

Blockchain oltre il Fintech

Seminario Crowdfunding e Blockchain

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SVP, M&A and Digital Transformation

**We are a global classification, certification, technical assurance
and advisory company**

OUR PURPOSE

**TO SAFEGUARD
LIFE, PROPERTY
AND THE ENVIRONMENT**

Companies are facing a dynamic and broader set of interconnected business challenges



Complex supply chains

Diverse stakeholder expectations

Trust and transparency expectations

Brand and reputation management issues

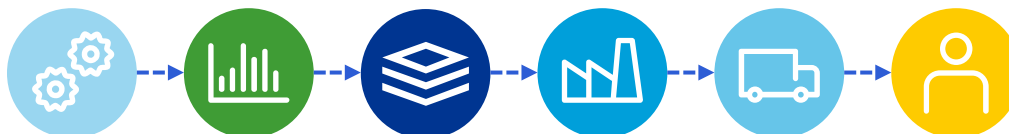
Supply Chains are undergoing a radical transformation

external market drivers

From product features to experience and story telling

Omni-channel Consumer experience

Digitalisation is increasing Consumer Power



Industry 4.0

Faster Reputational Risks

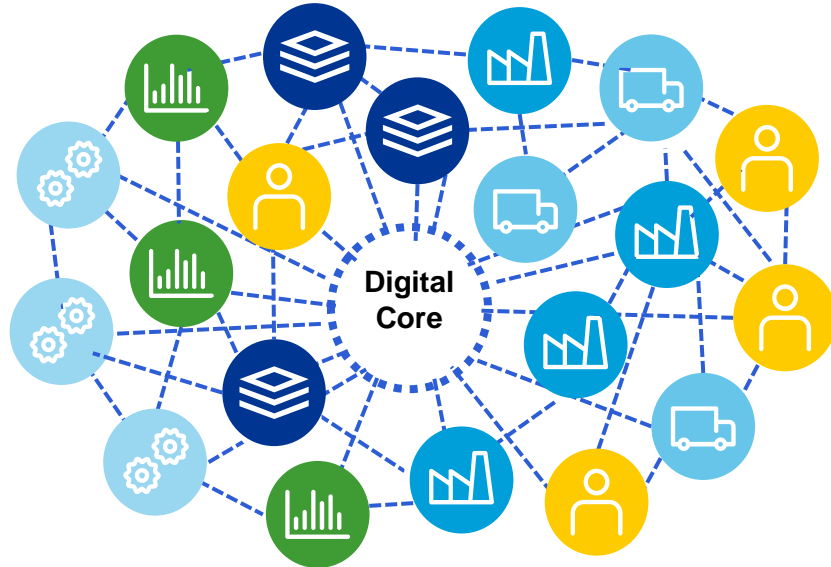
Shorter Product Lifecycle

Evolving Regulations

Increased Pressure for Efficiency

internal market drivers

Supply Chain Ecosystems will be empowered by Digital Trust

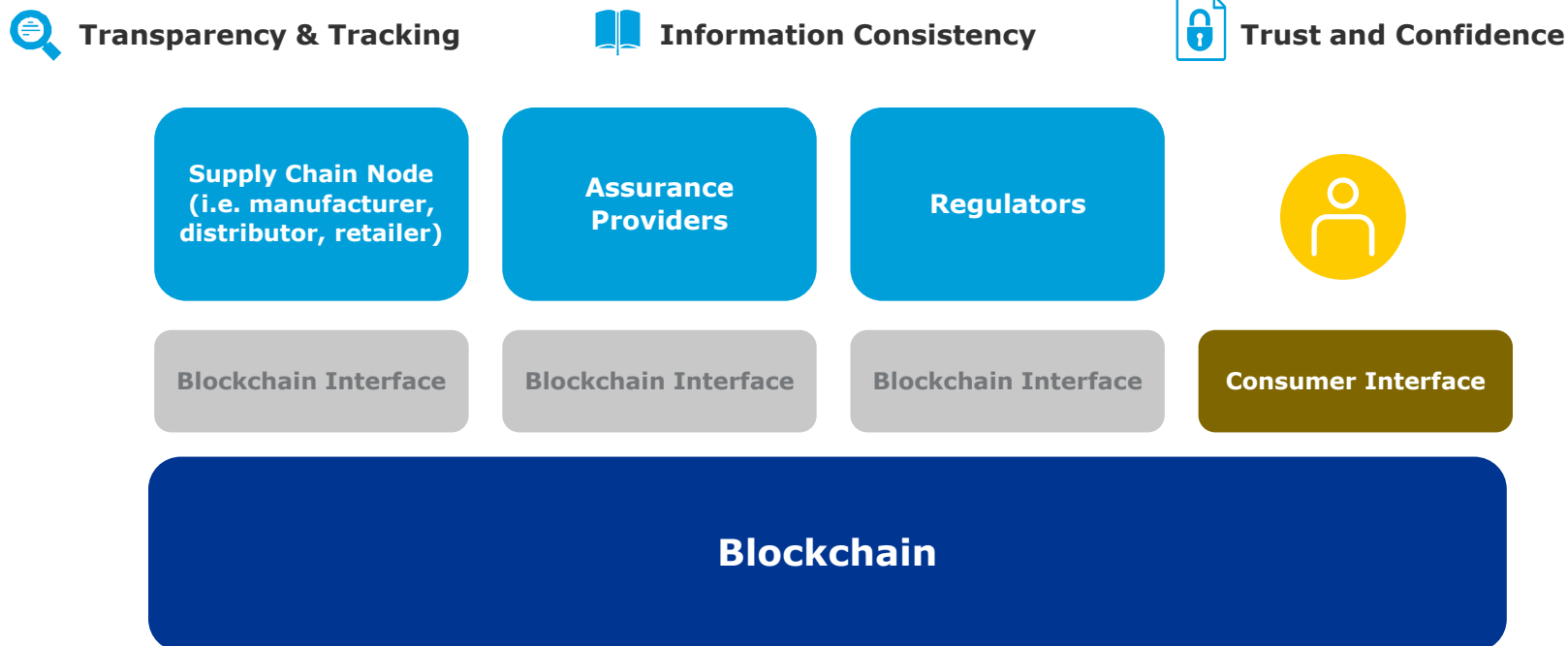


Source: Deloitte

- Exponential increase of transactions, in multiple forms and between multiple players, generating new needs for **TRUST**
- M2M micro-transactions: How do machines trust each other?
- IoT devices: Trust in generated dataflows
- Digital content of products and services: Trust that the Digital Twin corresponds to the product it represents

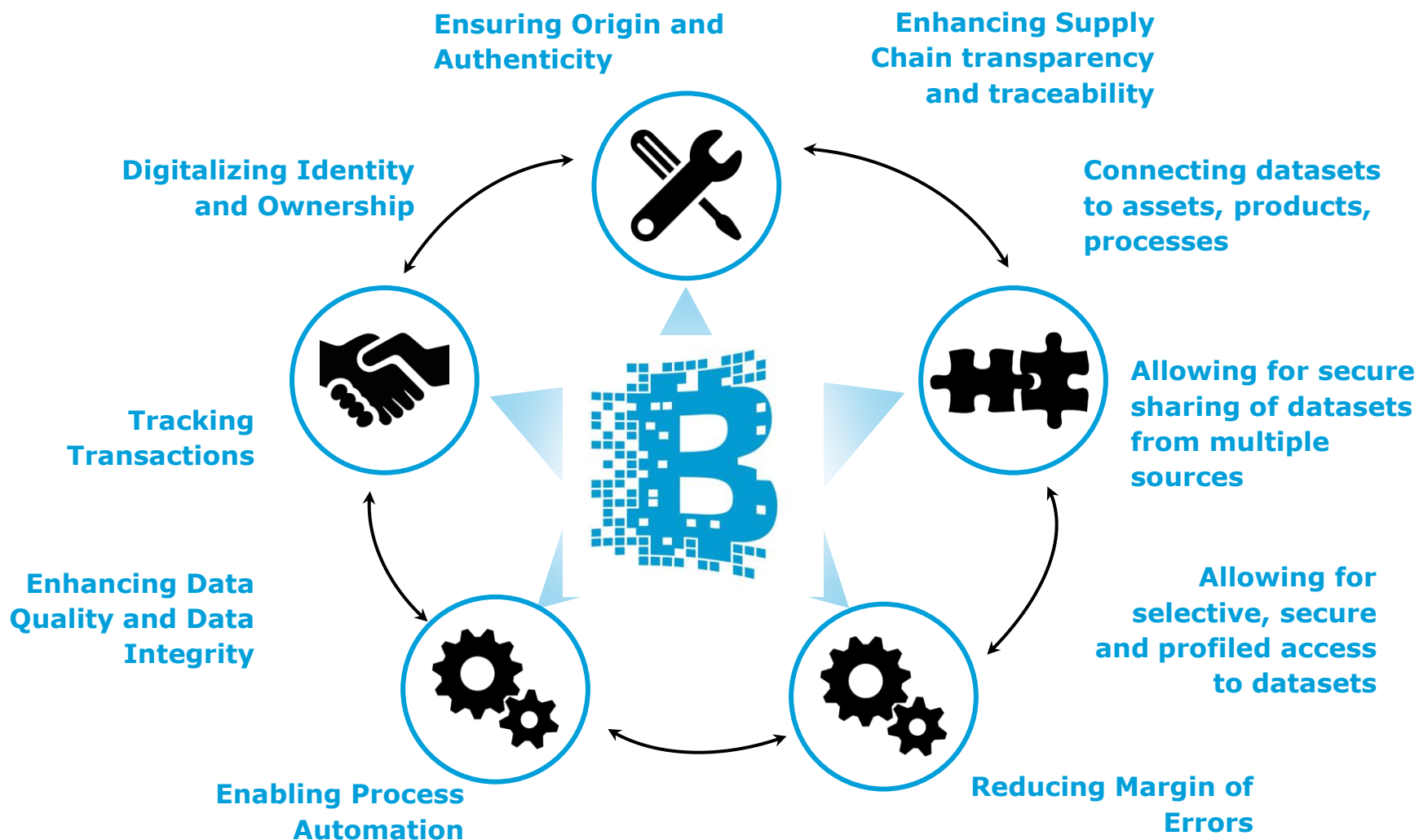
The ability to find smart and cost effective ways of tagging physical products and connecting them to the digital space will provide a crucial competitive advantage

Blockchain as the backbone of future Supply Chain

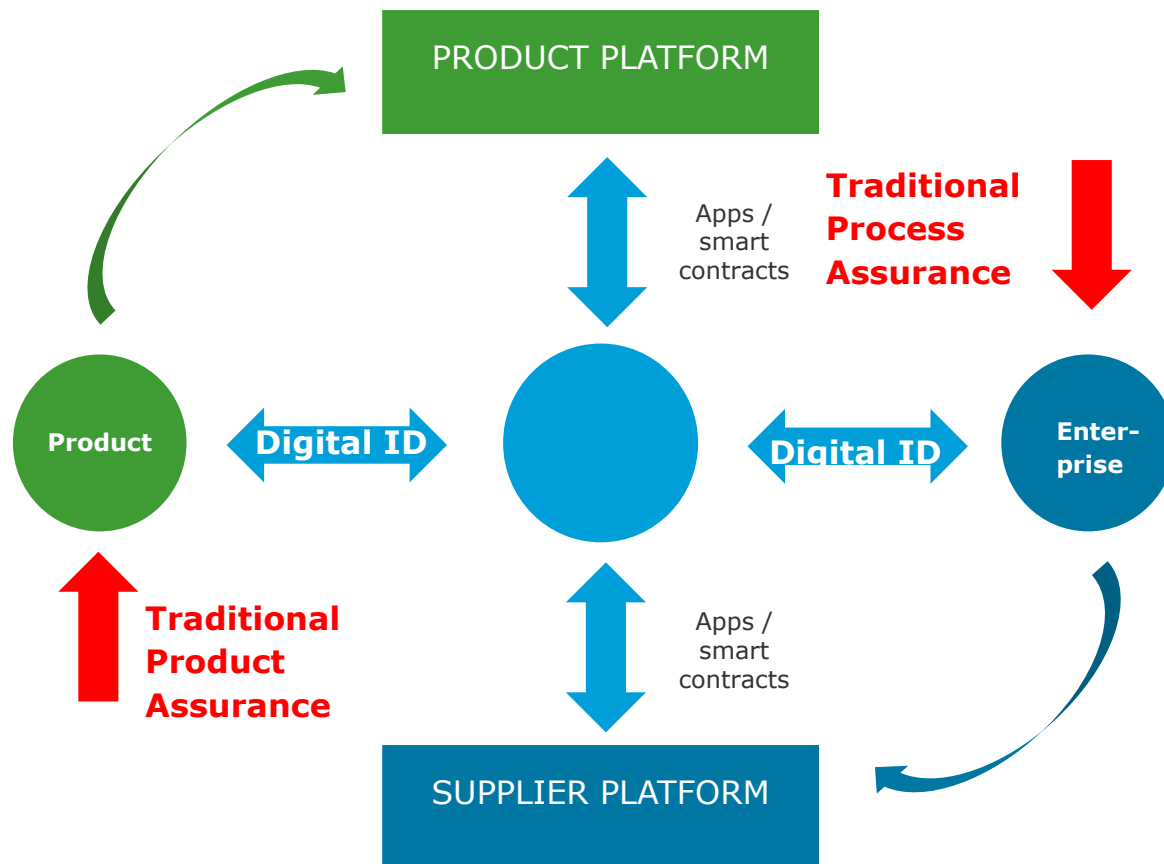


- Participants to the network use the blockchain as a **single source of truth in the supply chain**, obtaining transparency and security
- Assurance plays a prominent role as an oracle in this new ecosystem where **smart contracts** enable transaction execution
- **Digital Assurance** ensures the continuous correspondence between **Product and Digital Information**
- The added transparency allows for a total **reframing of assurance processes**, combining digital based services with field activities

Blockchain will massively impact Supply Chain Assurance



Redefined role of the Trusted Assurance Provider



- In tomorrow's supply chain ecosystems a **new dimension of Trust** will evolve: Each participant will need to ensure an accurate, effective and true provision of information, while also connecting all data to each specific product item
- We foresee a progressive shift of assurance activities **from 'Process' to 'Product'**, enabled by the possibility to 'synchronize' the information flow with the physical flow of products
- When a **Digital ID** is created, some form of 'certification and authentication' will be needed to assure that the relevant information and data is 'inherently true' – The Digital ID creation process itself may also need to be monitored or validated

Why we believe Blockchain is important



The combination of Blockchain and Digital Identity will transform traceability from a B2B tool to ensure efficiency and protect brand value into a **powerful enabler of interaction with Consumers**



This interaction enables the sharing of information and emotions around products and brands, the establishment of **long term personalized relationship** with Consumers, and the possibility to leverage on new learning about habits, behaviours, decision drivers and style

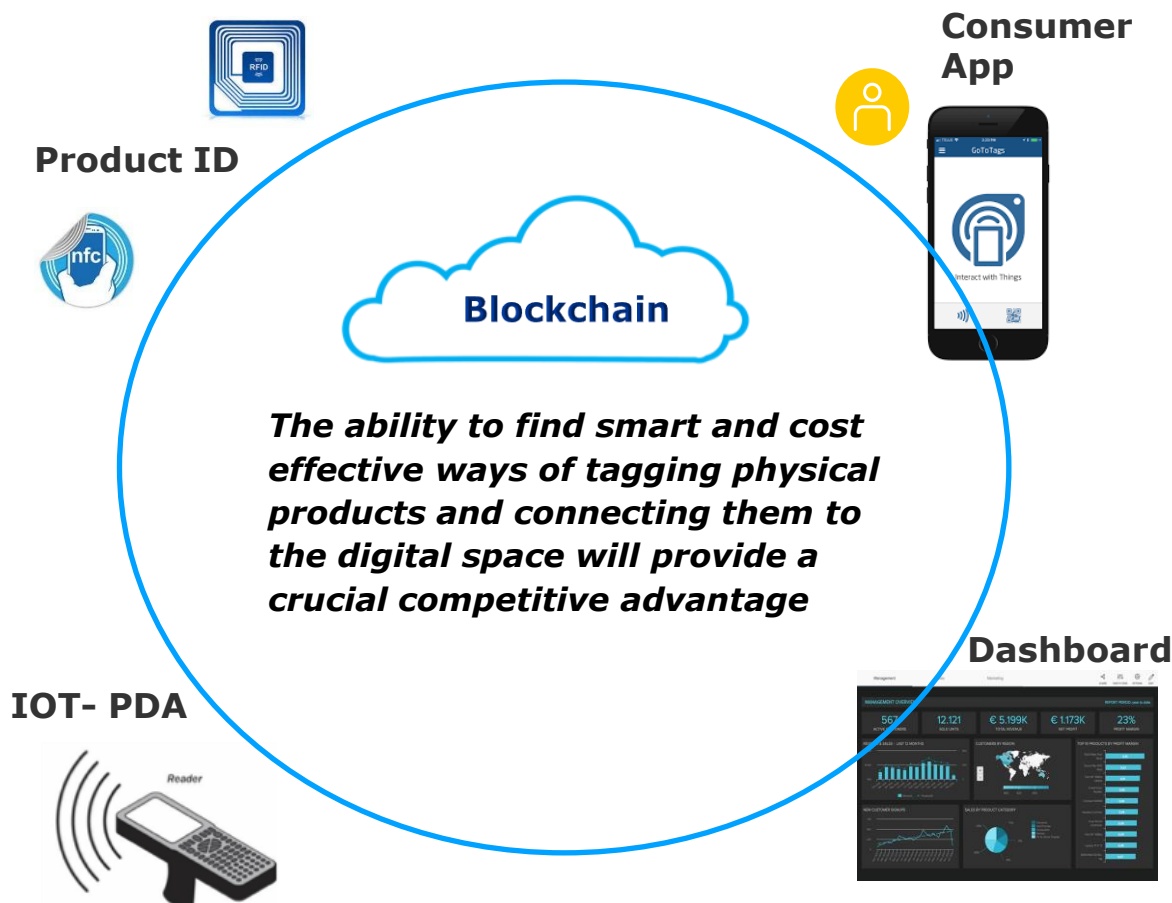


Digital Assurance will be able to satisfy the enhanced needs for Trust, by ensuring on a continuous basis the correspondence between Product and Digital Information, for the benefit of Supply Chain participants and stakeholders, all the way to end Consumers



Connecting physical products to the digital space

- When it comes to combining assurance information with unique product and/or supplier ID, it is still very early days
- Unique product identification at item level (serialisation) is today mainly considered a **compliance issue**, and marketed mainly for such purposes
- For any non-mandatory purposes linked to product authenticity and product risk management, today's solutions compete against insurance offerings, thereby **missing out on opportunities** to grow the potential markets
- Product "tagging" can roughly be divided into categories based on WHERE the ID is applied (i.e attached to the packaging, integrated into the packaging or into the product) – Innovation is ongoing in all of these categories
- It seems likely that both traditional and new technology providers will increasingly seek collaboration opportunities with **potential partners** such as global assurance players or entities in other categories with similar access to interesting customer portfolios



DNV GL is piloting a Blockchain solution for Lifecycle Management

Supervision of the entire Supply Chain

- Data of purchase and sale (stock in/out) is generated by IOT devices and automatically uploaded to DNV GL/Vechain blockchain, creating a **tamper-resistant supply chain record**
- Stronger product identity control reduces grey market risks dramatically and brings mystery shopping to next generation level, while improved management efficiency leads to reduced costs
- The dashboard analyses information across the supply chain and alerts users in case of unusual data

A state of the art anti-counterfeit solution

- **Individual products are given a Digital Identity** by means of a proprietary chip with state of the art anti cloning features, which is attached and activated during the manufacturing process
- DNV GL will perform physical and digital audit and inspections throughout the supply chain to ensure compliance to standards and stakeholders requirements
- Consumers can verify product authenticity and information by means of a smart phone application

Personalised Interactions with Consumers

- **The combination of the product chip and App enables consumers to interact with Products and Brand before, during and after a purchase**
- The App and its data enables Brand owners to establish and nurture a personalised relationship with Consumers, tailored on individual consumer habits, preferences and decision patterns
- With App data indicating when and where the consumers interact with their products, Brand owners will finally know which regions their goods are circulating to and where they are being used

Thanks!

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