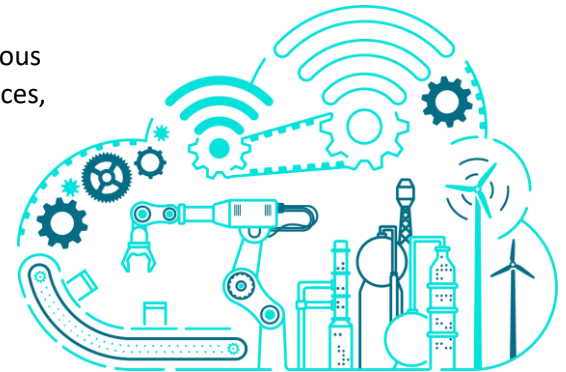


Cloud Computing

Connecting for Success

Cloud computing is the delivery of computing services over the Internet, a.k.a. “the cloud.” Cloud services can house, protect, enable and/or maintain: servers, document and file storage, databases, networking, software, analytics, and intelligence. When utilized, businesses stay more securely connected with employees, equipment, customers and the supply chain. Cloud computing offers several advantages:

- ✓ Reliability: Cloud-based technology has fewer technical problems than software used on individual computers and stays updated without IT departments having to make sure that everyone has the latest versions of software.
- ✓ Cost savings: Cloud solutions do not require in-house servers, and most contracts are set up based on a pay-as-you-go or on-demand basis, allowing access to resources without having to invest in expensive network infrastructure hardware and equipment.
- ✓ Scalability: Cloud computing helps manage increasing or decreasing project workloads, growing with the business or scaling back during slower times. The flexibility of cloud-based computing enables businesses to respond more quickly to market trends.
- ✓ Centralized management: Access to programs can happen from any computer in the organization, improving collaboration and information sharing. Ensuring that one source of information exists and everyone is using the same data, information and documents reduces misinformation.
- ✓ Seamless integration: Cloud-based computing facilitates the simultaneous integration of data streams from multiple partners, platforms and devices, which can prove advantageous when working with numerous supply chain partners.
- ✓ Security: Data and information stored in the cloud is likely safer as cloud computing cybersecurity measures are typically more advanced than is available with network infrastructures.
- ✓ Competitive Advantage: Cloud computing offers the structural support required for implementing and utilizing smart technologies (or smart manufacturing) in small and medium-sized companies.



Webinars, Videos or Podcasts to Check Out



- Technically Iowa Podcast, [Cloud Computing with Wells Enterprises](#)
- [Cloud Computing in 6 Minutes](#)
- [Industrial Cloud Benefits](#), Automation World

CIRAS Webinars on Demand:

- [Business Process Automation Using SharePoint-Office 365](#)
- **CIRAS Industry Technology Video**
- [Cloud Computing](#)

CLOUD COMPUTING



Scalable



Elasticity



Big Data



Operational



Third-party



Service



Security



Data Storage

Public sector service providers for your businesses:

- [CIRAS](#) offers assessments and assistance with cost benefit analysis, process improvements and integration planning, among other services. In cloud computing, CIRAS offers basic education and provider facilitation on:
 - Review and assessment of current process need
 - Data Storage, virtualization and disaster recovery systems
 - Business process automation through Cloud platforms
 - Facilitated connections to system integrators and assist with implementation.

Cloud Solutions Vendors:

- [EnCompass Iowa](#), Cedar Rapids
- [C.U.R.E Solutions](#), Burlington, Fairfield, Fort Madison
- [Siemens](#)
- [NTT Data](#)
- [Simio](#)

Disclaimer: This is not meant to be a comprehensive list of service providers

Articles



- ✓ [Why Cloud Computing Is Essential To Modern Manufacturing](#), an article from *Forbes*
- ✓ [The State of Cloud Adoption in Manufacturing](#), an interesting blogpost/interview about cloud computing in manufacturing from *Accenture*.
- ✓ [Big Data, Cloud Computing Redefining Manufacturing Paradigms, Pushing Industry 4.0 Farther](#), a short article on *Automation Alley*.
- ✓ [The Different Types of Cloud Computing Explained](#), a guide from *Jellyfish Training*. Briefly explains the three types of cloud computing (public cloud, private cloud and hybrid cloud) and the types of cloud services (IaaS, PaaS, SaaS and serverless)
- ✓ [Top 10 Cloud Service Providers in 2022](#), blogpost on *Tech2Sports*. A quick look to get you thinking about what you might already be using in your daily life!

10 Questions to Ask When Choosing a Cloud Provider

1. Which cloud services do you provide (e.g. storage, CRM, virtual server, software/applications)?
2. What is your pricing structure?
3. How secure is your cloud?
4. Where is your data center and how safe is it?
5. What happens if you lose my data (e.g. redundancies, compensation)?
6. What customer support services do you offer?
7. Can your cloud scale up to meet my business needs?
8. What is your downtime history?
9. How will I get set up?
10. How will I access my company's cloud?



Sourced from *Entrepreneur*, read full article [HERE](#)



BREI at a Glance is Produced through a Partnership of:

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- *Hawkeye Community College Corporate & Business Solutions*
- *Iowa Manufacturing 4.0 Consortium*