COMPUTERIZED BUSINESS SOLUTIONS

Engineering the Digital Fortress

End-to-end datacenter solutions that combine architectural excellence, operational resilience, and future-ready scalability.

OFFICIAL BROCHURE 2026

Executive Summary

In an era where data has surpassed oil as the world's most valuable resource, your datacenter is no longer just a facility—it is the strategic nerve center of your enterprise. At Computerized Business Solutions (CBS), we understand that every second of downtime translates to lost revenue, eroded customer trust, and competitive disadvantage.

With over two decades of infrastructure expertise, CBS delivers end-to-end datacenter solutions that combine architectural excellence, operational resilience, and future-ready scalability. We don't just build server rooms—we architect the foundation upon which your digital future stands.

> *"In the digital age, your datacenter is the heartbeat of your business. At CBS, we don't just build server rooms—we architect the foundation for your digital future."*
>
> **— Amarjeet, Director, CBS**

The Business Case for Modern Datacenters

Data Explosion

60% of enterprises face storage capacity crises annually. Our scalable architectures grow with your data footprint.

Downtime Costs

Average cost of unplanned outage: $5,600/minute. Tier-III/IV designs deliver 99.982%-99.995% availability.

Energy Inefficiency

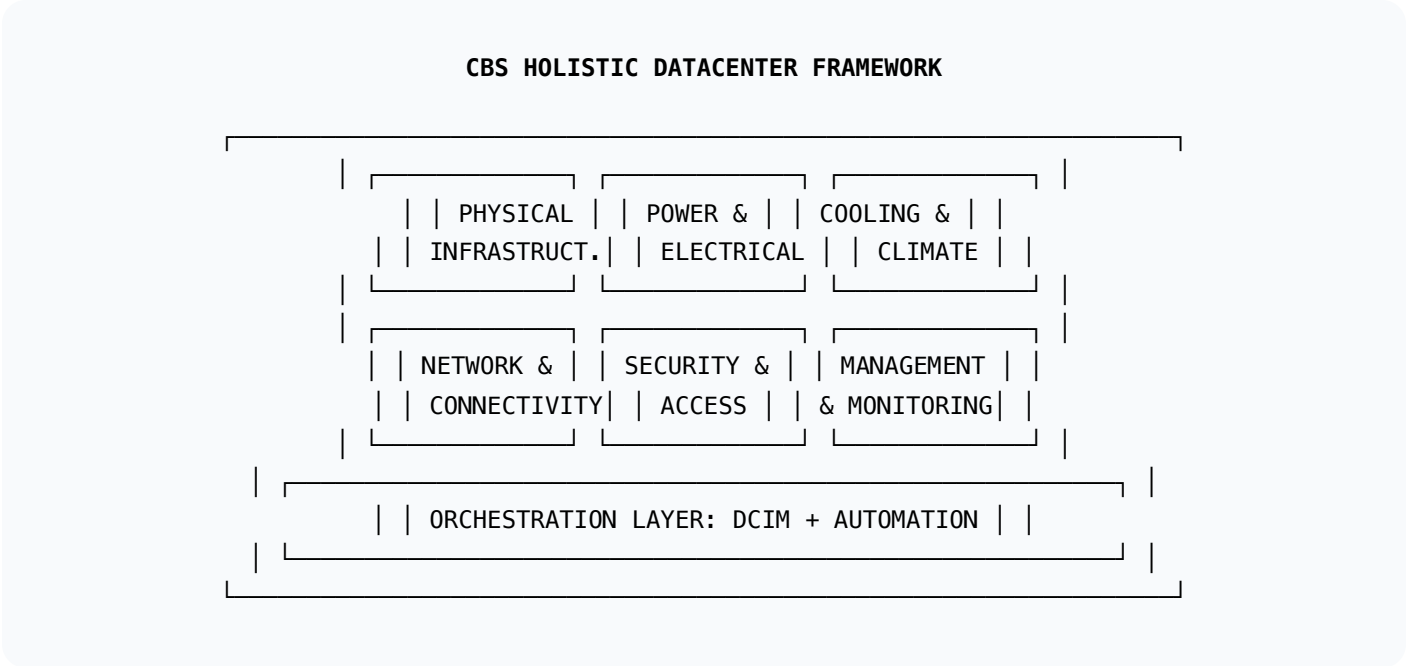
Datacenters consume 1-2% of global electricity. PUE optimization reduces energy costs by 30-50%.

Security Threats

Physical & cyber attacks increased 400% since 2020. Layered security with biometric, surveillance, and zero-trust models.

Our Solution Architecture

We approach every project through a holistic lens, ensuring all critical domains work in harmony.



🔌 Power & Electrical Engineering

CBS Approach: N+1, 2N, and 2(N+1) redundancy architectures • Intelligent PDUs with outlet-level monitoring • Lithium-ion UPS systems with 50% smaller footprint • Automatic transfer switches (ATS) • On-site generator integration
Outcome: Zero single points of failure; predictable power availability regardless of grid conditions.

❄️ Precision Cooling & Thermal Management

CBS Approach: Computational Fluid Dynamics (CFD) modeling • Hot aisle/cold aisle containment • Liquid cooling readiness for high-density compute • Free cooling economizers • Real-time temperature mapping
Outcome: PUE below 1.4; 20-40% reduction in cooling OPEX.

Tier Classifications Deep Dive

Tier	Uptime	Annual Downtime	Best Suited For
Tier I	99.671%	28.8 hours	Small business, non-critical workloads
Tier II	99.741%	22.0 hours	Mid-sized, some redundancy needs
Tier III	99.982%	1.6 hours	Enterprise, concurrent maintenance critical
Tier IV	99.995%	26.3 minutes	Financial, healthcare, mission-critical

CBS also designs hybrid tier models—Tier-III compute zones with Tier-IV power for critical workloads—optimizing cost without compromising resilience.

Our Proven Methodology

Phase 1

Discovery & Strategic Alignment

Business impact analysis, current state assessment, 3-5 year growth modeling.

Phase 2

Site Selection & Feasibility

Power availability, fiber connectivity, seismic risk, climate suitability.

Phase 3

Design & Engineering

Architectural blueprints, 3D BIM modeling, vendor selection.

Phase 4

Construction & Integration

Project management, factory testing, staged commissioning.

Phase 5

Transition & Empowerment

Operational Runbook, team training, 90-day hypercare.

Phase 6

Ongoing Partnership

24/7 remote monitoring, preventive maintenance, quarterly reviews.

🌱 Green Datacenter Imperative

Datacenters account for approximately 1% of global electricity consumption—projected to double by 2030. CBS is committed to sustainable design.

PUE Optimization
Reduce from 1.8 to <1.4

Free Cooling
Eliminate chiller usage 3,000+ hours/year

Liquid Cooling
Support 2-3x compute density

Solar Integration
Offset 20-40% of grid consumption

High-Efficiency UPS
96-97% efficiency

E-waste Recycling
Zero-landfill disposition

Case Example: For a financial services client, CBS implemented a free-cooling solution that reduced annual cooling energy consumption by 2.4 million kWh—equivalent to removing 380 cars from the road annually, with $240,000 yearly savings.

🏆 Case Studies: Proven Results

National Healthcare Network

Challenge: 12-hospital network with aging server rooms; compliance concerns; frequent heat-related outages.
CBS Solution: Regional Tier-III datacenter, N+1 redundant cooling, DCIM implementation, HIPAA-compliant security.
Results: 99.99% uptime achieved • 40% reduction in cooling OPEX • Zero compliance findings • 3-year ROI of 215%

E-Commerce Unicorn

Challenge: 400% YoY growth; existing colocation space exhausted; peak traffic causing thermal shutdowns.
CBS Solution: Modular datacenter with phased deployment, high-density racks (15kW/rack), liquid cooling readiness, 100GbE backbone.
Results: Scaled from 50 to 500 racks in 18 months • Supported 10x traffic growth with zero downtime • PUE reduced from 1.9 to 1.35 • $2.3M annual OPEX savings

Government Agency

Challenge: Security-sensitive operations; required air-gapped infrastructure; strict procurement compliance.
CBS Solution: Tier-IV certified design, multi-layered physical security, TEMPEST-compliant shielding.
Results: Operational within 14 months • Passed all security certifications • 15-year infrastructure lifecycle plan established

Technical Partners & Innovation Ecosystem

Power
Schneider Electric, Vertiv, Eaton, APC

Cooling
Stulz, Liebert, Trane, Carrier

Rack & Containment
Rittal, Chatsworth, APC

Network
Cisco, Juniper, Arista

DCIM
Sunbird, Nlyte, EcoStruxure

Cloud
AWS, Microsoft Azure, Google Cloud

Investment & ROI Framework

Operational Cost Optimization (per 100kW IT load)

Cost Center	Industry Average	CBS-Optimized	Annual Savings
Power (kWh)	$120,000	$84,000	$36,000
Cooling	$80,000	$48,000	$32,000
Maintenance	$25,000	$18,000	$7,000
Total OPEX	**$225,000**	**$150,000**	**$75,000**

**Based on $0.12/kWh, industry PUE 1.8 vs. CBS-optimized 1.35.*

Engagement Models

End-to-End Build

Full responsibility from design to handover. Best for organizations without internal infrastructure teams.

Design-Assist

CBS designs; you (or your GC) build. Ideal for clients with construction partners who want expert design.

Advisory & Audit

Expert assessment and recommendations. For organizations validating existing plans or troubleshooting.

Support & Optimization

Operational monitoring and maintenance. For existing datacenter owners seeking performance improvement.

Why CBS?

✔ **One Partner, Complete Accountability** – Single point of contact, guaranteed outcomes.

✔ **Vendor-Neutral Architecture** – Best-in-class components, not proprietary lock-in.

✔ **Future-Ready by Design** – 30% capacity headroom, modular expansion, AI-ready.

✔ **Operational Excellence** – Tier-IV operational standards, 24/7 monitoring.

✔ **Proven Track Record** – 50+ projects, 100% customer retention.

Let's Build Your Datacenter

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