



SIEMENS

Ingenuity for life

Totally Integrated Automation in the Digital Enterprise

On the way to Industrie 4.0

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On the way to the Digital Enterprise – with Siemens

The Internet is now a part of production reality – while posing great challenges for automators and manufacturers:

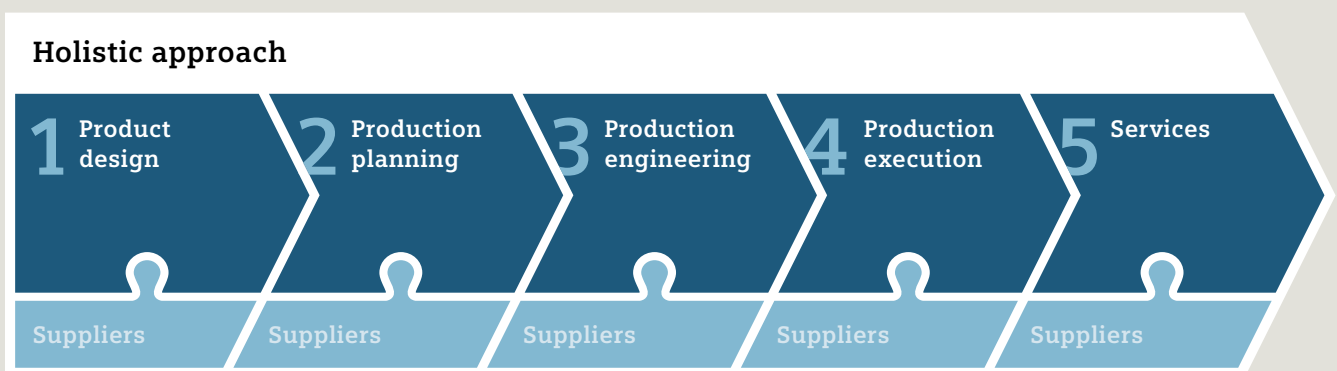
How can I manufacture cost-effectively, faster, and flexibly, even with batch size of 1?

How can I minimize my use of resources?

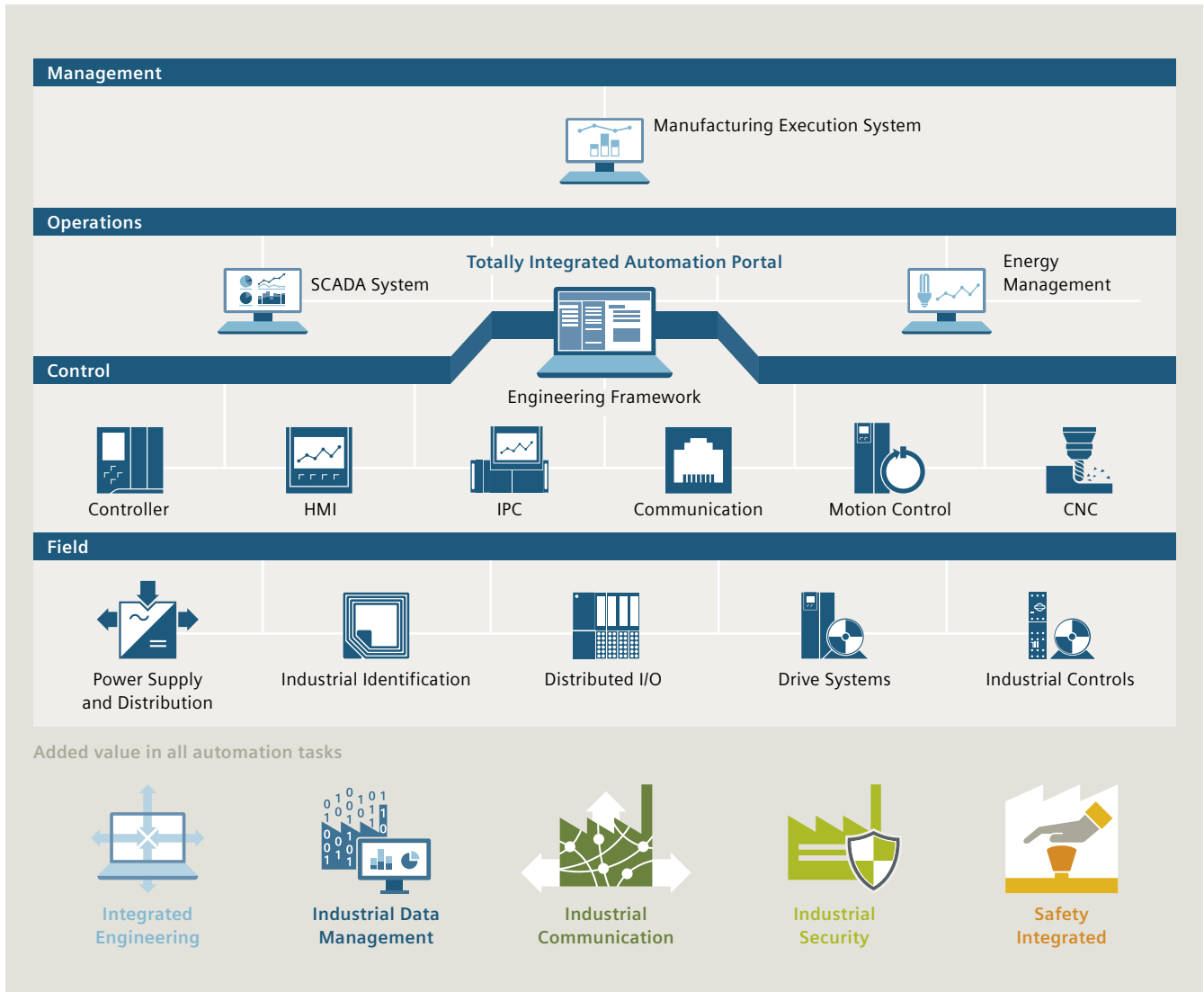
How can I help my customers to meet these requirements?

Siemens shows the way by combining Totally Integrated Automation (TIA) with the Digital Enterprise Software Suite.

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The Digital Enterprise Software Suite comprises the entire industrial production value chain as well as integrating the supplier network.



TIA and Digital Enterprise Software Suite

TIA is an integral part of the Digital Enterprise Software Suite. Today, Siemens is already offering an optimized platform for Industrie 4.0 processes with the Digital Enterprise Software Suite, which combines the benefits of Siemens' Product Lifecycle Management Software with the proven properties of TIA via a shared database. In addition to horizontal integration, the Digital Enterprise Software Suite also offers vertical integration through the Manufacturing Execution System (MES), thus providing the necessary connection to the management level.

The benefits are obvious: Everyone participating in the process has access to the same consistent database where every change, every update, and every release is immediately visible and available to all.

This means a flexible production organization, shorter project execution times through simultaneous engineering, avoidance of duplication of effort, comprehensive process control, consistent data for quality documentation, integration of mechanics, electrical systems, and automation, and much more. You can enjoy the benefits of worldwide networking today – for example, by analyzing data in MindSphere – Siemens Cloud for Industry to optimize your repair and maintenance. The scenarios inside these pages show you which benefits TIA already holds in store for you as part of the Digital Enterprise Software Suite.

Siemens offers a complete portfolio for the Digital Enterprise

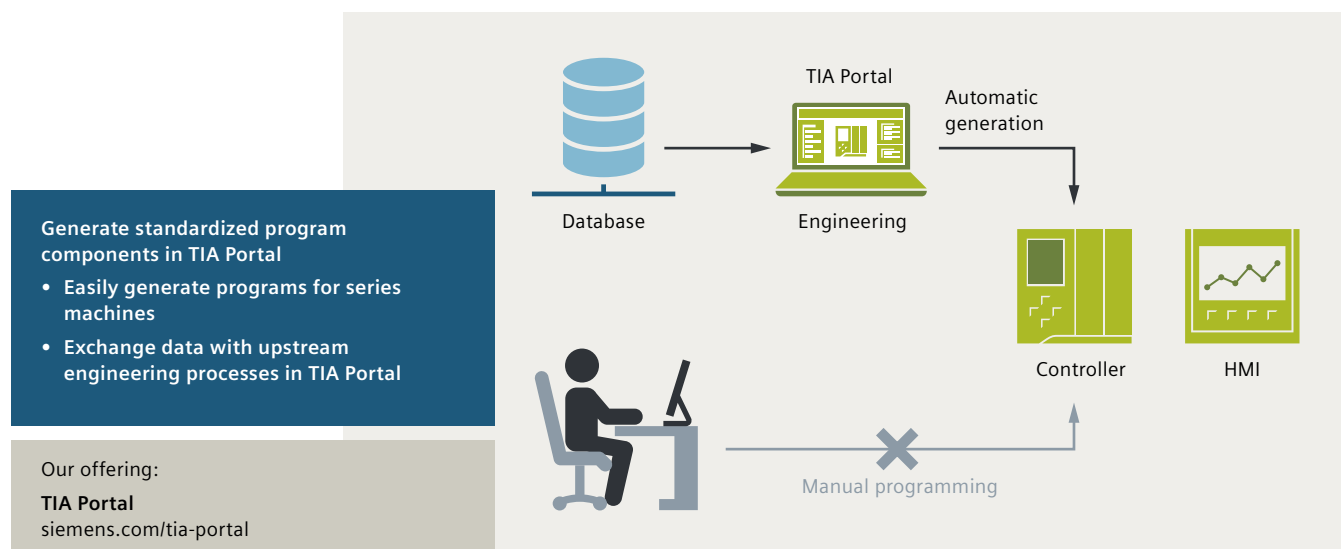
Protect automation components against cyber-attacks and unauthorized access and secure your expertise. Find out more at [siemens.com/industrialsecurity](https://www.siemens.com/industrialsecurity)

[siemens.com/tia](https://www.siemens.com/tia)

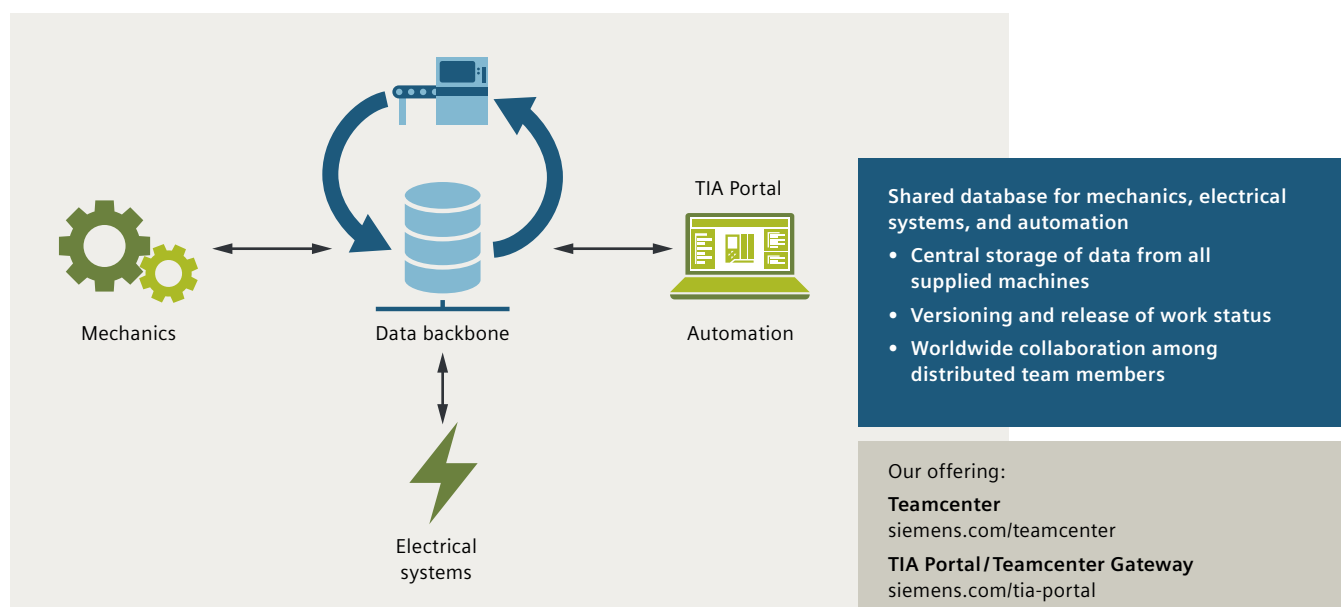
Totally Integrated Automation in the Digital Enterprise

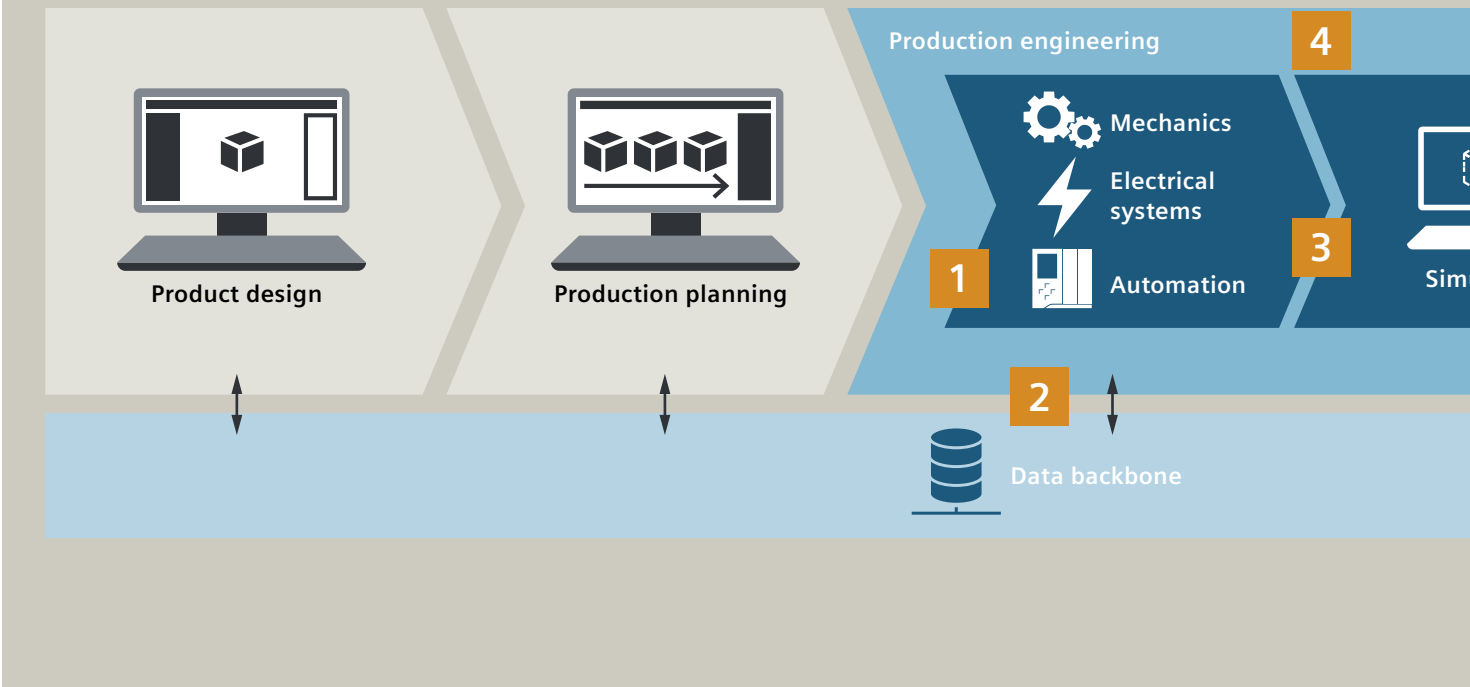
These scenarios will start you on your way to Industrie 4.0 today!

[1] Automated engineering

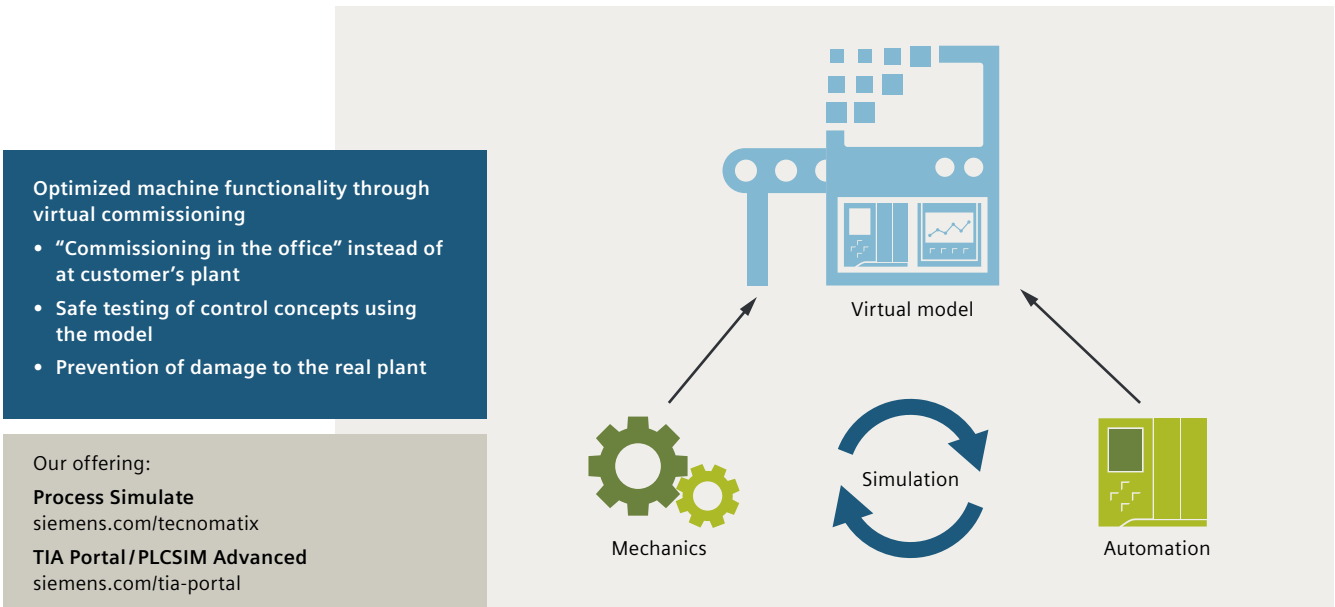


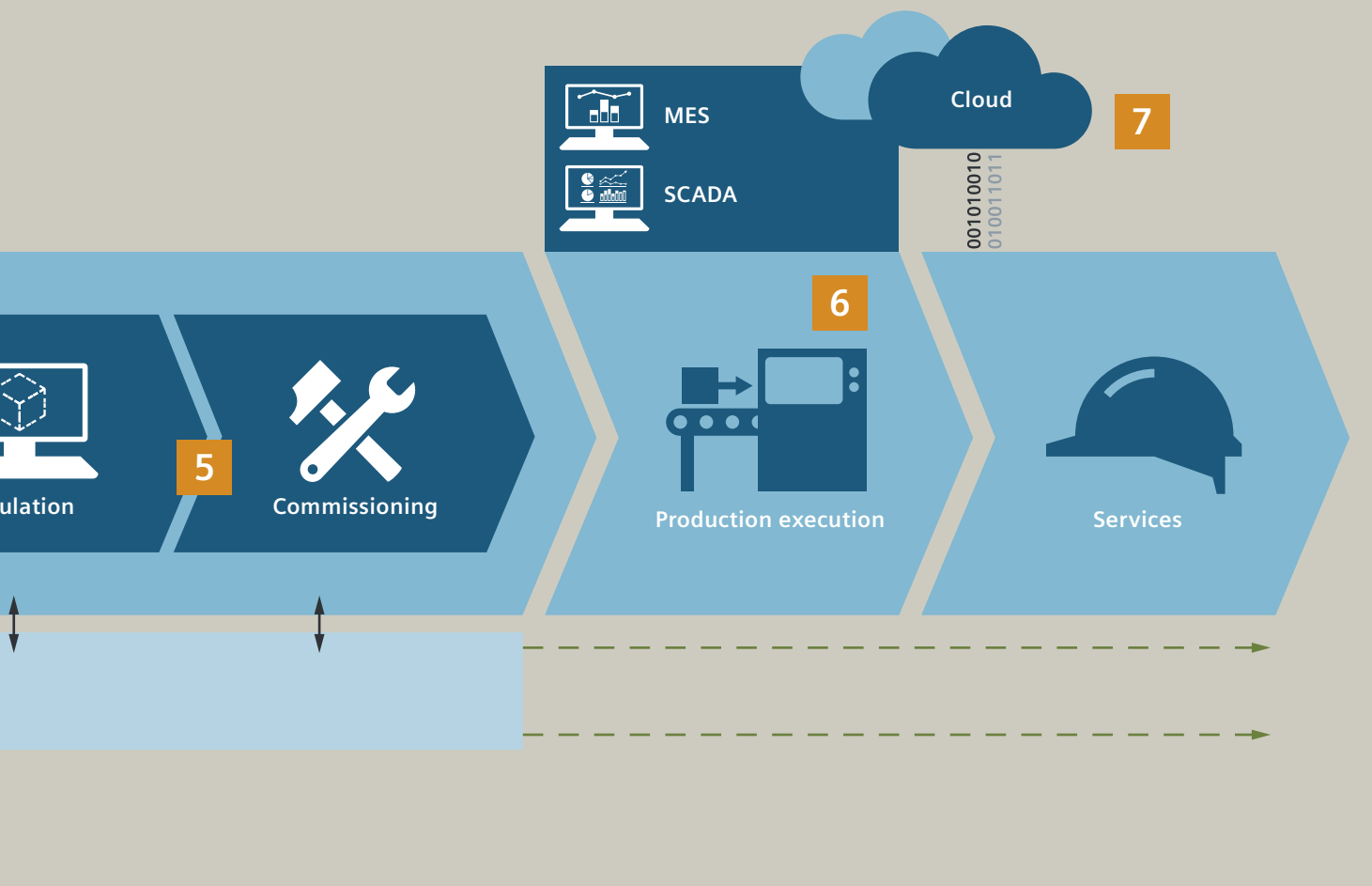
[2] Intelligent data management



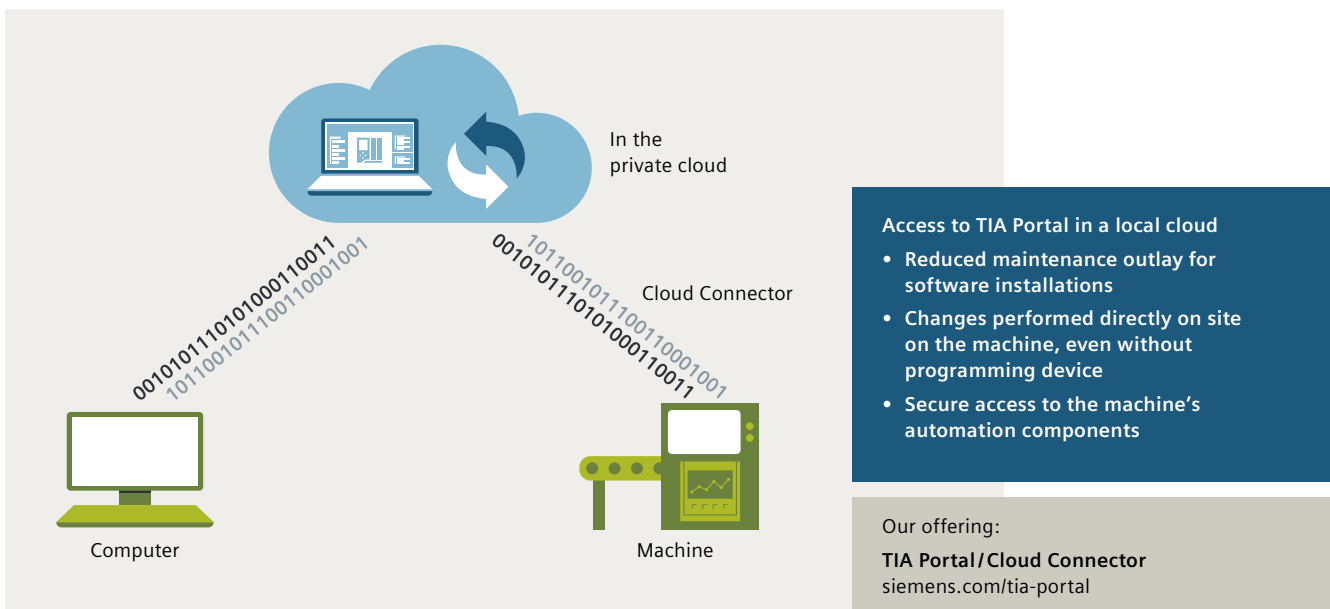


[3] Virtual commissioning

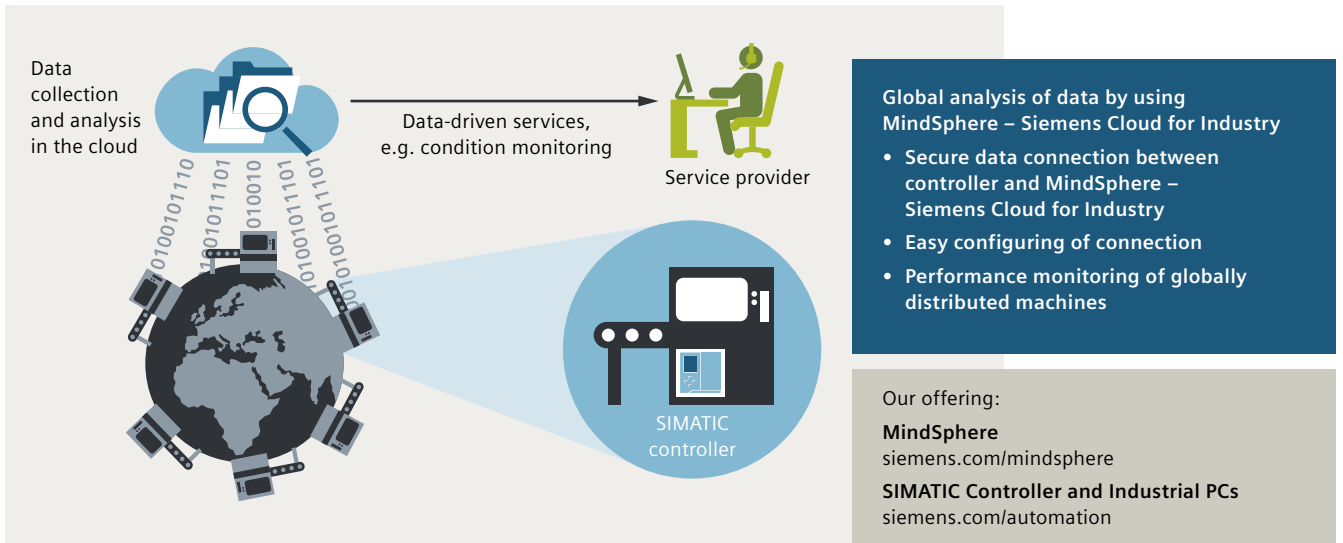




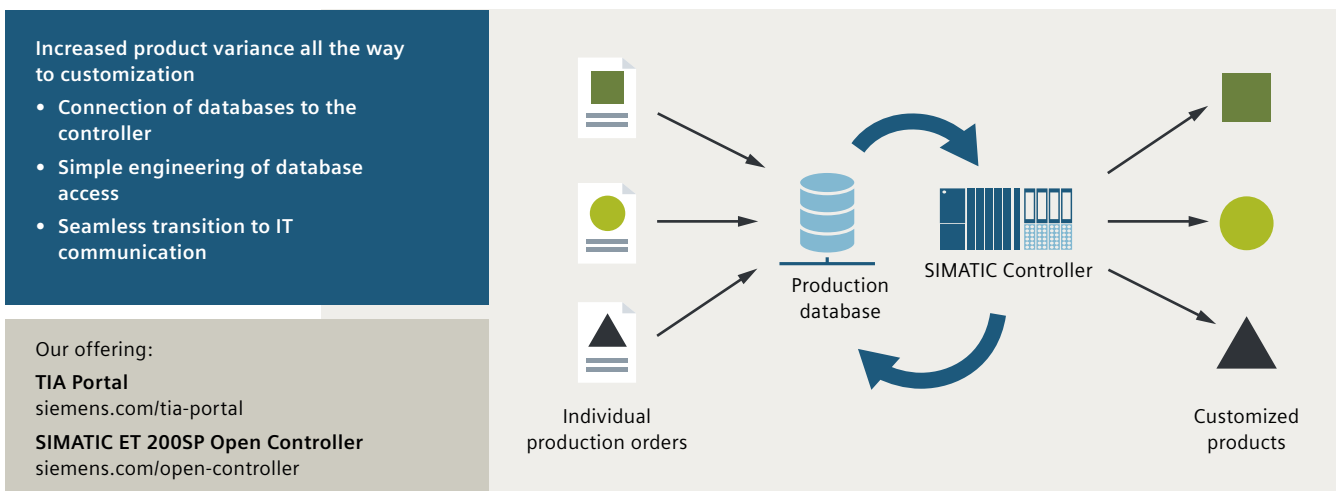
[4] Cloud-based engineering



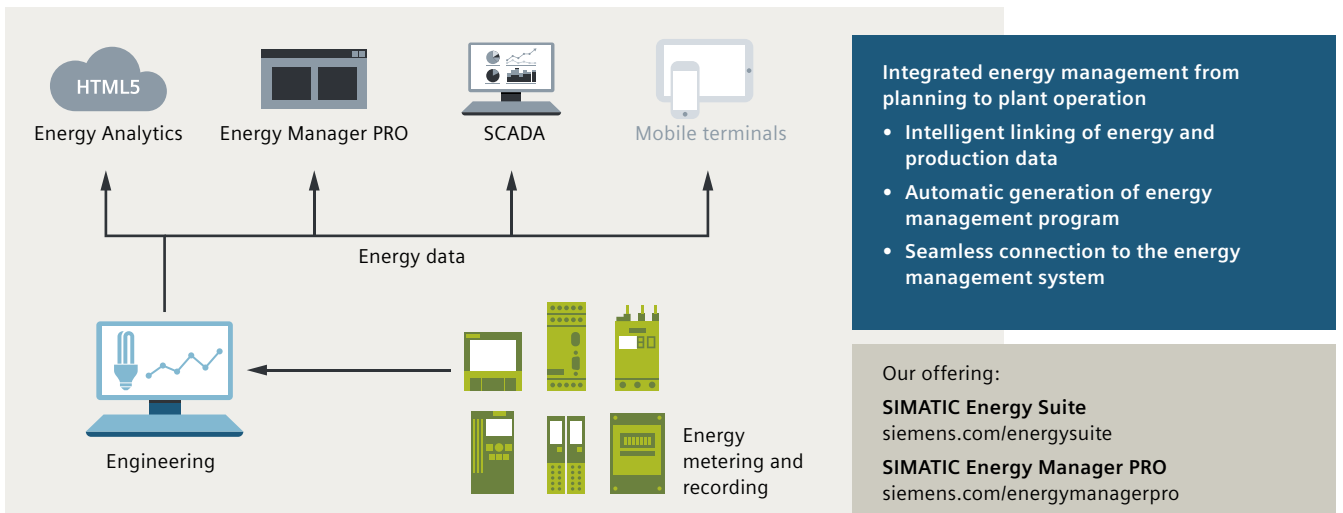
[7] Preventive maintenance



[6] Individualized mass production



[5] Integrated energy management



Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions only form one element of such a concept.

Customer is responsible to prevent unauthorized access to its plants, systems, machines and networks. Systems, machines and components should only be connected to the enterprise network or the internet if and to the extent necessary and with appropriate security measures (e.g. use of firewalls and network segmentation) in place.

Additionally, Siemens' guidance on appropriate security measures should be taken into account. For more information about industrial security, please visit [siemens.com/industrialsecurity](https://www.siemens.com/industrialsecurity).

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Subject to changes and errors.
The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

The perfect combination: TIA and the Digital Enterprise Software Suite

- Reduced time to market due to shorter innovation cycles, even for more complex products
- Complete flexibility for volatile markets and individualized mass production
- Greater energy and resource efficiency
- Collaboration and standardization in interaction with suppliers

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