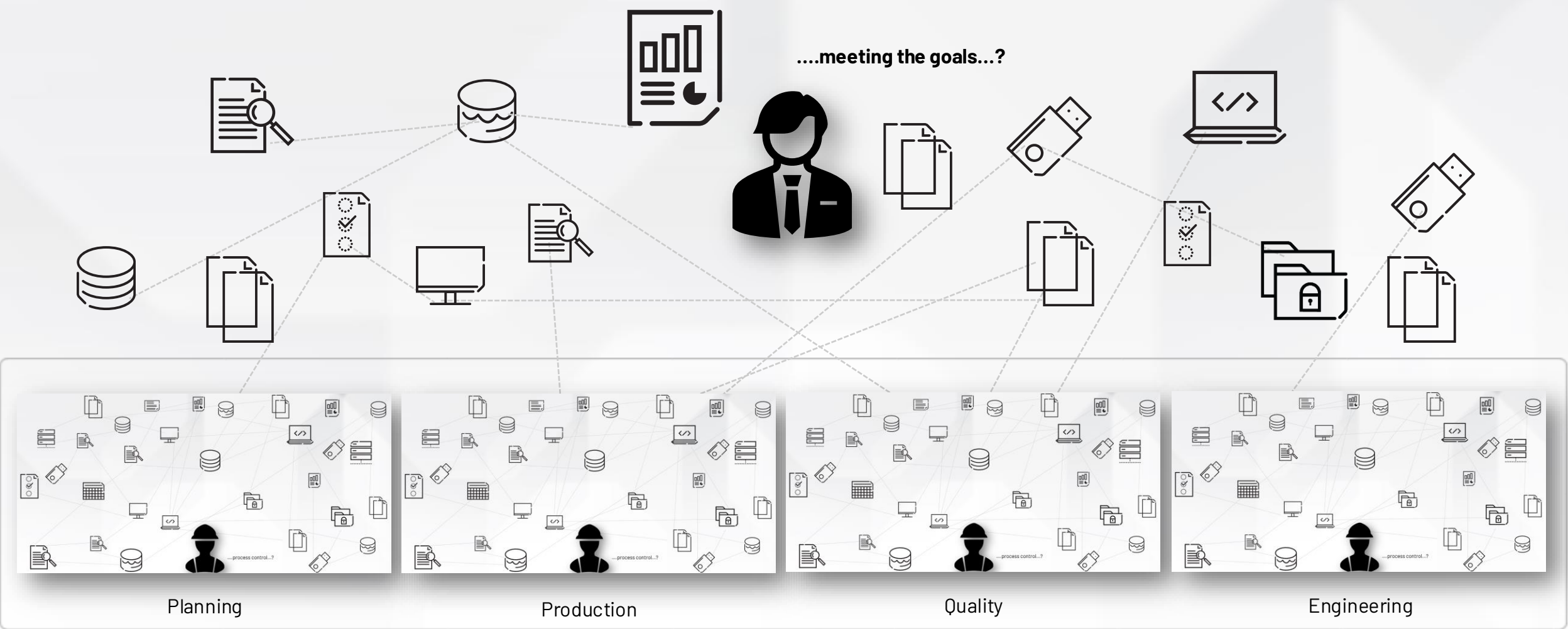


Przemysł ?.0 – Pracownik



Przemysł ?.0 – Manager

....meeting the goals...?



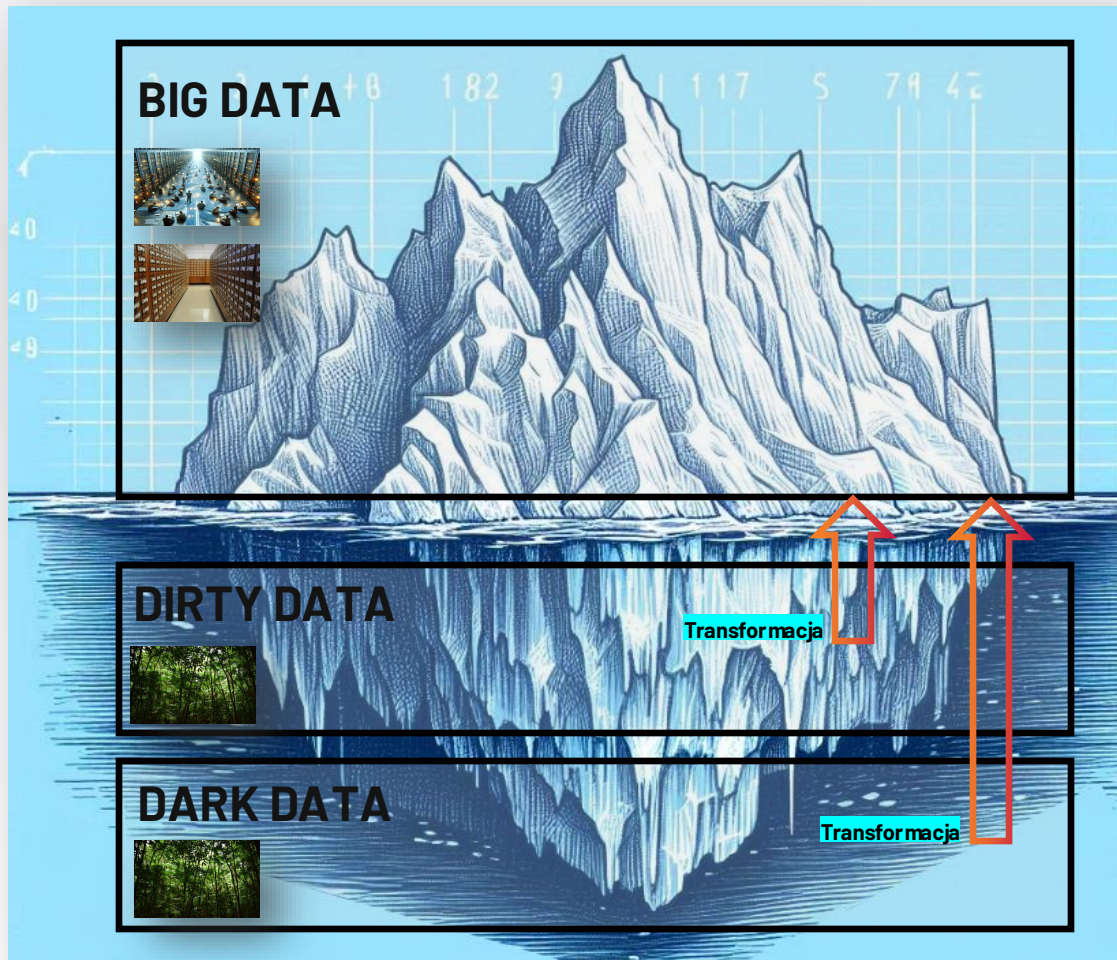
Planning

Production

Quality

Engineering

Proces transformacji – od Dark Data do Big Data



Automatyczny proces zbierania i przetwarzania informacji w organizacji

Podejmowanie decyzji w locie



Dane zbierane manualnie

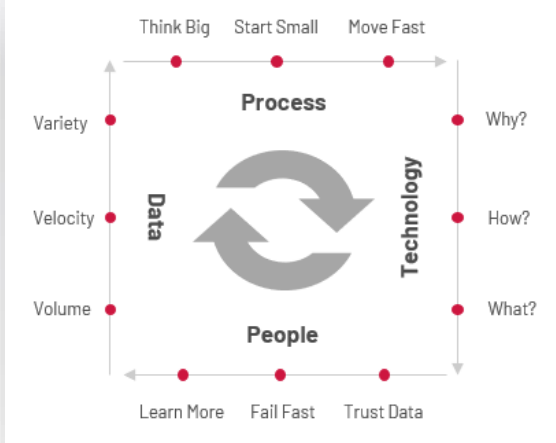


Dane nie zbierane

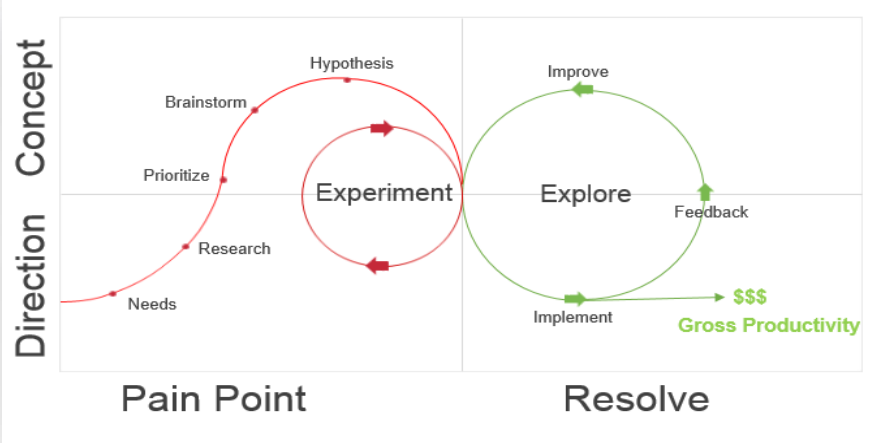
Manualny proces zbierania i przetwarzania informacji w organizacji

Być 4.0 to więcej niż mieć

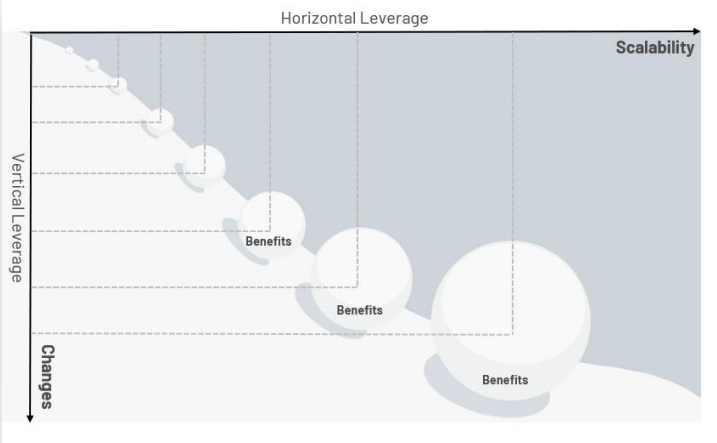
Projektowanie rozwiązań



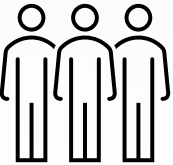
Implementacja „od kierunku/punktu bólu do oszczędności



Generowanie benefitów



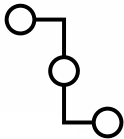
Projektowanie zorientowane na człowieku – Human Centric Design



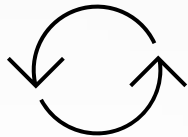
People-Centered



Solve the right problems



Everything is a system



Small & Simple Interventions

People on the fly



Czyli:

Tu i Teraz

Zarządzanie Jutrem

Podejmowanie decyzji opartych o dane

Mobilność, zwinność, elastyczność

Praca twórcza

Dynamiczne środowisko

Szybka adaptacja

Otwartość na zmienność

Otwartość na niepewność

Technologia naturalnym przedłużeniem potencjału ludzkiego



expanding **human possibility**®



Allen-Bradley

by ROCKWELL AUTOMATION



LIFECYCLEIQ™
Services

by ROCKWELL AUTOMATION



FactoryTalk

by ROCKWELL AUTOMATION