



TATA COMMUNICATIONS



Unlocking Business **Agility & Innovation** in a Hyperconnected Ecosystem

A LUNCH THINK TANK

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To succeed and thrive in the current business environment, every organization must revisit how it connects with employees, partners, vendors, and customers. They must also embrace critical technologies such as IoT and AI to drive efficiency and automation. As significant levels of upheaval, driven by macroeconomic conditions and societal changes, characterize recent times, agility and flexibility have emerged as arguably the most essential ingredients businesses require. These components enable rapid responses to changing industry dynamics and shifting customer demand patterns.

By extension, business leaders must embrace a hyperconnected business ecosystem that empowers the connection of people, processes, devices, and infrastructure to enable seamless, secure, and effective collaboration in near real time. Hyperconnectivity enables swifter decision-making, quicker access to more data, and more dynamic planning. As a result, businesses can improve revenue growth, customer service, and operational efficiencies.

Frost & Sullivan discussed these issues with prominent UK-based movers and shakers across various verticals at an in-person Think Tank. This article summarizes that discussion.

Key Insights from the Think Tank



Ecosystem-wide collaboration is essential. Hyperconnectivity can help to remove business silos, enabling businesses to harness the power of connecting colleagues, partners, and customers.



Attention is shifting from data collection to data insight – extracting value from data to enable automation, ensure better decision-making, and open the potential for new business models.



Hyperconnectivity will drive innovation across industry sectors, underpinned by enabling technologies including AI, IoT, cloud, and edge. Improved operational efficiency, greater automation, and enhanced customer engagement come to the fore.



Cybersecurity remains top of mind, with resource challenges and an increased attack surface threatening all businesses. Enterprises need reliable solution partners to ensure that they can fully embrace the potential of hyperconnectivity while protecting their business.



Removing the Silos: Hyperconnectivity Drives Ecosystem-wide Collaboration

Hyperconnectivity is an essential ingredient when creating a more collaborative business environment; enhanced communication and collaboration are arguably the most tangible benefits of this approach. Being better connected with customers, suppliers, and other entities across the value chain offers multiple advantages. Businesses can respond quickly to changing demand patterns, seamlessly resolve customer challenges, and collaborate with suppliers and partners to optimize supply chain operations. By extension, hyperconnectivity underpins the emergence of new business models, including the sharing economy; organizations can share resources and collaborate in new ways, aiding the development of new products and services and enabling companies to reach new customer segments.

Historically, organizations have relied upon siloed systems that are characterized by time-consuming (and sometimes error-prone) manual processes. Traditional siloed business structures often result in every departmental or regional leader having their own view of success, which can limit progress. The Think Tank panel agreed that breaking down these siloes is vital for success in a hyperconnected world. However, moving away from a siloed structure does not mean that a single, global approach is always workable; each country will have its own unique requirements, regulations, and customer demands. A balancing act is needed: on the one hand, standardization will enable greater efficiency and consistency; on the other hand, flexibility will deliver compelling solutions that resonate in a specific geography and will not inhibit innovation.



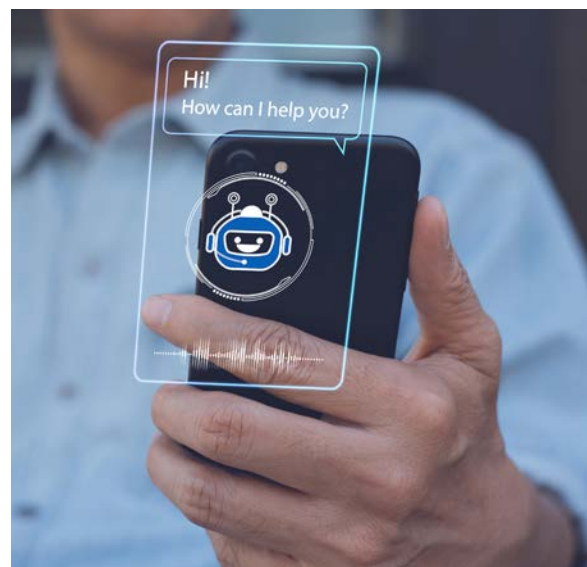


Beyond ROI: Enabling Agility and Automation through Hyperconnectivity

Technology innovation has accelerated in the past two years, with decision-makers refocusing their technology strategies and investments following a period of intense disruption. Many organizations rely on the cloud to ensure business resiliency and deliver more flexible access to resources.

Edge computing, where data is processed locally in real time, is also widely embraced; Frost & Sullivan estimates that **90% of global large enterprises utilized edge solutions in 2022**. Furthermore, IoT solution adoption is accelerating, with approximately **two-thirds** of respondents to a recent Frost & Sullivan IT Decision-maker survey having **implemented IoT in their organizations**.

Most technology-focused programs, including those with hyperconnectivity at the core, come with an expectation of return on investment. However, Wasim Mushtaq from Standard Chartered Bank outlined that it is not solely a cost play; his organization focuses on improving automation and controlling risk management. It is important to look for external partners to work on the activities that demand scale and automation, which creates capacity internally for subject-matter experts to work on the high-value initiatives with customers. This approach can help to deliver the expected ROI, albeit sometimes indirectly. Prajwal Prabhu-Raya from London Stock Exchange Group agreed that the focus should extend beyond quantifiable returns when considering hyperconnectivity-related investments; LSE Group focuses on being hyper-agile and putting the customer first.





Digital hype is also a key factor. As noted by Erich Kellow, it is common for senior business leaders to ask questions such as: “If everyone else is doing it, why aren’t we?” IT decision-makers tasked with developing hyperconnected strategies must consider what benefits such as an approach can deliver for their organizations. Knowing when to invest further and when to pull back is also vital; Prajwal highlighted that LSE Group is quick to kill projects that do not offer the desired returns. Erich noted how his team has explored a number of projects aligned to hyperconnectivity. While not all initiatives have evolved into fully deployed solutions, each has offered a datapoint that is helping to shape the company’s future investment decisions.

In terms of ensuring decision-maker buy-in, hyperconnectivity investments are complicated by the fact that they are not as straightforward or tangible as some technology investments.

As Erich explained, “It’s not as simple as saying get me a fork – we’re talking about how to orchestrate a whole restaurant.” With so many moving parts, multiple internal stakeholders expect to see the benefits.

Insight Becomes the New Gold

Hyperconnectivity has fast-tracked the shift to data-driven decision-making. Businesses are generating increasing volumes and complexity of data; enabled by the rapid emergence of IoT, hyperconnectivity empowers them to collect data in near real-time and deploy analytics to extract insights and make data-centric decisions. This can ensure that businesses optimize their operations, reduce costs, and improve efficiency.

Wasim explained that, for many, it is now a case of “too much data, not enough insight.” It is therefore essential to decide what data to invest in and to develop insights that can be useful for resiliency, product development, strategic planning, and delivering improved personalization to enhance customer value. He explained that many of HSBC’s initiatives in the area of data insights are somewhat siloed; each project tends to have its own rules, processes, and procedures that work well within the confines of a specific line of business. Erich agreed, noting that some areas of his organization are overwhelmed with data, but others are starved of useful data. Hyperconnectivity is the essential ingredient, ensuring that relevant data is collected, shared, and harnessed to deliver the insight that modern enterprises need to flourish.



Delivering Operational Efficiency and Customer Engagement in the Financial Services Sector

In the financial services sector, hyperconnectivity has the potential to transform how organizations operate and interact with customers; it can support the development of more personalized and responsive services, improve operational efficiency, and expand customer reach. Further, hyperconnectivity enables fintechs (and indeed progressive traditional financial services organizations) to leverage emerging technologies, such as AI and blockchain, to access and harness customer data, enabling providers to offer more targeted products to increase loyalty and engagement. Wasim expects hyperconnectivity to become increasingly pivotal in the financial services sector, spanning areas such as open banking and open APIs; enabling the flow of money and data between providers across the industry will become essential to hyperconnectivity-related strategies.

The banking sector is using data to gain insights related to personalization and product development, which will boost revenues. Wasim described how Standard Chartered Bank has seen a lot of change in the past five years, including decommissioning legacy systems, building centres of excellence, implementing shared services, and onboarding customers through the application of know-your-customer (KYC) solutions. However, maintaining customer journeys in a hyperconnected world without disrupting existing business models is a major challenge.

While their opportunities are clear, businesses must overcome practical challenges. For example, every industry faces a significant talent gap across data science roles, and financial services is no exception. This makes it difficult to obtain and retain the resources needed to navigate a data-driven business environment.

Wasim commented that the winning companies are those that have invested in the people needed to ensure digital capability and savviness—essentially, truly harnessing the data available. This is the case in the fintech space, where a start-up with only a handful of employees can outpace large competitors because they are able to harness technology in a smarter way, and without the weight of legacy systems and solutions that established multinational providers find themselves anchored to. While in some way hyperconnectivity has levelled the playing field, it also offers traditional industry participants a platform upon which they can innovate and collaborate to deliver the solutions needed to meet changing customer expectations.



Boosting Automation and Delivering New Levels of Visibility across the Supply Chain

From a manufacturing and supply chain perspective, hyperconnectivity delivers improved efficiency, enhanced supply chain visibility, and better communication across the value chain. Combined, IoT, AI, and cloud enable manufacturers to track and analyse data in real time, leading to improved and more automated decision-making and enhanced productivity. Hyperconnectivity makes it easier to respond to changing market demands, smooths the impact of logistical challenges, and reduces the need for manual data processes.

Erich noted that the volume of data and the changes to supply chain structures are so complex that it is important to look at ways of simplifying matters by deploying technology. He shared an example of how advanced technologies can take connected logistics to the next level. When a container ship had run aground and blocked the Suez Canal for six days in 2021, supply chain challenges were rife. Using AI models, it was possible to identify what aspects of business the disruption would impact and predict an event time frame.



Erich also outlined how his organization has been running a proof of concept related to the connected workforce. With operations spanning 50 factories and thousands of workers, operational efficiency relies upon each employee knowing what task they should be focused on, and which machines require maintenance. Sensor technology can determine whether machinery is operating within normal parameters (e.g., operating temperature) and which actions are necessary.

Although not a core focus today, Erich noted the potential of technologies such as blockchain to deliver the levels of automation and insight needed for companies with complex supply chains to flex to meet both customer needs and the challenge of ecosystem disruption. He explained how his organization is harnessing sensor technology across factory sites to assess the likelihood of a failure and ensure minimal downtime. Harnessing hyperconnectivity to develop a digital thread across the entire business is paramount; it enables a fast response if, for example, a production line goes down or a shipping container is unexpectedly delayed.



Security Is Paramount, but Concerns Must Not Stifle Innovation

To thrive in a hyperconnected world, businesses must remain cognizant of the cybersecurity-related challenges that increased connectivity can create if not handled carefully. By increasing the number of internal and external connections—counting network infrastructure and people—the attack surface expands. Wasim noted that UK financial services regulators routinely ask questions about cybersecurity resilience in the cloud, with the perception that too many ‘crown jewel’ data assets reside outside of the traditional enterprise perimeter.

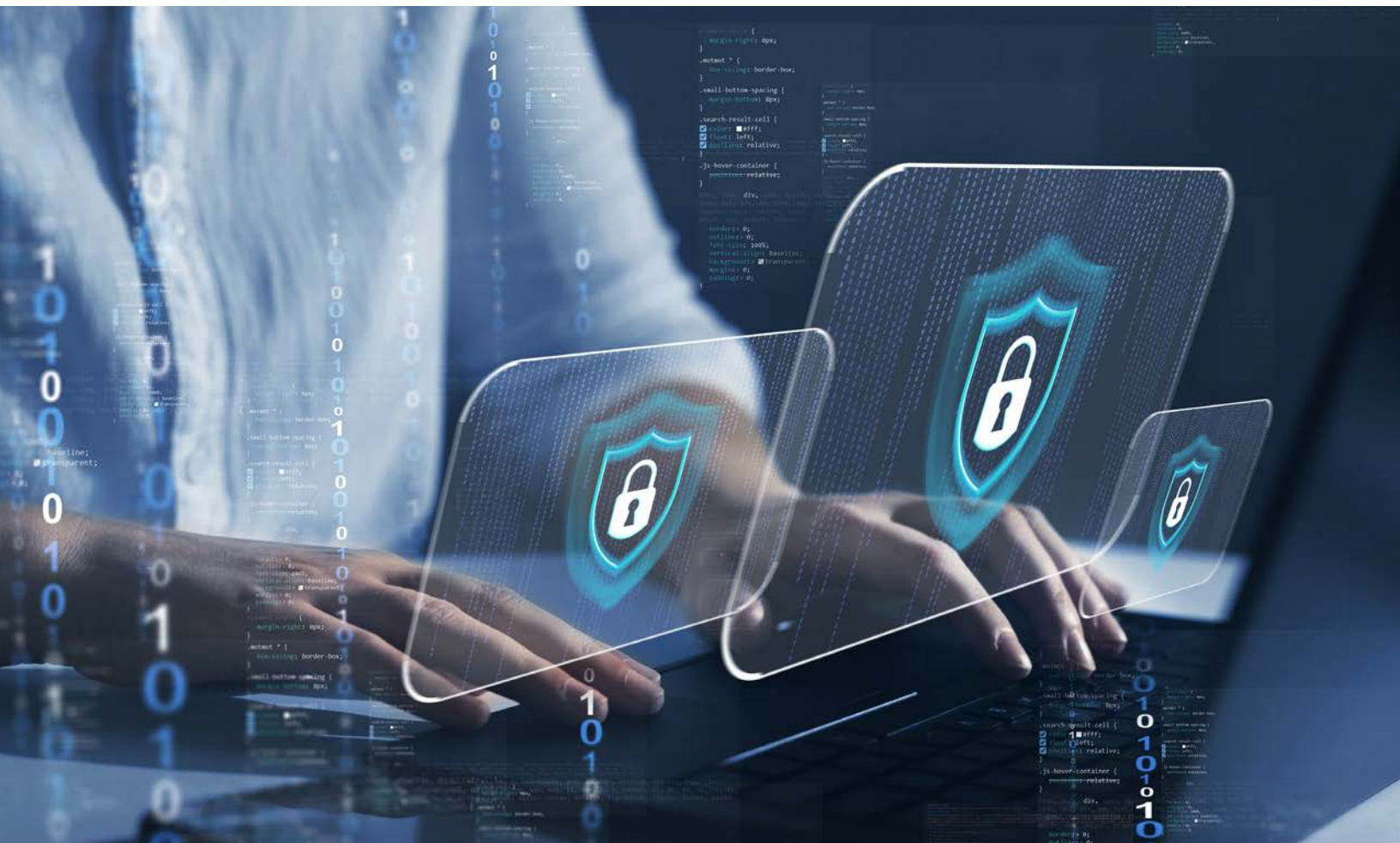
The results of a Frost & Sullivan Security Decision-maker survey conducted in March 2023 underline the security-related challenges that UK businesses face:

- ▶ In the past year, **59%** of UK-based respondents were **negatively impacted by a cyberattack** on more than 10 occasions. This underlines both the need for robust cybersecurity solutions and the pressure that CISOs are under to ensure their businesses are protected.
- ▶ **Two-thirds** of respondents consider **the move to more cloud-driven services** a major driver of their cybersecurity strategy and investment plans.
- ▶ Last, **19%** of respondents consider **the shift to more remote/hybrid work** as the most significant obstacle to their business being more secure. While hyperconnectivity is enabling new and more efficient ways of working, the increased complexity of managing a dispersed workforce remains a key challenge and concern.



A common challenge among businesses from all industry verticals is the lack of resources with the skills necessary to manage cybersecurity solutions. Dougie Cooper-Kelly explained how Tata Communications has ensured that security is a core element of its offering, enabling it to deliver connectivity and network services that feature security by design. He added that trust becomes vital in a hyperconnected world, especially given increased connections to partners, supply chains, and customers.

While hyperconnected ecosystems offer exciting new opportunities, organizations can become hyper-vulnerable if they do not correctly implement and manage their technologies; once lost, digital trust is hard to regain. However, a balanced approach is needed when it comes to security expectations in a hyperconnected world. As noted by Kévin Wu from HSBC, if organizations only focus on super-secure business, they may lose out to less risk-averse competitors. A trade-off between flexibility and innovation is essential. More than ever, organizations need to partner with IT/security providers ready to help ensure that the necessary measures are in place to mitigate risks in a complex hyperconnected world.





The Bottom Line: Harnessing the Power of Hyperconnectivity.

Modern businesses must embrace hyperconnectivity, but a considered approach is vital. Prajwal shared that while hyperconnectivity enables solutions to be built faster than ever, users must understand their relevance and value. Large organizations can fall into the trap of going too big, too soon—hyperconnectivity can put decision-makers in the mindset that every organization needs to move at lightning speed. As Kevin explained, it is human nature for some business leaders to want to do big things immediately. Although a common best practice is that when a project delivers clear business value in one area it is scaled to other parts of the business, launching enterprise-wide initiatives from the outset is often hard to manage—and even more difficult to gauge impact.

To fully deliver on the promises of a hyperconnected future, it is imperative that organizations work closely with trusted third parties. First, they must collaborate with partners across the business ecosystem to develop new business models and streamline operations. Second, they need to work closely with vendors that can provide the robust, reliable, and secure communications infrastructure needed to ensure success.

This Think Tank underscored the challenges and opportunities evident as the era of hyperconnectivity dawns. Connecting people, processes, machines, and applications in a seamless manner is pivotal. To navigate the hyperconnectivity storm, organizations must eliminate the internal siloes that have traditionally hindered so much progress. Hyperconnectivity is reshaping the modern business environment. During the next decade, its impact will be profound, delivering the agility and collaborative processes that organizations need to navigate the seemingly ever-changing social and economic headwinds.

Discover more insights and strategies here: [Tata Communications](#)



Thank you to our Think Tank participants:



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