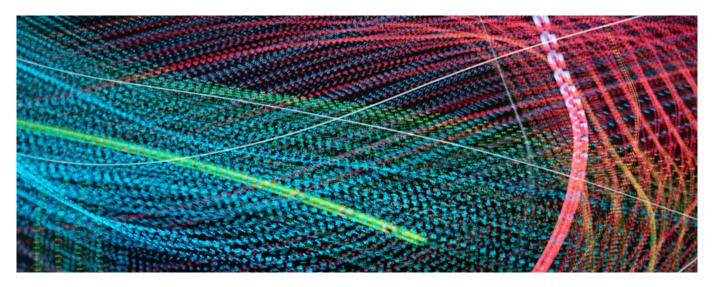


What if accounting reinvented itself?

# ACCOUNTING FOR INNOVATION

Enabled by a range of technological advances, new means of valuation, measurement and reporting make historical accounting approaches redundant, opening up new opportunities for innovation in problem-solving and fraud detection.



**MEGATREND** Devaluation of Raw Data

**TRENDS** Artificial Intelligence Edge Computing Future of Purpose & Work Internet of Things (IoT)

#### SECTORS AFFECTED

Communication Technologies & Systems Consumer Goods, Services & Retail Cyber & Information Security Data Science, AI & Machine Learning Financial Services & Investment Immersive Technologies Insurance & Reinsurance Logistics, Shipping & Freight Manufacturing Media & Entertainment Real Estate



## WHY IT MATTERS TODAY

Impacting accounting practices, the operating costs relating to compliance grew by over 60% for retail and corporate banks between 2014 and 2022.<sup>701</sup> These costs are associated with increasing regulatory changes driven by developments in crypto assets, operational resilience, sanctions, digitisation and environmental, social and governance (ESG) matters. In 2021 for example, and impacting 190 countries around the globe, an average of 246 regulatory alerts were sent daily, equating to 64,152 alerts annually.<sup>702</sup>

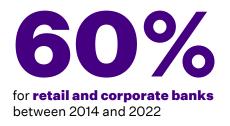
At the same time, the COVID-19 pandemic led to a surge in reliance on digital payments. In low- and middle-income countries (excluding China), over 40% of adults made payments using a card, phone or the internet for the first time.<sup>703</sup> In the United Arab Emirates, two-thirds of residents increased their use of digital payment methods in 2021 (higher than the global average of 61%).<sup>704</sup>

More generally, digital trade is the trade in goods and services that are digitally ordered and/or digitally delivered.<sup>705</sup> In 2021, digitally deliverable services reached almost 64% of global services exports.<sup>706</sup> The e-commerce market is projected to increase from \$3.3 trillion in 2022 to \$5.4 trillion in 2026.<sup>707</sup> In 2022, digital payments had a total transaction value of \$8.5 trillion and 25% of global small and medium businesses have adopted financial application programming technologies and distributed accounting technologies.<sup>708</sup>

The global smart sensor market – which enables smart parcel tracking – is also evolving and is expected to grow at a compound annual growth rate (CAGR) of 13.7%, from \$32 billion in 2021 to \$77 billion in 2028.<sup>709</sup> The RFID tag market was worth \$10 million in 2021 and is expected to reach nearly \$18 million in 2028.<sup>710</sup>

The Middle East and North Africa (MENA) region's smart sensor market is expected to double from nearly \$2 billion in 2021 to \$4 billion by 2028, an increase at a CAGR of nearly 11%.<sup>711</sup> It is estimated that the United Arab Emirates' share of the smart sensor market will grow at a CAGR of 16% in the period 2021–26, reaching a valuation of \$842 million.<sup>712</sup>

The operating costs relating to compliance grew by over





# THE OPPORTUNITY

Through advanced machine intelligence, distributed ledger technologies (DLT), the Internet of Things (IoT) and advanced analytics, the accounting profession can be re-engineered into one that is focused on innovation through problem-solving, fraud detection and evolving the capture of assets and flows. Blockchain technology will help to guarantee authenticity when accounting data is shared, also assuring its security.<sup>714</sup> Fully automated, collection and analysis is customised. Algorithms could continuously generate total value and accounting / cash flows, analysing financial and non-financial data, automatically checking for compliance and formatting reports according to national and international standards.

The ability to improve the capture and use of accounting information with a high degree of automation and customisation means that it will be possible to embed new forms of value into accounting processes in both the public and the private sectors. Examples of areas where these new forms of value will emerge include environmental, social and governance (ESG)<sup>715</sup> metrics; sustainability, ecosystem and carbon accounting systems for governments (such as the United Nations' System of Environmental–Economic Accounting, or SEEA);<sup>716</sup> and measures of inclusive wealth more generally. Regulatory bodies, funders and philanthropists will more quickly be able to identify the efficiency and effectiveness of underlying organisations.

These technologies could massively reduce business costs and enable companies to better manage their liquidity and finances. Enabling businesses, governments and supervisory agencies – for example, financial regulators and environmental agencies – to access real-time information and analysis would increase the overall efficiency of the financial system and mitigate the risks that come from lagging, poor-quality or incorrect accounting and financial reporting.

### **BENEFITS**

### RISKS

Improved transparency, efficiency and resource allocation. Efficiency in detecting fraud and embedding new regulations and flows into accounting and reconciliation processes. Vulnerability of systems to cyberattacks due to heavy reliance on automated analysis. Issues from barriers to adoption, such as resistance to change and the high price of technology.<sup>713</sup>



TRANSFORMATIONAL ACCOUNTING FOR INNOVATION

# GLOBAL SERVICE EXPORTS IN 2021

OTHER SERVICES DIGITALLY DELIVERABLE SERVICES

64%

THE GLOBAL 50 (2023)