

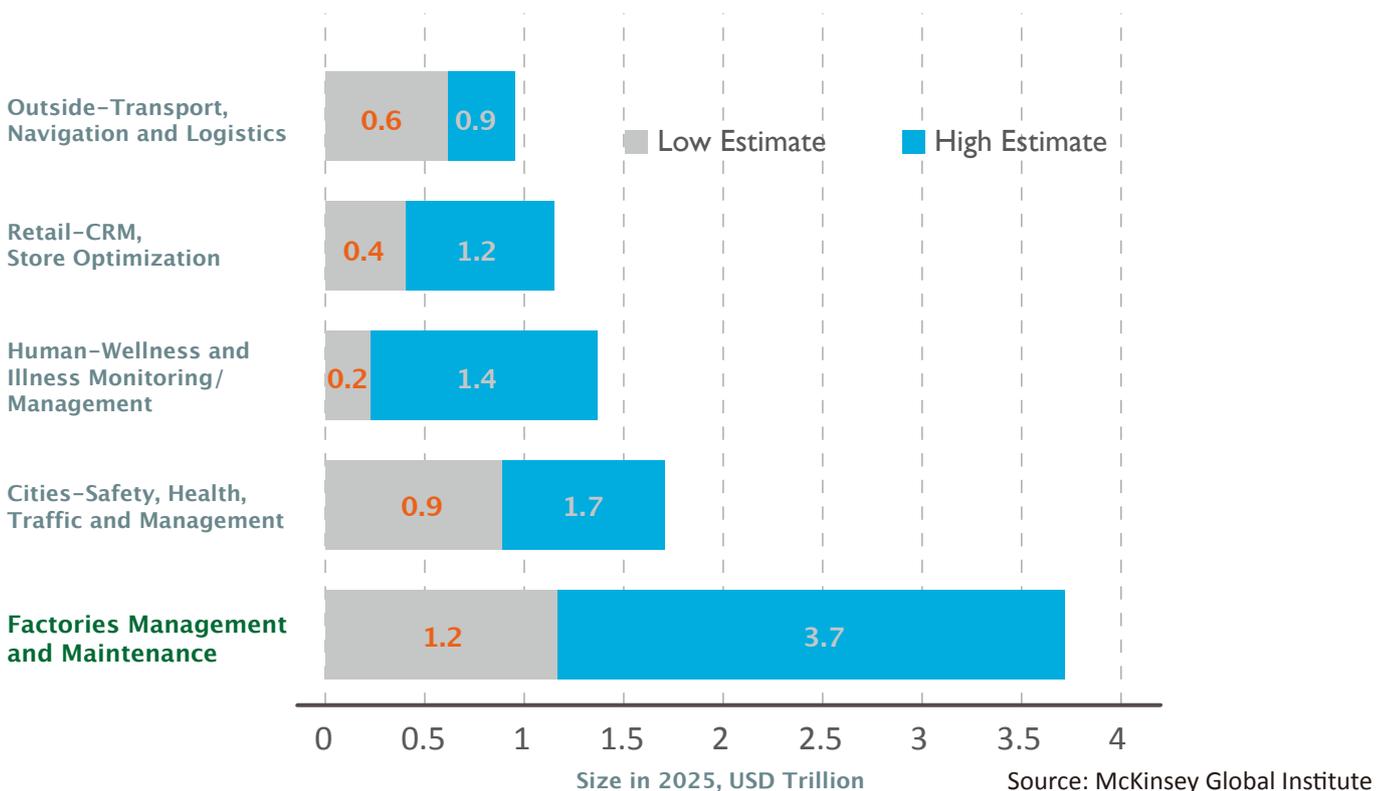
Digital Transformation for Industry 4.0



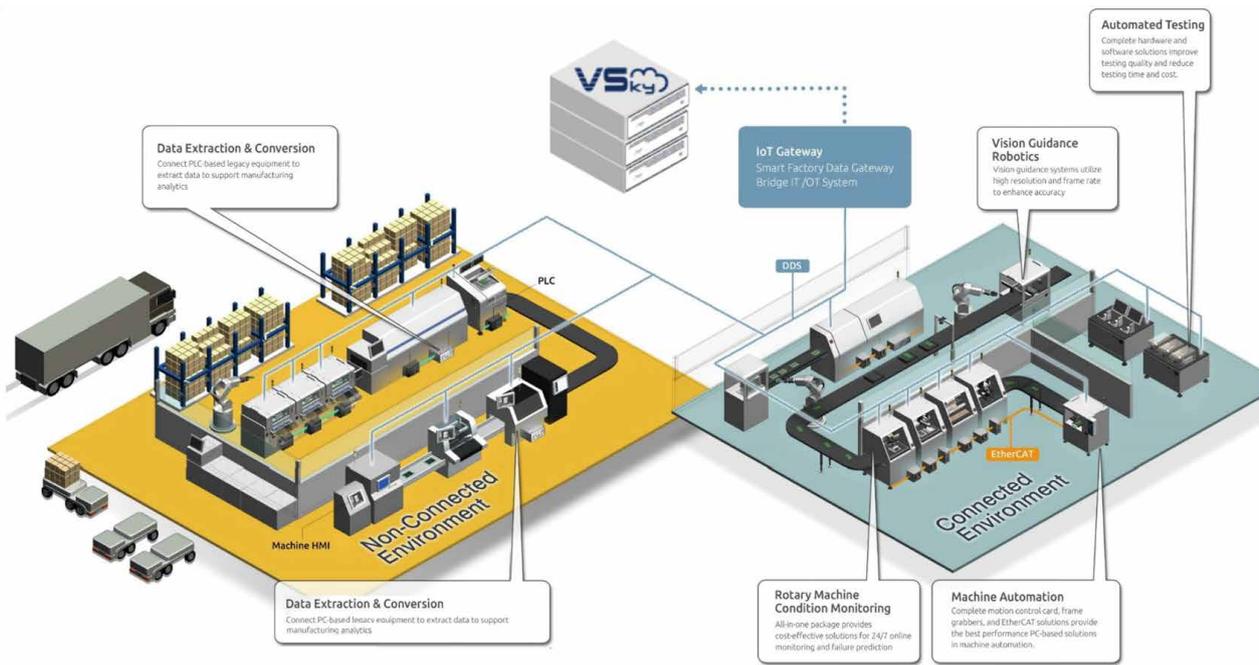
In our on-demand society, manufacturers are being challenged continuously to deliver increased customization on tighter schedules and at lower prices. As the data-driven, automated and autonomous production principles of Industry 4.0 are a solution, companies looking to embrace this trend must undergo digital transformation. Whether the end goal is improved record keeping, documentation for ISO or other certification, raised utilization rates, or lower idle times, digital transformation is no longer something that is nice to have or complementary to other business activities. With the economic impact of IoT and digitization in the manufacturing sector expected to reach at least 1.2 Trillion USD (Source: McKinsey Global Institute) in 2025, it is apparent that companies that have not embraced this trend face increasing marginalization.

One of the most important decisions is what IT infrastructure that will serve as the basis for the transformation. This is where Promise VSKyCube Hyperconverged Infrastructure Solutions come in. VSKyCube solutions deliver a pre-integrated, easy to scale, easy to manage, pool compute, storage, and networking resources, providing the ideal platform for companies to step into Industry 4.0 and beyond.

Top 5 Settings Where Value may Accrue



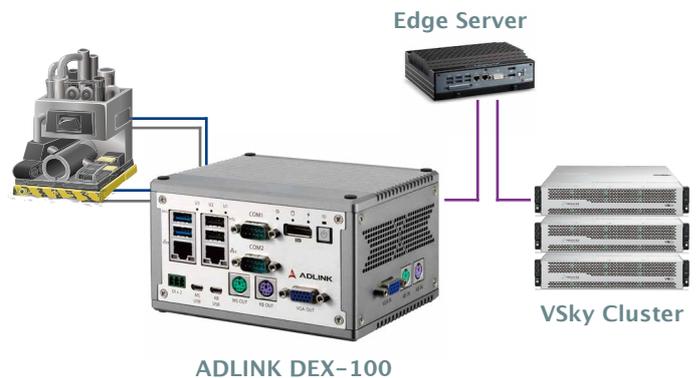
Solutions that give you an Edge



VSKyCube solutions are built with the needs of small and medium manufacturers in mind, with products to help companies gain the competitive advantage they need for the future while maximizing the value and the useful life of existing manufacturing equipment. VSKy appliances are further certified with a wide range of partner solutions that help our customers in their digital transformation processes, and provide value across Industry 4.0 use cases.

At the factory, VSKy solutions leverage edge device control and data capture from partners such as ADLINK to provide solutions that solve real world problems. One of the biggest roadblocks for smart manufacturing and Industry 4.0 is the fact that more than 85 percent of existing manufacturing machines are not connected, with many of them lacking even basic capabilities. At Promise, we understand that very few customers have the luxury of starting over with green-field deployments. By integrating ADLINK's DEX-100 edge devices, critical information can be extracted in real-time from almost all legacy machines that support external display, providing uniform data capture from a wide array of previously unconnectable devices. VSKy solutions can leverage DEX-100s built in Machine to Machine and Machine to Cloud capabilities, combined with our VSKyData big data platform and MES to offer even brown-field machine deployments the advantages of connected, smart manufacturing. For factories with existing connectivity, we also support solutions such as ADLINK's Talos based EtherCAT control solutions, Automated Testing, Machine Control Solutions, as well as their gateways, designed to deliver data to the VSKy Cluster.

Connecting the Unconnected



OCR Based, Non-intrusive, Real-Time Monitoring of Any Device With Display Port

On the back end Promise VSky works with business software solution makers, such as Epicor in the Taiwan market, to offer a wide range of applications such as ERP and MES. When paired with our proprietary VSkyData Analytics Platform support Apache Spark, Hadoop and Cloudera to increase machine utilization and streamline manufacturing – lowering manpower requirements while increasing production rates.



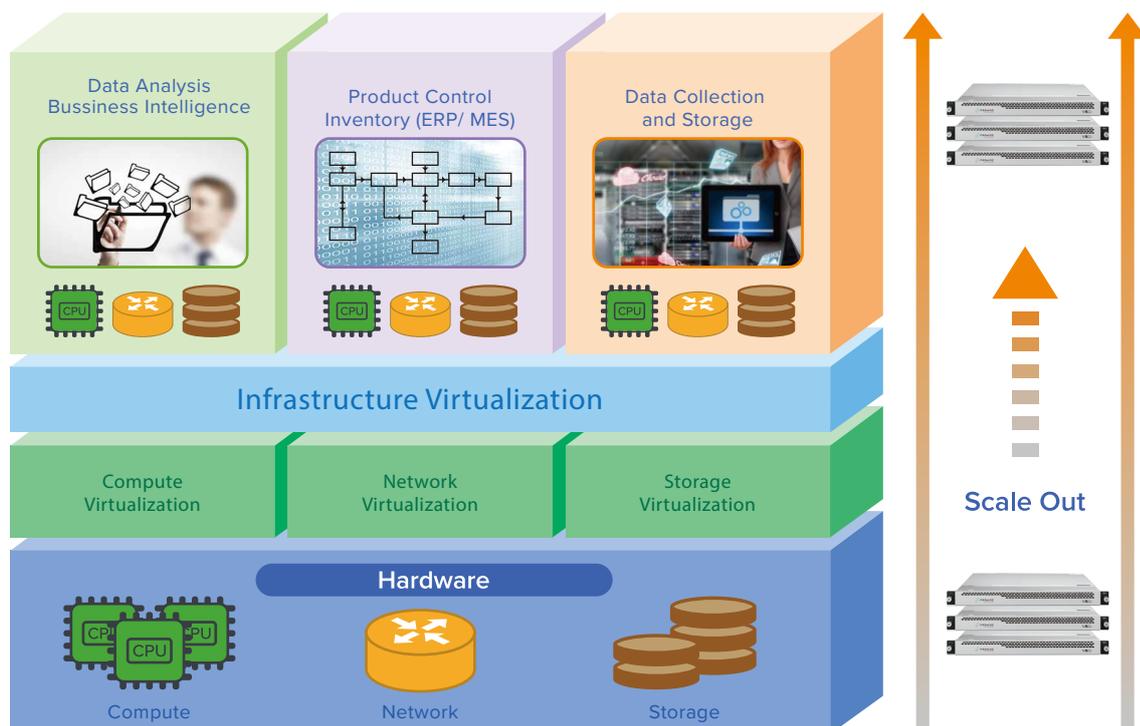
Epicor also provides a wide range of software solutions, ranging from HRM, to Compliance as well as Packaging and Label management. These solutions are further strengthened by our proprietary VSky software applications such as VSkyPoint VDI which can be used for machine consoles, VSkyBox enterprise-level file sharing and sync- which can be leveraged for content management and collaboration for manufacturing schematics or data, as well as the powerful VSkyStor platform gives businesses the ability to leverage extra provisioned storage for existing applications.

* Partnership Currently Limited to Taiwan Market

Scalability and Flexibility

Expansion is always a goal; however customer orders and IT budgets don't always fall in line with these plans. Instead of having to pay for a pre-planned solution and getting locked-in with little hope of adjusting to meet demands, VSky Hyperconverged Infrastructure can change to meet up-to-date needs. VSkyCube deployments can be tailored to fit individual budget and timelines allow manufacturers to take the first step toward digitization – then, pay as they grow. Minimum deployments start from just one node, enough to run an ERP, MES solution, or controls for busy machines that need to have tight scheduling. When operations are ready for the next step, VSky solutions scale linearly and predictably one node at a time, giving manufacturers a platform for more business management applications, machine control and data acquisition, or just everyday IT tasks. Simple, powerful management tools further reduce the burden IT overhead in your manufacturing workplace.

Software solutions such as Promise VSkyMotion also maximize efficiency by allowing seamless workload migration to AWS public cloud. This capability removes “computation” and “storage power” as bottlenecks to digital transformation, and allows our solutions to respond to higher workloads caused by unexpected orders, and gives manufacturers the capability to say “yes” to more business.



Resiliency and Availability

The increased reliance on industries on the just-in-time inventory, as well as computerized control and data logging means that impact of system or disk failures can be disastrous. VSkyCube Hyper-converged solutions provide multiple layers of resiliency to help mitigate the risks. Critical schematic and control data can be distributed over multiple nodes or disks, and if necessary both RAID and RAIN redundancy can be used for maximum protection. Important workloads, such as machining controls, supply chain, or billing can be migrated quickly between nodes, allowing the system to account for both unexpected failures as well expected events such as for online hardware maintenance without having affecting production. This in turn gives manufacturers the confidence to commit schedules and more transparent status reporting, increasing production efficiency while improving satisfaction.

In the event of hardware failure or a major catastrophic event affecting an entire area, Promise VSkyMotion solutions allows for the parts or even your entire solution to be backed up or even migrated to run at another geographic location, or even on the public cloud, providing Disaster recovery or data retention capabilities that ensure that remaining capacity does not have to stand idle and assuring business continuity, even in extreme cases.

In summary, Promise VSkyCube hyper-converged solutions provide manufacturers advantages at every step of the way:

- In planning, where our certified solutions provide simple building blocks covering both front-end data acquisition and back-end business management.
- In procurement, by allowing digitization at a planned pace, saving upfront costs that can be used to buy more tooling or data acquisition modules instead.
- In deployment, by providing powerful tools to seamlessly migrate and work with existing platforms while minimizing impact to the factory floor.
- In everyday operation, by allowing on-the-fly adjustment to application resources, simple maintenance, high availability, and workload security; ensuring that manufacturing does not stop.
- In expansion, where predictable scalability allows manufacturers to digitize and grow at their own pace.

