What are the Benefits of Next-Gen Machine Tools in Manufacturing Industries?

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Are you looking for the best Machine vision, HMI and machine tool services for your business? Read our blog and contact us today for more information.
Industry 4.0 has been brought about with the integration of various technologies like Internet of Things (IoT), Artificial Intelligence (AI), Augmented Reality (AR), Virtual Reality (VR), Digital twins, etc.
Impact of Industry 4.0 on Machine Tools:
current machine tools are not equipped for Industry 4.0 due to the following aspects:
1. Lack of multi-connectivity capabilities
2. Non-intuitive **HMI** incapable of processing data from multiple sources
3. No Cloud and Cloud analytics capability along with the absence of Edge technologies
4. Their non-modular nature and inability of providing remote monitoring and predictive maintenance
Therefore, there is a need for advanced machine tools which can support the needs of Industry 4.0.
At present, the top priority for industrial machine and precision tools manufacturers should be to re-engineer their existing machine tools and enable the following:
1. Reduction in field maintenance costs by providing remote digital diagnostics
2. Encourage the move from reactive to predictive maintenance for their customers
3. Arrest revenue losses due to unexpected downtime, and guarantee uptime for customers
4. Create new Digital revenue streams, such as Product-as-a-service, which are recurrent and predictable
5. Provide real-time usage insights to encourage product innovation and development

How Next-Gen Machine Tools can Add Value across the Manufacturing Chain:
1. Multi-connectivity
2. Intuitive HMI
3. Improved Control/Torque/Accuracy
4. Preventive Maintenance
5. Utilization and Productivity
6. Avoiding Improper Use
7. Revenue Models

Learn how Sasken is accelerating the development of next-gen machine tools, by leveraging its chip-to-cognition capabilities.