Extending the Life of Your IBM i Systems

IBM Power Systems and the IBM i OS have helped thousands of organizations run their most mission-critical applications for years. However, as IBM i turns 30 (and the average IBM i technician turns 50+), many businesses are having a hard time hiring and retaining the skill set they need to maintain security and compliance while optimizing the cost of operations. In this paper, we'll explore those challenges and look at how a qualified Managed Service Provider can help bridge the gaps for those who want to continue using the IBM i platform for many years to come.

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IBM i Innovation

Over thirty years is quite a track record in the IT world, but perhaps no platform deserves more recognition than IBM Power Systems and it's powerhouse OS – IBM i. Introduced in 1988 the IBM i OS evolved from the earlier operating systems designed to run on IBM System 36 and System 38 architectures and the more recent AS/400 architecture.

Today, the platform still has more than 150,000+ systems installed around the world, and IBM continues to enhance the OS with ever-more advanced capabilities while maintaining backward compatibility with earlier versions. Most importantly for mission-critical applications, the IBM i has a reputation for reliability. As fans and users have frequently noted, "It just runs."

The IBM i Skills Shortage Creates Security and Compliance Concerns

But time changes more than just Tom Hanks' hairstyle. According to Indeed.com, the average salary for an IBM system administrator is currently just over $70K, 8% below the national average for similar roles on other platforms. The lower cost of hiring a system administrator for the IBM i platform may sound like a good thing. After all, the average age of an IBM i system administrator is over 50, and as they retire, they will need to be replaced.

However, universities no longer offer IBM i engineering programs, so there isn't the traditional pool of new IT graduates to tap into. And with lower average salaries, younger IT workers are less interested in acquiring IBM i skills either on their own or through their employers.

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It's no surprise that 44.3% of respondents to a recent survey said they had concerns about the level of IBM i skills in their organization.[1]

Security and compliance are of particular concern to many IBM i customers. Ransomware and Distributed Denial of Service (DDoS) attacks continue to be a problem, as does the oldest trick in the book: convincing an employee to provide their credentials via phishing. According to CSO, damages from cybercrime are expected to hit $6 trillion annually by 2021,[2] a figure that is higher than the profits from the global trade of all major illegal drugs combined.[3]

Furthermore, almost every business has to comply with regulations of some sort, and although the pace of new regulations seems to have slowed for the time being, regulators continue to be aggressively enforcing existing rules. At HIMSS18, Roger Severino, Director of HHS's OCR division, said, "I come from the Department of Justice Office for Civil Rights; I bring that mindset to OCR. We're still looking for big, juicy egregious cases." [4]

[1] 2018 IBM i Marketplace Survey Results, Help Systems
[2] Top 5 cybersecurity facts, figures and statistics for 2018, CSO, January 23, 2018
[3] How to Prevent the Bank Robbery No One Can See, Cisco Blogs, August 29, 2017
[4] 'No Slowdown' for HIPAA Enforcement, But Audits Ending, BankInfoSecurity.com

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HIPAA and HITECH get a lot of media attention, but penalties for other types of regulatory violations also remain steep. For example, PCI compliance violations range from $5000 to $500,000, and fines for GDPR violations can be up to 20 million Euros or 4% of annual revenues even for companies outside the EU.

While the IBM i platform has plenty of security safeguards, for many IBM i customers, the applications they run create vulnerabilities. Since many of these applications are mission-critical, they inherently contain the most sensitive data sets. In addition, almost three quarters (70.1%) of respondents to the study cited above said they had deployed home-grown applications on their IBM i platform. That's a far higher percentage than the next highest named-category, which came in at 17.9%.
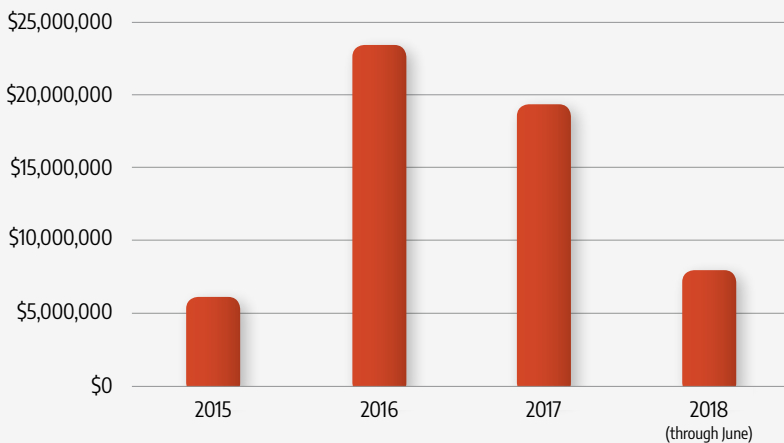
Home-grown applications can be sophisticated and powerful, but they come with unique security and compliance concerns such as:

- My IBM Power Systems development team really knows the platform, but are they up-to-speed on the latest security threats?
- Are the security measures they've taken enough to address compliance requirements like HIPAA/HITECH, PCI DSS or GDPR?
- As my developers retire, do we know enough about the security of our applications to maintain compliance with those standards?
- What happens if we get audited? Can we prove our systems are secure?

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Roger Severino
Director of OCR

Penalties for HIPAA Violations by Year

Bar chart showing penalties: 2015 ≈ $6,000,000; 2016 ≈ $23,500,000; 2017 ≈ $19,000,000; 2018 (through June) ≈ $7,500,000.

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The Innovation/Administration Balancing Act

For many IBM shops, maintaining their IBM i systems has become a bit of a balancing act: Ensuring they have the skills they need to cover all of their bases such as security, compliance and disaster recovery, with time and resources left over to focus on the initiatives that drive the business forward.

To help sustain a proper balance, many organizations are turning to Managed Services Providers (MSPs). A qualified MSP can handle time-consuming (but vital!) administrative tasks, leaving your internal resources free to create innovative solutions to your toughest business challenges and find new ways to take advantage of trends such as Big Data and the Internet of Things.
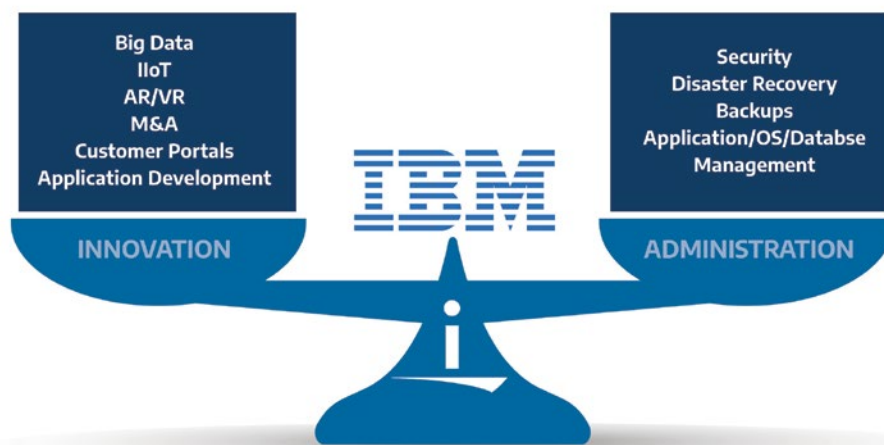
It Might be Time to Turn to an MSP When:

- Your IBM i go-to resource in IT has just left or is about to retire, and a sense of panic is setting in.

- Your security expert got recruited by another company. (The job market for IT security professionals is hot!)

- Your industry is stepping up compliance audits, and hefty fines are common.

- You haven't performed your own security and compliance risk assessment for a year or more.

- Recent downtime or a "close call" during storm season has you revisiting your outdated business continuity and disaster recovery plan.

- You haven't tested your backups or disaster recovery failover procedures, so you aren't 100% sure they'll perform as required should you need them.

- Your company just went through a merger, acquisition or consolidation, and you've inherited unfamiliar IBM i systems.

- You need to get ready for a pending merger, acquisition or consolidation by paring back internal staffing.

- In an effort to reduce costs, you'd like to divest your data center and get rid of the high cost of maintaining the hardware you own.

- You need more flexibility to adjust to seasonal or fluctuating workloads.

- You're so busy maintaining your systems your IT team hasn't had time to launch a truly innovative initiative in years.

Choose the Relationship That's Right for You

Every business is unique. We offer three different partnership arrangements, so you get the assistance you need without paying for extras you don't.

Managed Hosting

We'll house your workloads in one of our SSAE 18 SOC 2 certified data centers using only authorized IBM I hardware, OS and system applications.

Remote Administration

In addition to monitoring your system we can provide comprehensive system administration services, troubleshooting and support services.

Remote Monitoring

We'll monitor your systems 24x7 for potential security threats, performance issues and resource utilization. If we see a potential problem we'll alert you using your prescribed escalation processes.

You Won't Find a Better IBM i Resume!

At Connectria, we consider ourselves part of your IT team. It's only fair that we share our IBM i "resume" with you.

Our objective:

To be your go-to provider of IBM i managed services, letting you focus on IT innovations that move your business forward.

Services we offer:

- IBM i Remote Monitoring
- Remote Administration
- HIPAA Compliant Hosting
- SaaS Application Hosting
- Desktop as a Service/VDI Hosting
- PCI Compliant Hosting
- Data Center Outsourcing
- IBM i Disaster Recovery
- Application Hosting
- Custom Application Hosting

Key Accomplishments:

- Hosting over 500 IBM environments worldwide
- Average tenure of our IBM engineers is 12+ years
- Chair the IBM i LUG (Large User Group)
- Lead several strategy focus teams including Security & Availability/Reliability
- 4-time recipient of the IBM Beacon Award for HIPAA Compliant Private Cloud

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Enjoy a Different Kind of IT Experience

At Connectria, we've made it part of our core mission to create a different kind of IT experience, one where our customers know we're listening and taking their concerns and objectives seriously.

We established a unique culture where every individual goes "the extra mile" to take care of our customers and this extends beyond our people, too. We make it easy to do business with us through flexible terms, scalable solutions and straight-forward pricing to serve the hosting needs of large and small organizations alike..

Our "can-do" attitude and our extensive knowledge and experience in IBM i systems has earned us some pretty impressive accolades from our customers.

"We created a business model which compared purchasing the same IBM i 7.2 configuration and running on-premise versus hosting in the cloud, and the payback in the cloud was less than 18 months."

Greg Tipton
CIO Americas, Dometic

"We know the System 38, 400, System i and Power System. In talking with a lot of vendors, we often felt we knew just as much as they knew....until we met Connectria."

Darren Yankin
CTO, Health Care Software, Inc.

"Connectria is so good at what they do, they make hosting complex environments seem easy."

Tad Wharram
Partner at MTG

"Connectria has exceeded our expectations. Their expert remote management has helped us streamline and automate our processes, delivering tangible savings. Since Connectria has partnered with us, our relevant admin costs are a third of what they were."

Eric Hanson
Director of IT Services, Milwaukee Electric Tool

"We depend upon Connectria's high level of System i hosting services and uptime as a critical component to our solution & success."

Paul Sarrapy
President and CEO, Grupo Porteo

About Connectria

From Fortune 100 enterprises to medium and small businesses, Connectria provides managed cloud, managed services, and compliant cloud security solutions to more than 1,000 global customers. Working as an extension of each customer's IT team, we deliver technology-agnostic solutions consistently, with depth and breadth of engineering expertise, scalable solutions, and speed to market. Our service includes flexible terms, straight-forward pricing, and custom solutions. With a culture based on integrity and an unwavering employee commitment to treating every customer with a relentless focus on satisfaction, it's easy to do business with Connectria.

Connect with us today

Talk to one of our IT advisors by calling **800.781.7820** or reaching out to us by email: **sales@connectria.com**.

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