



## Transformative technology techniques enable Assurance Services to meet evolving industry needs.

Digital tools, creative thinking and new methodologies are extending the boundaries of assurance services to enable greater flexibility, enhanced customisation and faster delivery.

As new technology is adopted, it changes the way companies operate. Normally, this is a gradual process – fax machines replaced communication by Telex, email slowly took the place of fax machines, and the introduction of instant messaging and texting now makes business communication possible in real time.

The creep of progress generally happens at a pace that allows workers to adjust and adapt,

but sometimes, extraordinary events expedite technology acceptance.

The pandemic was one such incident. Out of necessity, companies concerned about worker and customer safety were forced into a rapid and massive shift to remote technologies. For some, transitioning to remote operations was a struggle, but for others, the groundwork had already been laid to enable working remotely.

While companies around the world were beginning to create a new framework for operations, **IIOC members** were rapidly stepping up their remote auditing capabilities and capitalising on the knowledge gained from their experience in remote applications to extend services into new areas.





## Extending safety to remote services

**From the onset of the pandemic in early 2020 through 2021, IIOC member organisations stepped up to the challenge of continuing to provide critical services, performing tens of thousands of remote and blended audits that used on-site as well as remote techniques, proving that, done responsibly, this approach to auditing is viable and effective.**

Forward-looking assurance service providers had moved toward enabling remote audits well in advance of the Covid pandemic, which meant they were able to quickly launch remote auditing tools – among them, online portals that give companies access to more data and greater control over their audits.

According to Ahmad Al-Khatib, Assurance Business Development and System Certification Director at **BSI**, his organisation had a fully functioning client self-service platform “*BSI Connect Portal*” in place to immediately address any scheduling changes in the short term.

Moreover; BSI was working on a Remote Audit pilot programme years before the pandemic hit and was

one of the first global assurance providers to switch to remote delivery for Audits and Training programmes, fully embracing it early in the pandemic.

*“It was imperative we kept our clients certified and able to deliver their critical products and services, our ability to conduct remote audits enabled numerous clients to produce mission critical supplies like face masks and respiratory equipment”.*

Although BSI had plans in place, Al-Khatib says, it was critical to educate clients and assess their readiness to adopt remote auditing. It also was important to evaluate new technologies for appropriateness in remote audit to make sure audits are effectively carried out and adapted to the different sectors and audit types.

*“Our vision is not to embrace technology for the sake of doing so. It’s about leveraging relevant technological solutions and tools to solve our clients’ challenges, unlock their potential and provide the broader market with instruments of Trust, Resilience, and Sustainability.”*

Al-Khatib believes Hybrid or Blended audits – combining in person audits with digitally powered remote audits, effectively connecting experts and clients – are the future.

**bsi.**

**“ Assurance is going to evolve rapidly towards becoming more digitally enabled – what we refer to as ‘Digital Assurance’.”**

**Ahmad Al-Khatib**  
Assurance Business Development  
Director at BSI

Digital Assurance will use data analytics, AI, Machine Learning, IoT devices and other technologies to provide organisations with real-time predictive and continuous assurance.



For **DEKRA**, implementing remote auditing services started with the recognition that time was of the essence.



“Everyone was struggling to keep everything on track when the pandemic hit, and they were looking for immediate, practical solutions.”

**David Salmon**  
Head of Strategic Development  
at DEKRA

DEKRA's “Umbrella” was one of the answers. The online self-service portal, rolled out in the United States, offers users a way to get a quotation, book an auditor and follow the status of the audit at any time from any location.

It was important to get implementation right. “Companies don't want to be guinea pigs.” Salmon says, noting that demographics play a role in the acceptance of new technologies. “Some, mostly younger employees, want to work this way, while diehard traditionalists still want to do everything the way it used to be done – on bits of paper.”

Making the transition is challenging, which makes the job of assisting companies and individuals who are adapting to new ways of working critical.

**TÜV SÜD** is well aware of the hurdles. The organisation launched its online tools for clients as the pandemic ensued, and according to Marion Volk, Manager of International

Market Strategy and Sales for the Management Systems Certification Business Unit, the Audit and Certification Engine portal is giving companies much more control over audits and significantly more insight into the certification process.

Not only does the portal enable immediate access, Volk says, it expedites the certification process and eliminates time delays in auditor responses, which were commonplace when communication was taking place via phone and email.



“Time zones are no longer a stumbling block. There is no need for the United States to wait until German offices are open to find out the status of an audit.”

**Marion Volk**  
International Market Strategy Manager  
at TÜV SÜD

TÜV SÜD also has invested in upgrading its e-learning modules, Volk says, adding to its digital academy offering of virtual classrooms, webinars and e-learning courses and expanding its curriculum to include quality management coaching and a one-on-one, online “talk with an expert” option.

The goal is to provide the necessary tools for customers to become comfortable working with online tools so they can take advantage of the benefits.

Stephane Ponthieux, who is in charge of Operation Performance for the **Bureau Veritas** (BV) global certification network says the organisation's digital platform has introduced customers to a better way of managing the audit process, providing a way for clients to prepare an audit and streamline audit preparation.



“The online portal simplifies the onboarding process, making it more flexible, more fluid, and more rapid.”

**Stephane Ponthieux**  
Operation Performance Director  
at Bureau Veritas

“It allows potential clients to get a quote for services, makes it easy for auditors to upload data and manage assessment information to keep audits on track, and gives companies a tool to quickly address nonconformities.”

In short, “It enables a good end-to-end journey for users.”

Although there was some initial uncertainty about how digital assurance would work, for most companies, the experience met or exceeded expectations and is now simply a part of their regular assurance process.





## Performance proves the possibilities

**To truly evaluate the success of this transition, it is important to move beyond anecdotal evidence.**

A survey carried out by IAF (International Accreditation Forum), ILAC (International Laboratory Accreditation Cooperation) and ISO (International Organisation for Standardisation) in July and August 2021 gathered opinions about using remote techniques for audits (Certification Bodies on clients), assessments (Accreditation Bodies on Certification Bodies) and evaluations (Accreditation Bodies on Accreditation Bodies).

The results, based on 4,320 responses, were overwhelmingly positive, with **97%** of respondents participating in remote audits, assessments or evaluations reporting they were satisfied or somewhat satisfied with the experience. Alternatively, when asked if they trusted a completely remote assessment as much as a traditional one, nearly **80%** of respondents said yes.

The responses to more specific questions provide additional insight to the true state of acceptance. For example, a preponderance of respondents said they saved time and money through remote audits

and appreciate the risk reduction and improved environmental stewardship enabled by the new process. Many said increased access to certification body specialists and experts improved the process and that since no travel was required for the auditors/assessors, rescheduling was fast and easy, and there was no impact on the cost of the service. The majority viewed remote and blended audits as critical to maintaining certification at a time during which traditional, in-person audits were not possible.

Despite the hesitancy of a small percentage of those surveyed, there seems to be an acceptance of the inexorable march toward digitalisation and advanced technologies, with **91%** acknowledging that the dramatic increase of remote techniques and the willingness to change will provide a stimulus to new processes and facilitate more frequent and shorter audits, broader use of data, continuous audit/assessment/evaluation, and a greater use of specialists.

General approval of remote techniques provides a strong foundation for continuing “*blended audits*” that draw on both on-site workers and technologies

that allow the expertise of those working remotely to be brought to bear on the process, with the proportion carried out by each party determined based on a risk assessment of audit complexity.

Perhaps one of the most significant responses was to new technologies and alternative techniques – e.g. real time camera, sensors, data exchange, artificial intelligence (AI) technology, etc. – and their role in ensuring continuous improvement, robustness and trustworthiness of audits, assessments and evaluations. Nearly three-quarters of respondents agree that these new methodologies should be used going forward and nearly one-quarter said they somewhat agree.

The overall acceptance and approval of the remote auditing process is a bellwether of change, and this has led IIOC members to continue to invest in the technologies and techniques that, over time, will carry them down the path toward revolutionising the audit/assessment/evaluation process.

Already, assurance service providers are finding new ways to use emerging technologies to improve their ability to deliver their essential services.





# Paving the way to the future



“The tool brings our data, customer data and third-party data together.”

**Ian Barber**  
Global External Communications Manager at LRQA

LRQA was on the remote auditing journey before the pandemic, says Ian Barber, Global External Communications Manager – using the success of the processes implemented as a springboard for launching a new supply chain management service.

According to Barber, LRQA InSight uses data analytics to analyse compliance patterns, identify areas for improvement, and help clients understand where their supply chains are most at risk.

“The tool brings our data, customer data and third-party data together.” Barber explains that by examining this collective data, the technology can provide information on food provenance, monitor cold chain conditions, more accurately predict shelf-life and even enable direct feedback from consumers

to producers. “Smart labelling can also identify bottlenecks and inefficiencies in supply chains and allow for remote regulatory oversight and compliance.”

Smart labels are unique digital IDs that can be attached to food, allowing it to be traced, tracked and monitored in real time. SecQuAL (Secure Quality Assured Logistics for Digital Food Ecosystems), a recently launched, UK-based pilot project funded by the Industrial Strategy Challenge Fund and led by LRQA, brings together 11 companies that will work on applying smart labels in pork production.

“SecQuAL will explore how real-time data can be provided to every actor in the chain to help reduce waste and build consumer confidence in food supply chains with the goal of bringing the farm-to-fork ecosystem into the digital age.”

SGS, meanwhile, is looking ahead at what the future of auditing will look like and has appointed an internal team to identify short-, medium-, and long-term expectations says Neil Willings, Head of Supplier Risk Management and Head of International Sales/ Global Key Account Management.

In the near term, Willings expects the process and technology elements to change, but looking farther along, he expects the role people play to change.



“AI and ML (machine learning) will become more integral to the audit.”

**Neil Willings**  
Head of Supplier Risk Management and Head of International Sales/Global Key Account Management at SGS

He explains that these emerging technologies will deliver value for both the internal auditor and the client.

Internally, AI and ML will be part of the audit report quality and review process, spotlighting areas for improvement for individual auditors and identifying training needs. At the same time, these technologies will be able to pick out exceptional auditors so their superior performance can be examined and their differentiating techniques shared across the team to improve the overall skill level.

For clients, AI and ML will be used for benchmarking that will provide insight not only into the company’s internal performance at any point in time but also how its performance compares to its peers.



Data security is one of the essential building blocks for a digital future, which is why some member organisations are hyper-focused on mitigating cybersecurity risks.



“There is a need for trust in assurance services, and cybersecurity is one of the cornerstones.”

Dominic Townsend  
President of  
ABS Quality Evaluations Inc.

Dominic Townsend, President of **ABS** Quality Evaluations Inc., says cyber threats are a priority because they are one of the things keeping business leaders up at night.

Townsend points to the May 2021 Colonial Pipeline ransomware cyberattack as an example of how things can go wrong when cybersecurity fails. The largest cyberattack on an oil infrastructure target in the history of the United States, the incident halted pipeline operations, shut down airports, and left fuelling stations empty. The attackers also stole nearly 100 gigabytes of data.

In August 2021, ABS Quality Evaluations made its most recent advancement in cybersecurity with its designation as a CMMC Certified Third Party Assessor Organisation (C3PAO) candidate by the

Cybersecurity Maturity Model Certification Accreditation Body (CMMC-AB). The C3PAO candidate classification signifies the completion of the first phase in a process that authorises ABS QE to evaluate the cybersecurity maturity levels, practices, and processes of Defence Industrial Base (DIB) contractors within the U.S. Department of Defence (DoD) supply chain.

Navigating the evolving cybersecurity landscape requires vigilance and diligence, Townsend says, and ABS QE is stepping up to fill an important risk-mitigation role to help secure critical infrastructure and the defence supply chain.

No one has a crystal ball, but one thing is clear. New technologies and techniques are being introduced to assurance services, and the future will bring more change.

## Planning for broader application of new technologies

The biggest question in the face of that inevitable change is how certification bodies will adapt to validate new approaches and new technologies.

Today, IIOC members are at the forefront of developing new techniques and technologies with

the potential to revolutionise auditing and assurance services.

Every new method of providing assurance services needs to be acceptable not only to the customers who rely on it but to the regulators, including the accreditation bodies that govern and enforce their use.

Working with accreditation bodies for acceptance is one of the key steps, requiring open and constructive dialogue.



### To infinity... and beyond!

The remote technologies that have gained acceptance during the pandemic, provide a foundation on which to build a range of new techniques to improve the delivery of certification and assurance services.

Remote auditing has demonstrated the adaptability and ingenuity of IIOC members, opening the door for new techniques that will provide even more options and opportunities for customers and extending the value and benefits IIOC members can offer.





## Data and the future of assurance services

Sharing information to gain a competitive advantage is counterintuitive, but according to **DNV** Global Director for Market and Industries in Assurance, Stefano Crea, the insights that would be possible from expanded information-sharing, could be game-changing.

Today, an audit examines conformity to a specific standard and assesses an organisation's ability to achieve reliable performance.

*"It is a snapshot of operations,"* Crea says, but with the next audit a year away, *"How can we ensure higher confidence in the level of performance and proficiency of the management system in the months in between?"*

Unannounced inspections over the year provide some insights, but Crea thinks auditors can do better.

It will take time to change the status quo, but if companies agreed to increase transparency, assurance service providers could help them improve operations by looking at how things are being done day to day. *"Our hope is at some point to be able to move from a static picture to a dynamic moving picture of certification and assurance."*

The next step in data-sharing is even bigger and has the potential to yield even more useful insights, Crea explains that processing anonymised data from multiple companies would allow a common ecosystem to be constructed.

*"Getting access to data and improving the ability to process huge amounts of information have the potential to transform the essence of assurance and certification services."*



“These are areas where we believe we are in the forefront of innovation. Ten years from now, management system services can't be the same as today, and we want to influence how things change.”

**Stefano Crea**  
Global Director for Market and Industries in Assurance at **DNV**





## Technological advances change the face of audits

Since the onset of the pandemic, information and communication technology have irreversibly changed the way people communicate. According to Guillaume Gignac, **Intertek** Global Vice President, Technical Management & Quality, Business Assurance, more changes are on the horizon.

*Inview*, the communication tool Intertek created to conduct remote audits, is a software platform that works with on-site hardware to enable a complete audit. An on-site person wears a harness that holds a phone from which a remote auditor can view the facility in real time, Gignac explains. With thorough preplanning and the proper technological capabilities, the auditor can effectively direct the on-site person with the phone through the site for a detailed audit that compares with the in-person audits of the past. As the person walks through the site, the auditor maintains control of the audit,

seeing what they would have seen in person and giving verbal direction to move closer to any activity or equipment that requires scrutiny.

According to Gignac, *Inview* has even met with approval from accreditation bodies. *“They were willing to observe how the platform is used for a remote audit on a pilot project, and they loved it.”*

The success of *Inview* paves the way for broader application and even more advanced technologies. *“Instead of walking, why not use a drone?”* Gignac asks, pointing out that on large sites or when an inspection must take place in a sensitive ecosystem, a drone carrying a camera could be a good solution. In time, simple tasks that do not require critical thinking could also be automated.

Technology is an enabler, and more changes are coming.

**intertek**

“Remote auditing is just the start of how we can use technology to safely conduct audits while maintaining the integrity of the audit process.”

**Guillaume Gignac**  
Global Vice President  
Technical Management & Quality  
Business Assurance at Intertek

