Team 3: Final Presentation

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Key Trends

Quantum Computing

A type of computing that uses quantum-mechanical phenomena, such as superposition and entanglement, to perform operations on data.

Digital Twins

A digital model of an intended or actual real-world physical product, system, or process

ESG

A set of standards for a company's operations that socially conscious investors use to screen potential investments.

Highlights from Analysis on the Competitive Space

Key Trends	Mckinsey	BCG	Bain	Infosys Consulting	Alexander Group
Quantum Computing	• Owns firm dedicated to it • Quantum computing reports & solutions for clients	• Quantum computing reports and solutions for clients • Focus on internal AI development	• Owns firm dedicated to it • Quantum computing reports and solutions for clients	• Infosys Quantum Living Lab offerings (in-house solutions for clients)	• N/A
Digital Twins	• Reports and solutions for clients	• Reports and solutions for clients	• Reports and solutions for clients	• Infosys Nia Platform (IoTs and digital twins solutions)	• Provide digital solutions to clients
ESG	• ESG frameworks, reports and solutions for clients	• ESG solutions using AI (Co2 AI, Supply Chain Net Zero Academy etc.)	• ESG investing, reports and solutions for clients	• Practical sustainability solutions using AI/Digital Twins	• ESG reports and solutions for clients
Other	• Creation of own frameworks to analyze business issues	• Early access to emerging tech / Constantly scouting tech ecosystem	• Future-back approach to derive innovation strategies	• Future-back approach to derive innovation strategies	• N/A

Company Competencies

PwC uses Several Initiatives to Tap into the Latest Tech Trends

- **Global Technology Center (GTC):** Helps clients embrace new tech and create tech-based solutions. Emerging Technology Lab: Researches and introduces new technologies, including AI, AR/VR, and blockchain.
- **Digital Accelerator:** Boosts clients' digital journey, connecting them with experts and investors.

How PwC Uses Tech in its Services

- **AI:** Automates tasks like auditing and contract reviews. They've also made AI tools to predict customer behaviors and detect fraud.
- **AR/VR:** Used for employee training, giving virtual office tours, and aiding clients in product design.
- **Digital Tech:** PwC employs cloud and blockchain to enhance its services and offer innovative solutions to clients.

Examples of PwC's Tech-based Offerings

- **AR/VR Training:** Trains staff on topics like tax and risk management.
- **Virtual Office Tour:** Offers clients virtual tours of office spaces.
- **Cloud Accounting:** Provides efficient accounting management.
- **Product Design:** Uses AR/VR for faster product design and launch.
- **Customer Service Chatbot:** AI-driven chatbot for customer queries.

PwC's Tech Journey

PwC started diving into AI/AR/VR/Digital Tech several years ago. The GTC began in 2017, the Tech Lab in 2018, and the Digital Accelerator in 2019.

PwC's Vision

PwC aims to harness AI/AR/VR/Digital Tech to elevate its services and introduce groundbreaking solutions to clients.

PwC's Success

PwC's tech platforms have achieved significant milestones. Their Digital Audit tool has audited over 100B USD, and their Contract Review tool has examined over 1M contracts.

SWOT Analysis

Strengths

- Renowned reputation of the company and their capabilities, often referred to as one of the “Big Four”
- High revenue earnings
- Diverse capabilities within the company- consulting, tax management, etc.
- Ability to hire knowledgeable employees from top universities
- Strong connection with their clients that lead to repeat business and loyalty
- Diverse geographical reach

Weakness

- Innovation, Research and development: PwC is not seen by many companies and clients as a leader in the innovation sector compared to its competitors
- Large employee turnover that leads to more spending on hiring and training
- PwC is a large company with thousands of employees, which can make communication slow
- Dependence on consultancy as their main source of revenue

Opportunities

- Expanding their customer base by acquiring other smaller consulting companies
- Utilizing the increase in companies looking for business solutions that could benefit from PwC services, specifically in risk and compliance
- New tech and the use of AI can be integrated into the company to further help clients and attract new business

Threats

- Competition in the industry: McKinsey, Deloitte, Ernest and Young, Accenture, KPMG
- New government policies that could affect their everyday business and potential revenue
- Currency fluctuation and recession in the market

Change Vision

Lead problem solving innovation with new technology

Change Initiatives Over the Years

	2023	2024	2025
Top Down	Establish an AI Innovation Hub to centralize R&D efforts	Launch a company-wide Quantum Computing program.	Implement Digital Twin technology and begin the integration of ESG Tech solutions into services.
Bottom Up	Host AI-focused hackathons and innovation challenges; Start an AI literacy program for all employees.	Redesign internal processes to be AI-first Develop internal platforms for employees to contribute to AI development.	Encourage creation of employee-led research groups and ethical AI governance framework Pilot employees suggested tool in live projects.
Inside Out	Publish press releases concurrent to key initiatives' announcements Lead industry-wide forums on AI best practices.		
Outside In	Gather extensive client feedback on AI, Digital Twin, and ESG needs and expectations.		Partner with tech firms for co-development.

Who should be on the guiding coalition?

James Shira

- PwC's Global and US Chief Information & Technology Officer
- Leadership Style: Change - oriented. Excels in large-scale problem-solving and people management.
- Innovation and Strategy: Ensures expert technology insight and strategic leadership in decision-making processes.
- Career History: Led security transformation programs in large financial services organizations

Scott Likens

- Global AI and Innovation Technology Leader, PwC
- Leadership Style: Forward-thinking and transformative, blending global trends with local insights to innovate in various industries
- Risk Management: He aligns tech advancements with PWC's objectives and manage related risks.
- Change Advocacy: Tech leader who champions organizational change, inspiring a culture of innovation and continuous learning.

Anand Rao

- Global Artificial Intelligence Lead and innovation lead within PwC's Emerging Technology.
- Leadership Style: Guides ethical AI adoption with collaborative and technical leadership
- Client Connection: Bridge client needs with tech solutions, shaping client-focused, market-relevant strategies.
- Broad Strategy: Offer wide-ranging insight on digital strategies, investments, and long-term planning.

Tim Ryan

- PwC Senior Partner
- Leadership Style: Trust-based approach focused on collaboration and empowering his team to achieve success.
- Feedback Channel: Facilitate direct client feedback to refine and improve PWC's tech offerings and strategies.
- Strengthen Client Bonds: His role in the coalition boosts client trust and ensures solutions meet actual needs.

Key Initiative 1: Quantum Computing

Description

Quantum computing leverages the principles of quantum mechanics to perform computational tasks at speeds previously deemed unattainable. This technology holds the promise to solve complex problems faster than classical computers.

Impact on Consulting Industry

This technology is transforming data analysis, making data-driven recommendations faster and more accurate. However, new security concerns and solutions are arising, as quantum computers can break many existing cryptographic techniques. Consulting around the application of quantum computing in various industries also is an opportunity for PwC to grow. PwC's Quantum Impact report discusses the potential implications of quantum computing for businesses and how they should prepare. However, there are opportunities to expand this research further to inform clients about its benefits.

Disruption Potential

The promise of solving previously insurmountable problems could fundamentally change several industries, necessitating quantum-specific consulting. Traditional computing has its limitations when it comes to solving particular types of problems like optimization, cryptography, and simulation. Quantum computing, leveraging the quirks of quantum mechanics, has the potential to solve these problems exponentially faster. Quantum computing could drastically reduce the time required for data-driven insights, transforming the consulting deliverables' speed and efficiency. Moreover, its potential to challenge current encryption standards means businesses will need guidance navigating this new landscape.

Key Players

IBM, Google, and Intel are established players in the space. Rigetti Computing and IonQ are startups that are making waves in quantum computing.

Key Initiative 2: Digital Twins

Description

A digital twin is a virtual representation of a physical object or system. This digital model can be used to analyze and simulate real-world conditions, responses, and interactions.

Impact on Consulting Industry

This technology can assist businesses in implementing and optimizing digital twin technologies. It will also enhance predictive analytics, maintenance, and operational efficiencies. Digital twins offer the benefit of scenario testing without the risks of real-world trials, which is a cost-saving benefit for the consulting industry. Digital twins are currently making the manufacturing process more sustainable. PwC itself has been exploring the potential of digital twins in various sectors, including manufacturing and health care.

Disruption Potential

This technology is quite disruptive. By having a real-time digital reflection of a system or product, businesses can make better-informed decisions, potentially revolutionizing sectors like manufacturing, energy, and healthcare and ultimately those who do consulting projects in the space. Additionally, digital twins allow companies to predict failures, understand system behavior, and simulate responses without real-world risks. With businesses seeking to optimize operations and reduce risks, consultants will be called upon to help implement and refine digital twin systems, integrating them with existing processes.

Key Players

Major players include IBM, Microsoft (Azure Digital Twins), and Siemens. Startups include Uptake and C3.ai.

Key Initiative 3: ESG Technology

Description

Technology solutions focused on helping companies measure, manage, and report their ESG performances and commitments.

Impact on Consulting Industry

Consultant will be tasked with assisting businesses in integrating ESG into their strategies as well as leveraging tech to track and report on ESG metrics. Additionally, consultants might increasingly be advising on sustainable practices and stakeholder management as this trend takes off. Digital platforms for tracking carbon footprints and setting reduction goals already exist. PwC's already contributing to this innovative movement with its Responsible AI Toolkit, which ensures AI solutions are ethical and transparent.

Disruption Potential

This technology is massively disruptive. Societal and investor pressures are driving businesses towards sustainable and ethical practices. To navigate this evolving landscape, companies need to effectively measure, manage, and report their ESG activities. ESG tech provides platforms and tools to gather, analyze, and report on ESG metrics, ensuring transparency and accountability. This can range from AI-driven analytics assessing a company's carbon footprint to platforms monitoring fair labor practices. The increasing focus on sustainability and ethical business means there's a booming demand for ESG consulting services. Consultants will guide businesses on leveraging tech to meet ESG goals, ensuring they remain compliant with evolving regulations and stakeholder expectations.

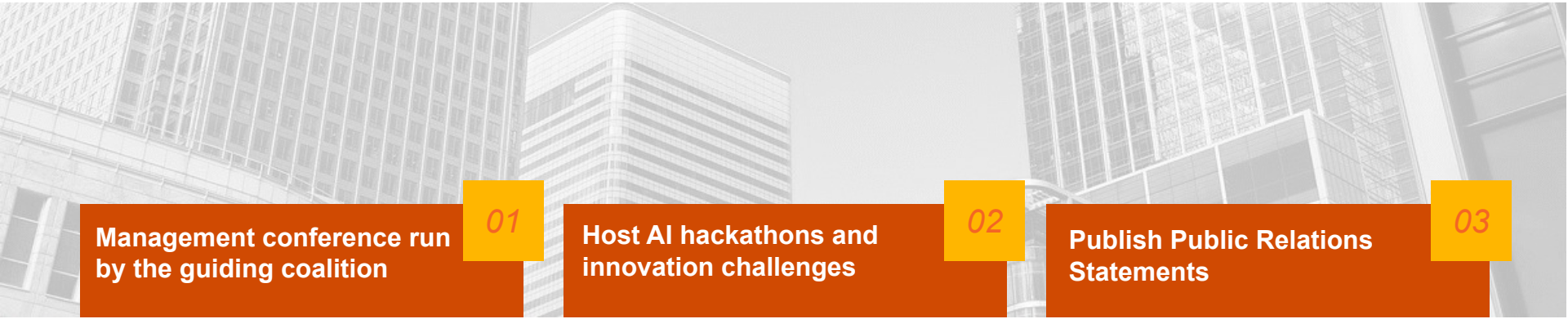
Key Players

Established Companies leveraging and innovating on this technology include SAP and Salesforce. Smaller companies contributing to this field are Sustainalytics and Cervest.

Obstacles & Plan to Address Them

Key Steps Taken	Obstacles Handled
Investment in Research and Development: PwC heavily invested in R&D to stay at the forefront of emerging technologies.	Talent acquisition and development were challenging, requiring partnerships with academic institutions and internal training programs to cultivate a skilled workforce.
Integration of Quantum Computing: PwC integrated Quantum Computing into its service offerings, revolutionizing data analysis.	Navigating regulatory frameworks surrounding AI implementation required active engagement with policymakers to advocate for responsible AI usage and contribute to industry standards.
Adoption of Digital Twins Technology: PwC adopted Digital Twins technology for real-time optimization across industries.	Ensuring the security and ethical use of AI necessitated robust cybersecurity measures and ethical guidelines to safeguard client data.
Leadership in ESG Tech- PwC became a pioneer in sustainable business practices through Blockchain and AI-driven reporting in ESG Tech.	Overcoming resistance to change within the organization involved implementing a comprehensive change management strategy to foster a culture that embraced innovation.
Strategic Expansion of Computational Capacity- PwC strategically expanded computational capacity to meet the growing demand for advanced AI solutions.	Achieving seamless integration of AI into existing business processes required a phased approach and continuous training to overcome resistance to change within the organization.

Quick Wins



01 Management conference run by the guiding coalition

PwC can establish internal conference to showcase unity and alignment with the new business strategy, in order to empower the cultural shift and incentivize the use of AI tools for any projects. This can help overcome internal inertia and encourage new ways of working

02 Host AI hackathons and innovation challenges

By organizing AI hackathons and innovation challenges, PwC can tap into the collective ingenuity of its employees and the broader tech community. Participants can compete to develop creative AI solutions for real-world problems, fostering a culture of innovation and collaboration within PwC.

03 Publish Public Relations Statements

Through strategically crafted PR releases, the company can demonstrate its proficiency in leveraging cutting-edge technologies but also emphasize their practical applications in solving diverse business challenges, reinforcing PwC's position as a leader in driving meaningful and forward-thinking solutions.

Key Constituents and Key Messages

Key Constituents

- **Internal Stakeholders**: All employees should understand the change vision and feel part of the journey. This specifically applies to all leadership in the organization, including executives.
- **Clients**: Communicate the benefits of new tech integrations and how they enhance service. Show the clients how the new technology works and all of its capabilities as it applies to their work and competition.
- **Partners and Investors**: Share strategic initiatives and expected outcomes to maintain support and confidence. Make sure all investors are on board with these changes and its benefits so they can advocate for its usage.
- **Regulatory Bodies**: align on compliance and standards for emerging technologies like AI and Quantum Computing. Have risk management employees dedicated to ensuring this compliance.

Key Message

- **Commitment to Innovation:** Dedication to R&D and the integration of cutting-edge technologies. Expand our R&D teams to include those specifically focused on our new innovative products. Be transparent about new findings with the company and its clients.
- **Client-Centric Solutions:** Development of tailored solutions that leverage tech to address specific client challenges. Put in the initial time and effort needed to get each client on board and eager for these new changes. Show them how it will directly help them in a specified way.
- **Collaborative Growth:** Partnerships with tech firms, academic institutions, and industry consortia to spearhead innovation. This will help to gain talent from universities and utilize its resources for creative idea development as it relates to AI.
- **Sustainable and Ethical Approach:** Adoption of ESG Tech and Responsible AI Toolkit to ensure sustainable and ethical business practices. This will also help keep the organization compliant, while giving our company a positive reputation for innovation with sustainability.

Change Plan Effectiveness Measurements

Key Initiatives	Key Performance Indicators
Establish an AI Innovation Hub	• Number of R&D projects initiated • Amount of funding secured for R&D • Number of patents filed/technologies developed
Host AI-focused hackathons	• Number of hackathons conducted • Participant engagement levels • Number of viable products/ideas generated
Start an AI literacy program	• Enrollment numbers in the AI literacy program • Completion rates of the program • Pre- and post-literacy skill assessments
Redesign internal processes to be AI-first	• Process efficiency gains (time/cost) • Employee adoption rate of new processes • Improvement in decision-making speed/quality
Publish press releases concurrent to key initiatives' announcements	• Media coverage reach and sentiment analysis • Increase in company mentions in industry publications • Engagement metrics on company's press release channels
Launch a company-wide Quantum Computing program	• Number of quantum computing projects initiated • Progression of quantum computing capabilities (benchmarks reached) • Employee training and engagement in quantum computing
Develop internal platforms for AI development	• Usage metrics of internal platforms • Number of AI solutions developed using the platform • Employee satisfaction with the development tools

Change Plan Effectiveness Measurements

Key Initiatives	Key Performance Indicators
Lead industry-wide forums on AI best practices	• Number of forums led and attendance rates • Influence on industry standards (e.g., adoption of proposed practices) • Post-event feedback and subsequent implementation of best practices
Implement Digital Twin technology	• Number of services/products using Digital Twin • Improvements in product/service performance with Digital Twin implementation • Cost savings from predictive maintenance and simulations
Integrate ESG Tech solutions into services	• ESG score improvements • Reduction in carbon footprint • Compliance rate with ESG regulations
Encourage employee-led research groups	• Number of research groups formed • Innovations/inventions stemming from these groups • Academic and industry partnerships formed
Pilot employees suggested tool in live projects	• Successful project completions using the tool • Feedback from project teams on tool effectiveness • Adoption rate post-pilot
Partner with tech firms for co-development	• Number of partnerships established • Joint products/solutions brought to market • Financial and strategic benefits from partnerships

Thank You