In *Girl with a Pearl Earring*, Vermeer used the Fibonacci sequence to create a composition of perfect proportion, harmony and beauty.

**Leading-edge digital technology powering the EY audit**
Innovating the audit to deliver quality and value.

There has never been a better time to disrupt and innovate to provide an audit with an even greater focus on quality. At EY we are embracing the benefits of the latest technologies and integrating them into our audit processes to respond to the evolving needs of business, regulators and investors. We innovate and invest in innovation because we are committed to building a better working world and to providing the capital markets with greater confidence, a better business perspective and enhanced transparency.

Felice Persico
EY Global Assurance
Vice Chair

The seamless integration of technology into our audits drives quality and Exceptional Client Service.

EY Canvas, our global online audit platform lies at the heart of the audit. EY Canvas Client Portal is integrated into EY Canvas and connects our clients directly with our auditors. EY Canvas mobile apps connect our people around the globe and allow them to support our clients on the go.

EY Helix, our suite of data analytics, are embedded in our audit process and help us provide deeper insights to our clients.

EY Atlas provides our auditors and our clients with the latest accounting and auditing content.
One globally seamless audit delivered by teams linked through one global methodology and one online global audit platform.

Better risks identification and response, allowing findings to be reported promptly.

Centralized planning and monitoring of the global audit, providing enhanced capability to the primary team.

Audit approach quick customization to make relevant changes across all geographies and to be responsive to the ever-evolving regulatory environment.

Real-time monitoring of the audit. We can capture, flag and share global audit findings as they arise.

Streamlined client communications via its integrated online portal.

Improved project management and ability to monitor key milestones in the audit.
EY Canvas Client Portal streamlines our clients’ communications and offers them access to the status of audit requests.

Benefits include:

- Reduction of email requests and improved means of communication with our clients, saving them time when supporting the audit
- On-demand visibility into the status of audit requests, improving project management
- Reduced risk of duplicate requests by integrating them directly into EY Canvas
- Better security of client data and automated uploading into EY Canvas, creating confidence that data has been properly delivered to EY
- Multi-language support — the online portal is available in 10 languages

EY Canvas Client Portal users can also:

- See all items or just those assigned to them
- Clearly pinpoint new or overdue items
- Delegate requests to other members of their team

Pinpoint new or overdue requests.

Clients can see all items or just those assigned to them.
EY Canvas Pulse allows our people to provide real-time status updates to their clients on the go, thanks to the instant visibility of engagement status, timelines and team performance.

EY Canvas Inventory allows our people to record their inventory counts on their mobile device and upload them directly into EY Canvas.

EY Canvas Engage helps us keep the audit moving and meet deadlines by displaying the actions required on an engagement. Its user-friendly display allows our people to instantly view their specific tasks and focus on those. It also saves our clients time in supporting the audit as the camera feature allows our people to capture audit evidence and securely upload it into EY Canvas.

A range of mobile apps work hand-in-hand with EY Canvas, enhancing our clients’ and EY professionals’ digital experience.
Our global suite of data analytics, built to scale from the largest to the smallest of our clients, is an integral element of our audits.

Analytics at EY is not about tools looking for issues. It’s about our auditors considering what the analyzed data means and assessing its implication to the audit.

Benefits include:

- **Greater confidence** in financial reporting by revealing hidden patterns and trends in our clients’ financial data.
- Analysis of larger populations of audit-relevant data to present a fuller picture of the business activities and to identify the risks that matter.
- **Clear identification of trends and anomalies** in the business processes and controls to help direct our investigative effort in the right areas.
- Relevant feedback and insights provided during the audit to help our clients improve their business processes and controls.
- **Efficiencies for our clients** thanks to our globally integrated data capture and extraction tools.

EY Helix at work — the analysis of settled and unsettled invoices

We can extract and analyze customer activities. For example, we use analytics to look at sales invoicing activity throughout the year, the impact of credit memos and, ultimately, how the invoices are settled. We obtain a better understanding of both revenue and trade receivables to help focus our audit procedures. We can also glean insights about our clients’ business or areas for process improvements that we can share.

We look at the aging of the year-end balance to understand which customers have greater risks.

We perform additional analytics on this and on the closing balance.

We look for what has been cleared and what is still open.

We look at how items are cleared to see what has been paid into the bank and what has been cleared by credit memos.
EY Helix library contains all of our data analytics from around the globe covering different industries and audit areas.

Examples include:

**General Ledger (GL) Analyzer**
Examines and evaluates GL journals of any data size and volume to enhance our planning and scoping, understanding of the business, risk assessments and performance of audit procedures.

**Purchases & Trade Payables Analyzer**
Examines and evaluates purchases and payables activities to perform detailed analysis of key aspects of the purchase-to-pay cycle.

**Group Scope Analyzer**
Helps audit teams organize and present financial data considered to determine the group audit scoping strategy.

**Revenue & Trade Receivables Analyzer**
Examines and evaluates revenue and receivable activity to perform detailed analysis of key aspects of the revenue-to-cash cycle.

**Inventory Analyzer**
Provides analysis of inventory to better understand its composition and aid efficient completion of audit procedures.

**Mortgage Analyzer**
Assesses the risk profile of a client’s mortgage portfolio by assigning thresholds and weights to the main risk factors.

**Group Scope Analyzer**
Helps audit teams organize and present financial data considered to determine the group audit scoping strategy.

The screenshot above is a sample for illustrative purposes and our library is large and will continue to grow.
Knowledge in the cloud. EY Atlas is our new **cloud-based platform** for accessing accounting and auditing content including external standards, EY interpretations and thought leadership.

**Benefits Include:**

- Faster and **better research results**
- Integration with EY Canvas to bring the **most relevant up-to-date accounting, auditing and industry information**
- **Clients’ direct access** to EY technical insights relating to accounting, financial reporting and regulatory filing matters with EY Atlas Client Edition

EY Atlas is a cloud-based solution providing us with the platform to allow us to incorporate Artificial Intelligence and speech recognition capability, to bring a leading class research experience to our people and clients.
In our journey to building a better working world, we will continue to innovate and integrate new technologies into our audit process.

Audit quality is at the heart of our innovation strategy.

Unmanned aerial vehicles piloted remotely. Our developments include:
- Assessing the use of drones to assist with inventory observations
- Assessing the integration of inventory observations with drones and our mobile applications

Computing systems that exhibit some form of human intelligence. Our developments include:
- Investigating the use of AI in the audit process and our research capability
- Digitalizing large volumes of unstructured contract data and incorporating machine learning to assist with revenue and leases contract reviews

A distributed database/ledger that maintains a continuously growing list of data records (public and private) put together in encrypted blocks. Our developments include:
- Working across the organization on helping our clients understand the impact of blockchain
- Assessing the audit impact of blockchains and developing new techniques to audit a blockchain

Enhanced automation has been a key component in the development of EY Canvas and EY Helix, which now allow us to further improve audit efficiency through the incorporation of robotics process automation (RPA). EY has formed a centralized Automation Center of Excellence, a dedicated team of highly qualified Automation engineers and Process consultants, to enhance the RPA opportunity across the organization. We are currently piloting RPA across various platforms. Our pilots include:
- Transforming our audits of funds in the financial services sector through automation
- Automating the production of audit-ready work papers across the portfolio of statutory audits of our largest clients
- Developing discrete RPA objects to help automate routine and non-judgemental audit procedures such as loading client data to our analytical tools and sampling
- Innovation workshops on our largest clients to identify routine audit procedures that can be automated

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About EY
EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

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EYG no. 04365-163GBL

BMC Agency
GA 0000 08841

ED 0618

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