**Technology Enabled Solutions** address clients’ key global risk concerns:

- Secure my assets
- Guard my reputation
- Keep me in control

Our world is changing rapidly and our business becomes more data and technology driven. Also, **exponential technologies** have a great impact on us, our clients and our business model. We embrace this change and see this as an **opportunity to grow** and develop new services.

Within TES we **bundle** all our **expertise & business experience** in the Risk domain. We focus on **solving business issues & creating value** with technology and through scalable technology platforms, for and with our clients through **co-creation**. We deliver this according to your needs, **dedicated** or as a **managed service** or **solutions-as-a-service** business model.
Technology Enabled Solutions address essential risk topics in all service areas with:

Client facing solutions:
These are revenue generating managed services or solutions-as-a-service and new business models delivered for our clients, reinforcing them in the field of risk management and security. Examples of these solutions are BRISQ, Hacking as a Service and Continuous Controls Monitoring.

Enablement Solutions:
With the help of technology we enable Risk Advisory professionals in the field of risk management to better deliver. Examples of these solutions are Discovery and eQsmart.

This approach allows us to deliver Technology Enabled Solutions that grow value for our clients in changing environments.
Technology Enabled Solutions bring together:

- **Content** for our solutions will be provided by the other service areas and service lines. Also, our Clients & Industries team will provide close connection with the business, needs and requirements of the industries and our clients for whom we work. We focus on:

  - **Delivering knowledge** and content applications on our proven and scalable technology platform to our clients.
  - With the application of technology, we shift our business from preventative & responsive to monitoring and ultimately prediction.
Technology Enabled Solutions

Focus on **strategically** important & **innovative solutions** that are **disruptive**, **scale** rapidly, **leverage** our impact and deliver **client value**.

New solutions are created and leveraged through:

- Cross-function solutions & **global member firm** expertise
- **Technology partnerships & alliances** across established technology, service providers and start-ups
- Across **technologies & platforms** on which we build our content/knowledge applications, disruptive technologies like Artificial Intelligence, Blockchain or evolving IT eco systems like IOT
- **Risk Advisory Innovation & client development** programs
- **Industry themes, growth areas** and **strategic topics** from other service area’s and our Clients & Industries team such as managed FSI & compliance services, robotics and cognitive analytics
Our services

Managed Cyber Risk
- Hacking as a Service
- Managed Security Monitoring
- Phishing as a Service
- Assuring Medical Services

Managed Regulatory Risk
- BRISQ GRC
- Systematic Integrity Risk Analysis
- Managed Regulatory Reporting

Managed Operational Risk
- Process X-ray
- BRISQ Internal Audit & Control
- Continuous Controls Monitoring
- Blockchain
- Discovery

Managed Financial Risk
- AuditIQ
Service description
Systems, applications, and networks change regularly, and therefore, new vulnerabilities and ways to exploit them emerge on a daily basis. Security tests enable organizations to assess their current security position, but deliver only a snapshot in time.

With Hacking as a Service (HaaS), we periodically perform security tests of our clients’ applications and other infrastructural components that are connected to the internet. Depending on the desired tests, clients can select a bronze, silver of gold service level.

Besides and understandable report, the results of the periodical tests are delivered through the HaaS Security Dashboard. The dashboard provides advanced, customizable reporting capabilities. This way, Deloitte’s HaaS provides ongoing up-to-date insight into vulnerabilities, as well as an overview of an organization’s security position over time, and compliance with IT security laws and regulations.

Client benefits
- Tests periodically for new vulnerabilities and changes
- Access to the HaaS Dashboard with insight in trends
- Allows to comply with laws and regulations
- Offers low and predictable monthly costs

Why Deloitte
- We have extensive knowledge and experience in performing security tests with a large team of more than 50 hackers that has won the CyberLympics 5 times
- Our services are performed locally. Customers can have direct contact with the testers, so any (technical) question or request can be handled directly
- Because we have access to both technical attackers and business consultants we can translate the technical vulnerabilities to understandable business risks

Client references
- TMT: The largest group of clients with consisting of organizations that offer their software solution as a service (e.g. a health portal or an insurance compare application)
- FSI: Various FSI clients including a insurers and high frequency market makers
- PS: Public sector clients include different charities and the chamber of commerce
To continue executing your business strategy with confidence, you need to shift your thinking: from cyber security to cyber risk management. Three key features within this shift are security, vigilance, and resilience.

The number of cyber attackers is growing, and they are becoming better organized and more resourceful. Threats to digital security increase in number and complexity.

With our Managed Security Monitoring (MSM) we do not only detect security issues, we can also advise organizations on how to prevent them in the future.

MSM continuously monitors for internal and external changes as well as threats that affect the security landscape, to detect and even prevent disturbances to day-to-day business operations.

**Client benefits**

- 24x7 real time view of your business threats
- A scalable service: from basic monitoring all the way up to advanced threat management, incident response and cyber forensics
- Highly qualified team with a hacker mindset
- Fully managed or hybrid service delivery
- High end cost efficient security monitoring

**Why Deloitte**

- We have access to technology experts and business experts. This unique combination makes that we do not only detect security issues, but that we can also advise you on preventing them in the future, without letting them affect your day-to-day business
- Deloitte has a global presence. Therefore we have access to (threat) intelligence and experience from more than 20 Intelligence Centers around the world.

**Client references**

- FSI: For a high frequency market maker we ensure all cyber threats are monitored
- Consumer: We helped a large postal delivery service to address elevated risk posture within a short timeframe
- FSI: For a large international bank we perform hybrid security monitoring in a cost efficient manner
- Education: Tailored monitoring to protect student data for a Dutch University
Phishing as a Service

It is well known that humans form a potential weak link in any security setup, no matter how well-designed. Phishing emails, in the form of mass-phishing, and spear-phishing attacks, take advantage of this.

Although the effectiveness of spam filters has increased over the years, organizations want to be safe from targeted phishing attacks as well as from the bulk of “Nigerian princes” that the filters catch.

Our Phishing as a Service (PhaaS) team helps organizations continuously map and improve security awareness among their staff. We ensure all data is processed in line with (Dutch) privacy laws. Our results are never traceable to individuals: our reports are fully anonymized.

We can offer PhaaS as part of a security awareness program or stand alone and both off-the-shelf as well as fully tailor-made. In all cases, we offer a scenario based approach: every assignment is unique.

Client benefits
- Test the susceptibility of employees and improve the phishing and general security awareness.
- Deloitte can offer as part of awareness program or campaign
- Enables compliance with laws and regulations
- Offers low and predictable monthly costs

Why Deloitte
- Deloitte owns, maintains and develops the PhaaS tooling and performs the phishing tests in line with the Dutch privacy laws
- Our services are performed from our office in Netherlands unlike other providers. Clients can contact us directly, so any (technical) question or request can be handled directly
- We have extensive knowledge and experience in performing phishing tests. Due to the large team we are flexible and timelines for execution are short

Client references
- FSI: For a large international bank we periodically perform phishing tests for more then 20,000 employees.
- Ad hoc tests: we perform a lot of small ad hoc tests as part of our security tests at clients in all sectors (TMT and FSI are leading here)
- Red team: When we perform red teaming exercises at clients we use our phishing platform to gain a foothold within an organization and start our exploitation
The use of apps that process medical data is increasing. It is crucial for these apps to safeguard the privacy and security of their users’ personal information.

Assuring Medical Apps provides the comfort of a third party assuring that the app successfully does this.

The service checks applications against prevailing (European) regulation, and tests security and privacy controls.

Service can be extended to include App Monitoring, a service that continuously monitors changes and vulnerabilities within the application.

Client benefits

Hospitals can offer the best treatments available and become a leader instead of a follower

Our service increases the adoption of new technologies while mitigating risks.

By creating transparency stakeholders can make better informed decisions.

Moreover, medical data can be securely exchanged among different devices and the primary healthcare information systems.

Why Deloitte?

Assuring Medical Apps builds on the experience and knowledge from the Deloitte Cyber Security team. Moreover, our extensive network and domain knowledge helps us to offer total solution.
How do CFO’s, CRO’s, Compliance Officers and Internal Auditors cope with increasing regulations and legislations, getting insight in their risks and compliance? Governance, Risk and Compliance (GRC) is a hot topic, but organizations struggle to execute their GRC processes in a uniform and consistent manner.

BRISQ supports integrated GRC processes and requirements in a transparent way, facilitating end-to-end risk management.

BRISQ can be delivered with available framework content relevant to your industry & GRC needs.

BRISQ is service that can be offered as managed solution to capture your GRC requirements, have end users record their compliance, controls tests and actions, providing management insight. Deloitte offers the combination of industry knowledge, GRC approach and tooling. BRISQ is flexible to match your methodology.

Client benefits
BRISQ integrates the risk, control and compliance frameworks including regular updates across the enterprise, and enables global monitoring and realization of effective compliance and control cost efficiently. The BRISQ solution drives enterprise transparency, enforces awareness across all accountable employees. It enables a standardized approach across & beyond the organization including third parties.

Simple to use with a user friendly interface, multi browser support and ready for PC’s and tablets and offered through a private cloud in the Netherlands.

Why Deloitte
We deliver our vast experience supporting our global and local clients and their thousands of users with GRC software, e.g. for a large international bank, a large postal delivery service and oil and gas industry and combine it with our industry knowledge and GRC content.
Regulators such as the Dutch Central Bank (DNB) formulate integrity requirements or ‘Good practices’ for financial institutions.

Integrity risks like money laundering, corruption, conflicts of interest, fraud, and tax risks are the largest contributing factor to compliance incidents within the financial services industry.

Systematic Integrity Risk Analysis (SIRA) helps you manage your integrity risk effectively and meet the demands.

With SIRA, we facilitate the risk management process by collecting and analyzing relevant data in real time, and providing on-demand integrity risk reports for management, creating the opportunity to implement tailor made risk mitigating measures.

Client Benefits
SIRA is performed in a joint effort with business lines, compliance officers and Senior Management. Deloitte will support the organization in providing the foundation of SIRA, execute an efficient process for this assessment and ensure the quality of the DNB Report.

Afterwards, Deloitte can support the organization with the embedding of the SIRA outcome, communication with internal and external stakeholders and monitoring of the action plans with developed tooling by Deloitte.

Why Deloitte
Deloitte has multiple experience in the execution of SIRA’s within different types of financial institutions and has developed a methodology that has been proven to best market practice.

Our professionals can efficiently execute SIRA or offer support in performing SIRA.

Client References
- Top-5 Dutch Trust Firm
- Large Dutch Retail Bank
- Large Dutch Insurance company
Regulatory compliance requirements in the context of Prudential Reporting are on the raise. European regulators like EBA and EIOPA have mandated complex reporting requirements: CRD IV and Solvency II. Banks and Insurers face mounting challenges to keep up with these ever changing mandates, with respect to the reporting technologies (XBRL), volume of reports & data points and the automated validation of business rules.

The Reporting Factory managed service from Deloitte offers an user-friendly cloud-based solution to prepare various CRD IV and Solvency II reports in XBRL format and pre-validate them against the thousands of business rules specified by regulators, all with the push of a button.

Client benefits
The automated and managed service from Deloitte will result in increased data quality, replace manual reporting and offer analytical insights, encapsulating the domain expertise of Deloitte. Turn-around time: Within a couple of days of new regulation / rules publication, clients are in a position to report.

Why Deloitte
Deloitte has extensive and deep expertise about CRD IV & Solvency II regulation and National Supervisor reporting requirements. Deloitte supports many banks & insurers in improving their regulatory programs and has an in-depth understanding of the regulations and the challenges being encountered. Deloitte also has extensive experience of digital reporting using XBRL. Deloitte’s XBRL experts advise both public and private sector clients in the adoption and implementation of XBRL.

Client quotes
"Reporting Factory is a neat tool that checks all EBA and DNB validation rules in a quick and efficient way. It is user friendly and allows quick referencing to the schedules that contain the errors."

"The results of Reporting Factory were shared with the client who enjoyed the structure of the error reports since descriptions were in line with what they were used to. This client also frequently uses the validation tool from a competitor. First impression is that they enjoyed our tool more."
Most organizations have all the data they need, but may lack the means to access the right data at the right time in the reporting process.

The eXtensible Business Reporting Language (XBRL) is an open information exchange standard which reduces the time spent processing data and maximizes data accuracy and consistency throughout the information supply chain.

Our Technology-Enabled XBRL Solution facilitates the design and management of taxonomies appropriate to your business, and supports efficient digital processes, in which quality assurance and filing requirements are taken into account.
Regulations in the financial services industry are complex, change frequently, and are difficult to implement. Implementation programs are mostly manual, decentralized, and have unstructured approaches across teams, geographies, business lines, and product lines.

RADAR helps maintain oversight of relevant regulations, by continuously monitoring relevant global regulatory changes with a state-of-the-art tracking system. We help understand and assess the impact of regulatory changes on a global scale, and provide insight in the regulatory landscape.

With the RADAR toolkit, changes to various regulations can be aggregated to improve the efficiency of implementation and transformation efforts, while ensuring long-lasting compliance.

Client benefits
• Stay on top of regulatory change
• Fast insight for strategic decisions
• Fast insight to prioritize regulatory change and quick start the regulatory change
• A structured approach to tracking, maintaining, monitoring, assessing and managing the impact of regulatory change on a portfolio basis

Why Deloitte
• Deep regulatory expertise drawn from our regional regulatory strategy centers across EMEA, North America and APAC
• A structured toolset which supports the management of the regulatory change portfolio both on a executive level and at an individual project level (specific to a material regulation).
• Multi-disciplinary and cross geography teams to assist the bank in managing the portfolio of regulatory change

Client references
• International insurer – regulatory update service
• International private bank – regulatory update service
• International major bank – regulatory transformation program
Process X-ray

Process X-ray is a powerful process analytics platform that visualizes actual process execution based on data. It is applied at the world’s largest, most complex enterprises.

Results are eye-opening for our clients: They discovered that process variation is at least 100 times greater than they thought. In fact, 5,000 or more variations are common in most end-to-end processes.

With this knowledge they identify bottlenecks and waste based on aggregated behavioral patterns to find cost saving potential and check whether the process (e.g. purchase to pay, order to cash) runs as expected and conforms to policies, standard operating procedures and quality standards.

The CFO office gains transparency from X-ray that can be used to tackle a variety of high ranking business issues. Take process optimization, controls rationalization and continuous improvement to shared service centers, for example.

The CIO office can put the X-ray platform to use to get clear fact-based business insights into how the processes actually run and use this to optimize their ERP deployment and underlying business case.

Client benefits

Benefits range from multi million dollar reductions in working capital to quick benchmark of the state of key controls across geographies. An from a more effective internal audit to an exact view of how an ERP system is being utilized prior to upgrade or migration into a shared services center.

Leveraging X-ray as a managed service enables our clients to monitor the progress of their change initiatives and realization of the business case.

Why Deloitte

Process X-ray is a unique Deloitte proposition, not available through similar consulting firms. This is not just software as offered by vendors, but distinguishes through unique risk knowledge, content libraries and an industrialized approach that enables clients to get to value quickly in a project context without the requirement for specific technical knowledge.

“Process X-ray is used at some of the largest companies in the world to address business issues, such as finance transformation, working capital reduction, process harmonization initiatives, compliance questions and tax issues”

– Gartner
Continuous Control Monitoring (CCM) is in the research books since the past millennium. **Deloitte brings it to reality**

Deloitte brings its own solution as a service to standardize and automate the monitoring. Connecting your critical IT assets to **provide you with focused, actionable and intelligent insights**. We deliver in an outcome based model to simplify the investments, improve the uptake and help you to get started on this journey.

**CCM empowers control owners and operators** by bringing them closer to the daily reality. Focus shifts from control based monitoring to process based monitoring, making the organizations more resilient and smart.

We offer managed services and secure server environments in our cyber center, to bring your application to life in a secure and trusted environment.

**Client benefits**

CCM enables clients to reduce the effort spent on manual (pre-)testing of controls and moves from relying on a sample based approach to continuous monitoring of the full population. CCM provides control owners and operators with focused, actionable and intelligent insights.

Control from hindsight after the fact to real time insight

Leveraging CCM as a **managed service** enables our clients to monitor their controls without upfront investments.

**Why Deloitte**

Combining both the in-depth knowledge of controls and control processes with the technology platform in a secure hosting environment we are uniquely positioned to deliver an end-to-end solution that brings CCM to reality.

**Client references**

Oil & Gas industry
Blockchain Services

Blockchain technology enables organizations to decentralize transactions and to automate administrative processes. The big question is: **how will this technology affect your business?**

In any area where the trustworthiness of processes plays a crucial role, blockchain can be a solution, because of its fully searchable and transparent digital records. But as with any tool, it is important to **analyze** if it is the right tool for the job.

Through educational bootcamps, hackathons, and a follow-up in which **co-creation with the client** is a key contributor to success, Deloitte’s Blockchain Services help **develop, scale, and manage** novel client applications.

We offer managed services and secure server environments in our cyber center, to **bring your application to life** in a secure and trusted environment.

**Client benefits**

Blockchain can significantly reduce overhead in organizations by shortening processes thereby reducing costs. It increases the reliability of data through unique, tamper-proof storage and registration enabling quick information validation across entities. New use cases create new business possibilities.

**Why Deloitte**

Deloitte has proven experienced Blockchain experts across technical and business domains and can apply the latest industry knowledge to build Blockchain solutions.

Deloitte has a flexible solution approach through Proof of Concepts and Co-creation which can be delivered together with the client and also in a secure (encrypted/keys) managed service format through the TES platform. This allows for quick solutions builds and market tests.

**References**

- Healthcare: Secure & private patient – doctor medical data sharing
- Real estate: Contracting & financial insights
- Insurance: Recording critical records, available across companies
The growing amount of unstructured data in organizations makes it harder to comply with information requests from regulatory bodies, the Ministry of Justice, and internal departments.

To cope with this, Deloitte Discovery provides the full spectrum of information governance, computer forensics, discovery, complex analytics, and document review services.

Whether tasked with preserving data from thousands of mobile devices, or improving the efficiency of document review with new technology, we provide deeper, more comprehensive insights, and smarter, more efficient solutions than anything you have seen before.

This way, Deloitte Discovery helps control costs, and reduces risk during discovery.

Why Deloitte

eDiscovery solutions for corporations, law firms, and government agencies

In a complex business dispute or regulatory investigation, all parties face one certainty: the discovery process. Deloitte’s global industry and technical experience yields a more intelligent approach to the discovery challenge.

Deloitte Discovery services are to ready to tackle your toughest challenges as well as to help improve processes, programs and technology.

Are you looking to preserve data from thousands of mobile devices? Working to improve the efficiency of document review? Whatever the issue, our professionals offer your company the skills, technology and global network that help you control costs and mitigate risk. Plus, our services include everything from computer forensics and managed document review to cloud discovery and information governance.
Internal auditing grows increasingly complex. It needs to be accurate, effective, and provide the right insights.

To support internal audit organizations to optimize audit coverage and (audit) resource efficiency, while adding value to the business, Deloitte has developed AuditIQ.

AuditIQ provides Audit Intelligence and Quality by collecting and transforming raw source data from your ERP system(s) into useful information, presented in a visually-oriented dynamic report. This ready-to-use dashboard provides you with actionable insights on P2P, O2C and inventory processes, and can be delivered as-a-Service.

The solution contains over 200 predefined analyses and insights across various business cycles.

AuditIQ allows you to become adaptive to risks, target audit plans and focus resources towards areas that matter.

Client benefits

- Increase audit efficiency
- Obtain greater audit coverage through analysis over entire population of data
- Substantiate findings using facts based analysis and quantification of exposures
- Develop deeper understanding of business risks
- Provide insights to business owners for process optimization
- Detect cost reduction opportunities

Why Deloitte

- Our team of audit-, business- and data specialists combines their expertise to enable an effective integration of analytics into your audit and risk management approach
- AuditIQ is delivered to over 200 clients in various industries and ranging from medium sized companies to large multinationals

Client references

- Internal Audit team of large manufacturing giant in the Netherlands. All the Finance and compliance audits are now data enabled.
- Internal Audit functions for over 25 multinational companies in various industries
- Over 200 financial audit clients per year
Please feel free to contact us if you would like to learn how to tap into the possibilities and realize the opportunities for your organization.

Risk Powers Performance!

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