

Next stage of growth – Al-powered Life Sciences

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We are in the sweet spot of the attractive market life sciences

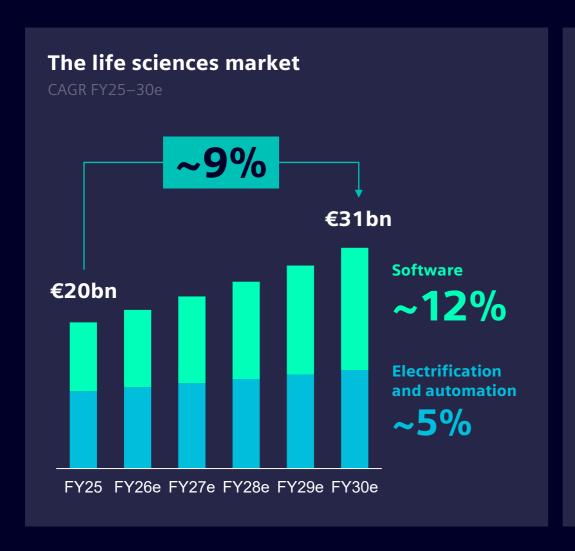


We accelerate transformation with the most complete and integrated portfolio



We enable a data and Al-powered industry and infrastructure

Life sciences – a rapidly growing and transforming market



Life sciences is growing fast and innovating globally

- Increasing demand
- Biotech and new treatments
- Geopolitical uncertainties
- Digitalization



Shorten the path from lab to patient:

Win the race against time



\$1.4m

average loss of launch delay per drug, per day

Source: Contract Pharma

\$50m
value of single
manufacturing
batch in Biotech

Source: ScienceDirect

\$2.2bn

average pharma
R&D cost per asset

Source: Deloitte

1.2%
average ROI from R&D in 2022
vs. 6.5% in 2014
Source: Deloitte

Ready to leverage technologies



Siemens has a very strong footprint in the life sciences industry

Pfizer

Faster production, more flexible and sustainable site

Siemens as a single-source provider of industrial solutions, from initial design to the running system

+40%

more energyefficient

Bayer

Integrated IT/OT solutions for large scale automated production

MES for easier handling of changes in the automation system

Change to paperless documentation

-80%

less time and effort

Merck

Plug and produce for faster and more flexible production

Module Type Package technology enables rapid integration of production modules

-80%

less engineering effort

GSK

Digital Twins for accelerated vaccine development

Significantly shorter development times, making vaccines available faster and in optimal quality

-25%

less physical experiments

Siemens offers end-to-end solutions across the life sciences value chain

		——— Supply chain ————			
Product —		Production and facilities ————————————————————————————————————			
Research and Development	Production Engineering	Production	Buildings	Electrification	
Drug discovery software	Plant design	Automation engineering	Building automation and management	Electrical automation	
Research simulation	Plant simulation	Automation operations	Fire safety	Electrical products	
Design software	Plant engineering	Industrial connectivity	Security	Energy management	
Validation solutions		Cloud and Industrial Edge	Digital services	Renewable integration	
Knowledge and tech transfer				Electric vehicle charging	
Scale-up	Commissioning and training				
Lab automation	Predictive maintenance				
		Critical environments technology			
		Asset and performance management			
		Digitalization services			
•		IT/OT convergence			
		Artificial Intelligence and analyt	tics —		
		Digital Twins			
		Cybersecurity			
		Financial and consulting service	es		
		Siemens Xcelerator			

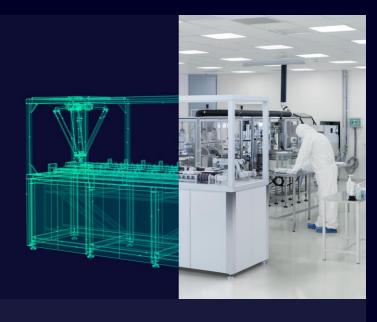
Accelerate transformation in...



...design and development



...smart production



...equipment engineering

Accelerate transformation in design and development

By using Digital Twins and Al simulation

UP TO

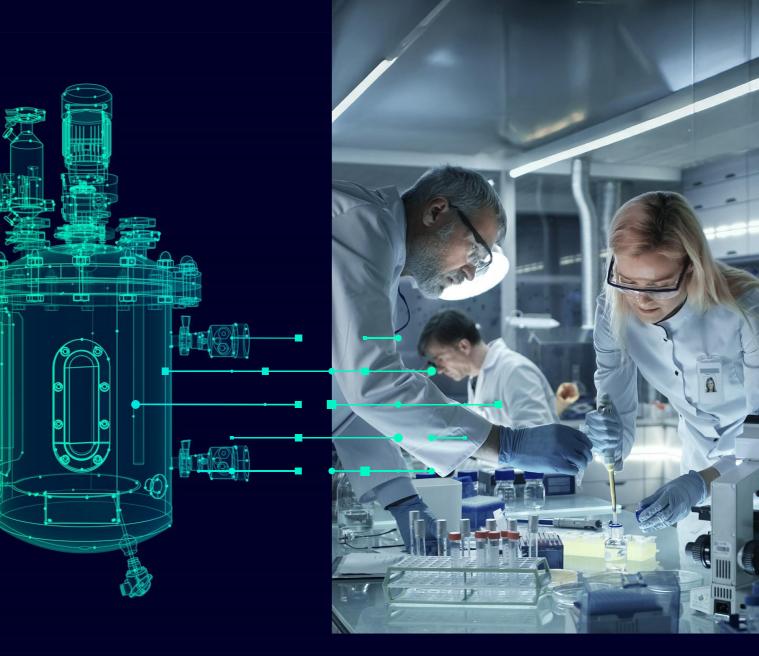
30%

less raw material use By using Al enabled room automation

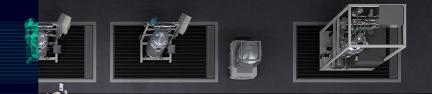
UP TO

80%

faster lab design and planning



Accelerate transformation in smart production



By streamlining workflows with Digital Twin and Al technologies

UP TO

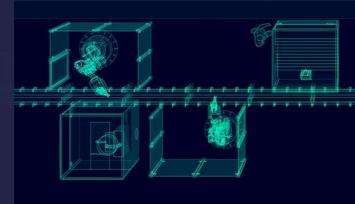
50%

reduced timeto-market By replacing paper-based batch records with digital ones

UP TO

80%

less deviations





Accelerate transformation in equipment engineering

By building Digital Twin of consumables and equipment

UP TO

15%

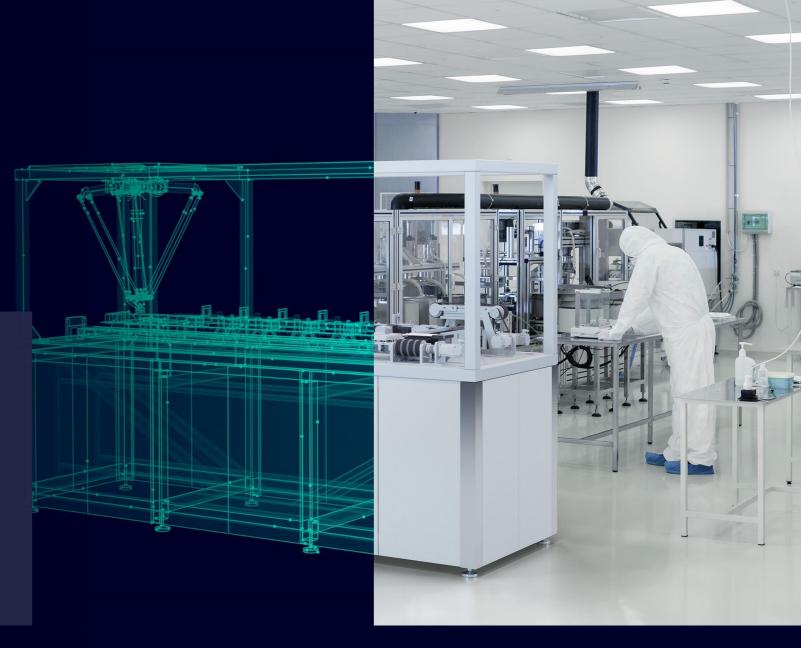
less project time

By smart data processing with Industrial Edge

UP TO

30%

downtime reduction



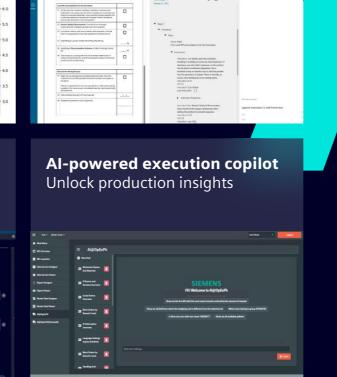
What's next?

Data and Al-powered insights – exemplary offerings











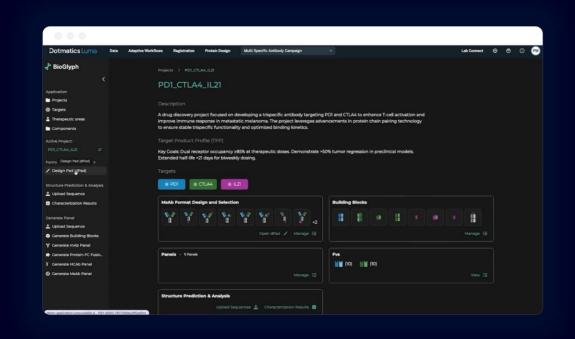


Gen-Al-powered assistant

Increase operational

What's next?

Data and AI-powered insights – applying Siemens' proven value creation playbook to Life Sciences





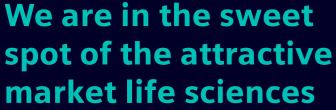
Dotmatics

Expanding Siemens' market leading position in Industrial Software by **extending Al-powered PLM portfolio** into Life Sciences

Creating end-to-end digital thread that connects data from research through to production helping customers to innovate even faster

Structural factors driving need for digital transformation in Life Sciences with **Data and Al as game changer to win the race against time**





Life Sciences is growing ~9% CAGR over the next five years.

Siemens has a very strong footprint in the life sciences industry.

We continue our profitable growth and with Dotmatics we expand into a new market segment.

We accelerate transformation with our portfolio

Siemens connects the real and digital worlds with the most complete end-to-end portfolio from electrification to automation to digitalization.

We accelerate innovation across the entire lifecycle, empowering industries with integrated technologies and unmatched domain expertise.



We enable a data and Al-powered industry and infrastructure

Siemens' Al offerings today already result in faster time to market, reduced material consumption, and lower energy usage.

With Dotmatics we make our customers AI ready, enabling multimodal drug development.

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