

JOURNEY TO GREEN FASHION

BLOCK CHAIN, UPCYCLE & AFTER-CARE IN
A SUSTAINABLE CYCLE IN KENZO

Presented to LVMH Fashion Group
By **Bring Green**

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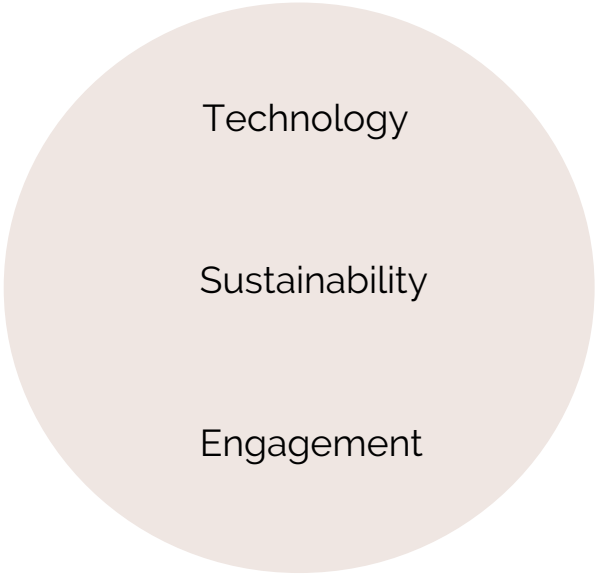


HKGCC BUSINESS CASE COMPETITION WITH LVMH FASHION GROUP

KENZO

Fashion industry consumer shifts and trends:

- 1** **Transparency** and reinforced **trust**
- 2** **Credibility** behind **sustainability** claims
- 3** **Digitalization** and **personalization** of brand's communication with customers



Importance of **targeting** Millennial and Generation Z customers

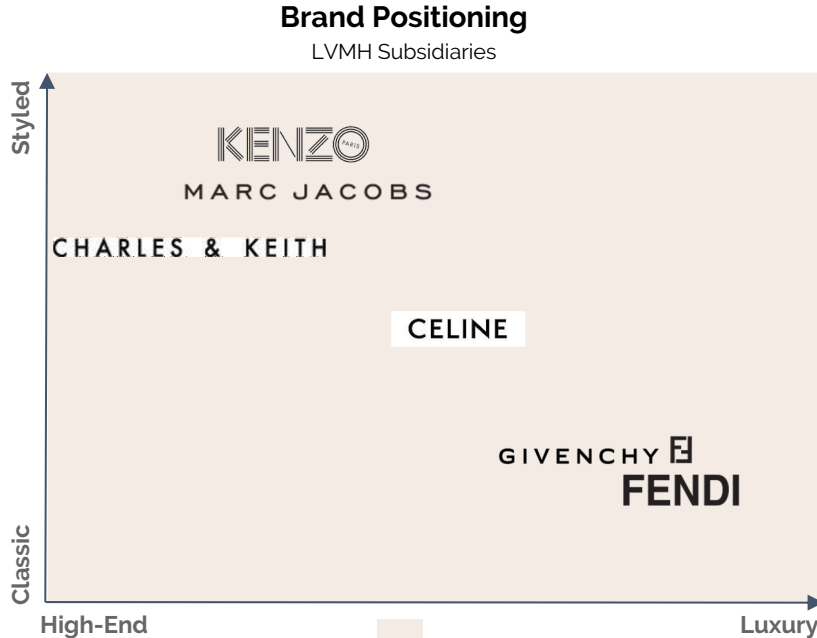
150 Billion USD
Spending Power of Gen Z in the United States

40%
Gen Z of global consumers by 2020

9 in 10 Generation Z consumers believe companies have responsibility to address sustainability issues

(The State of Fashion, McKinsey) Refer to Appendix-1 for more details

Kenzo Situation Analysis: Why Kenzo?



1 Diverse on-trend product portfolio makes Kenzo stand out from other high-end maisons

2 Kenzo's identity creates problems like having shorter product life-span due to varying designs and materials.

Refer to Appendix-2 for link

Kenzo Situation Analysis: Why Kenzo?



Kenzo's Current Initiatives

Member of BCI (Better Cotton Initiative) Since 2017

Awareness Program with Raw Material & Suppliers

Digital Pop-up Installations #NoFishNoNothing

How is this information communicated?

Were the internal practices sustainable?

Challenge: Lack of platform to communicate presale practices

Challenge: Questions on internal sustainability

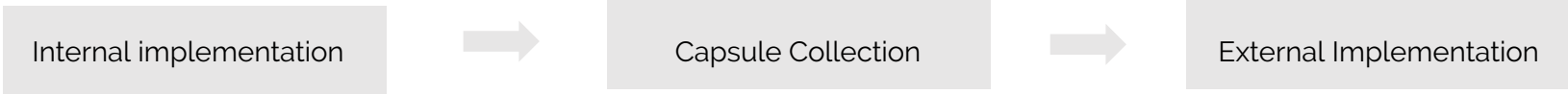
Key Question: How can Kenzo establish an internal system to advocate sustainability while increasing customer engagement?

How can Kenzo establish an internal system to advocate sustainability while increasing customer engagement?

What is blockchain and why we are using it



A single source of truth: Decentralized, open, distributed ledger that stores data in a public manner serving as proof of Kenzo's sustainability initiatives



Value

1

Transparency



2

Immutability



3

Decentralization

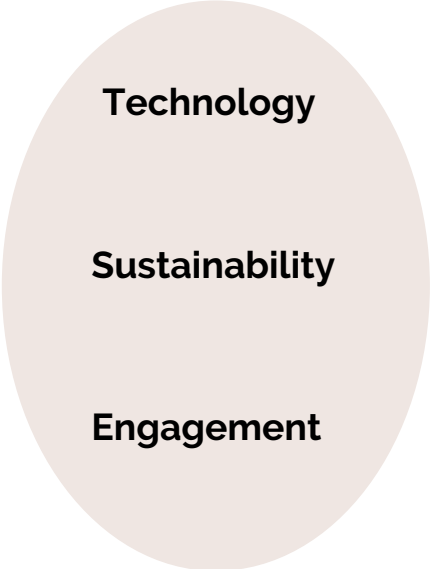


Implementing blockchain solution throughout the entire supply chain of Kenzo to create sustainability and brand value impacts by extending Kenzo's product lifecycle and establish storyline marketing approach as a unique selling point of differentiation

Blockchain solution throughout the entire supply chain to identify bottlenecks and extend Kenzo's product lifecycle

Sustainability Value

- 1) Hold suppliers and intermediaries **accountable** and clearly identify bottlenecks
- 2) Motivates Kenzo to engage in **sustainable practices**
- 3) **Engages** customers in sustainable purchasing habits and **extends product lifecycle**



Brand Value

- 1) Improve **brand image** and reinforce trust through a storyline approach
- 2) Establish Kenzo's as **sustainable pioneer** as unique selling point
- 3) Reinforce customer awareness/engagement to promote brand loyalty

Customer Journey with the implementation of blockchain solution



Implementation and purpose of blockchain in the Kenzo customer journey

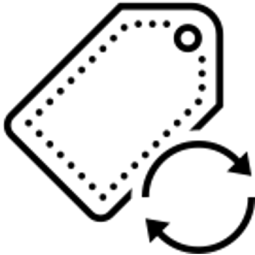
Shopping

Scan Blockchain QR Code

Purchase

After-Care

Upcycling



Blockchain educates customers and provides transparency

Storyline type of map to engage customer with the product and emphasize uniqueness of each item

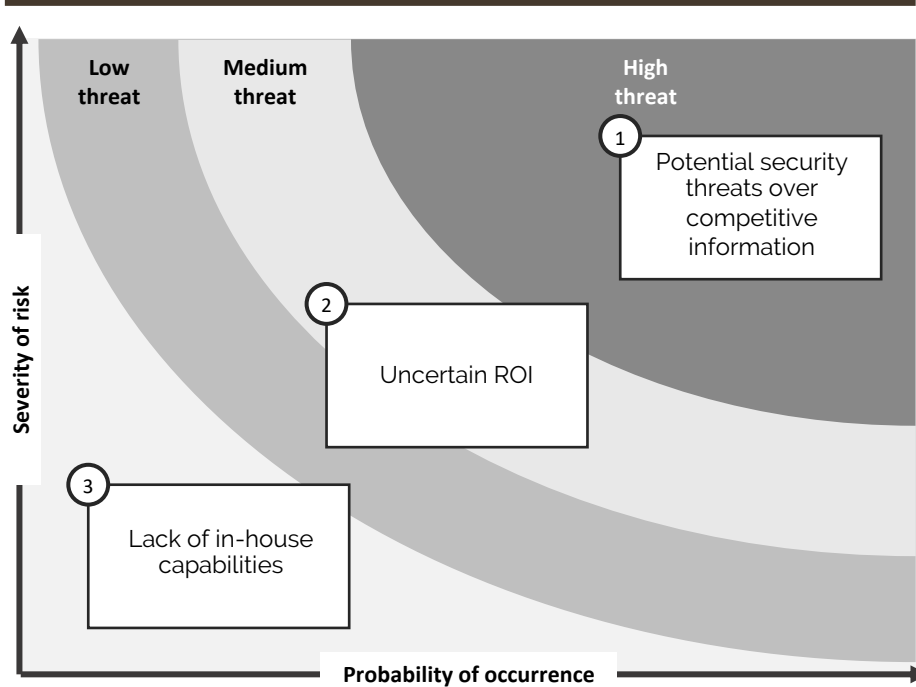
Comprehensive after-care serves to increase product life.

Helps reduce waste and engage users in beginning-to-end environmental consciousness.

Having a thought-through scenario analysis ensures stability of blockchain's strategic implementation within Kenzo



Risks



Mitigation of risks

- 1** Asymmetric Encryption: Public and private key cryptography
- 2** Brand value and marketing opportunities engage both existing and new customer bases
- 3** To apply blockchain technology to Kenzo, external parties will be invited to develop and manage the technology.

Marketing Campaign

Objective

1. To strengthen consumers' connections to products and reduce disposal
2. To establish positive brand image and increase emotional relationship with the brand
3. To increase customer loyalty and trust



Millennials and Gen Z:

They spend a lot of time on social media and constantly looking express themselves with impactful purchase



Key Opinion Leader and Celebrity:

They are well-trusted by people and possess high reach in the younger market



Reaching customers at heart:

Document the most authentic and genuine journey of our **capsule collection** to reinforce the storytelling purpose after blockchain

After-Care and Upcycling

After-Care Scheme

Improves the sustainability aftercare system

Upcycling Scheme

Provides customers with a chance to rework old items at Kenzo's stores locations



To increase product life span and reduce the need of disposal with the help of **blockchain** while enhancing the customer experience and engagement to build a long-lasting customer relationship and strengthen brand loyalty.

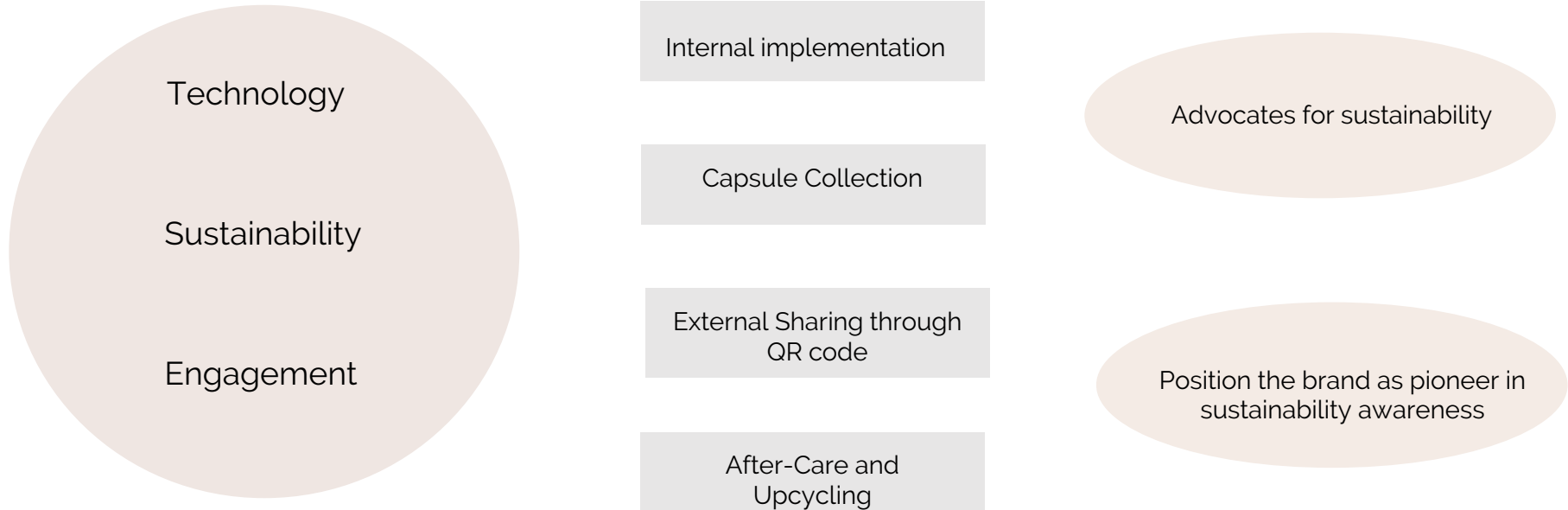


1. Brand image
2. Customer loyalty
3. First-mover advantage



1. Consumer loyalty
2. Extends product lifecycle
3. Sense of validation

How can Kenzo establish an internal system to advocate sustainability while increasing customer engagement?



APPENDIX

Objective: Leverage technological innovations to improve sustainable practices and engage customers

Situation

Lack of proof of adoption of internal sustainable practices available to customers

Lack of platform to clearly communicate sustainability initiatives

Key Question

How can Kenzo establish an internal system to advocate sustainability while increasing customer engagement?

Our Solutions

Utilizing blockchain technology to form a single source of truth to be implemented both internally and externally. Internal implementation will allow for identification of bottlenecks, suppliers and intermediaries which do not engage in sustainable practices through internal auditing and record tracing. External implementation will reinforce customer trust and educate customer on making sustainable shopping decisions which will serve to build a long lasting brand relationship. Moreso, it will enforce brand value and product uniqueness by creating a story of the product's origin. The long lasting brand relationship ties back in with the after-care and upcycling initiatives which will be authenticated using the blockchain encryption, the QR code or the NFC tag.

Our Impact

Advocates for sustainability

Position the brand as pioneer in sustainability awareness

Kenzo Situation Analysis: Why Kenzo?



Brand Positioning



SWOT Analysis

in regards to sustainable fashion

<p>Strength</p> <ul style="list-style-type: none"> • High quality materials used for the production of items • Strong brand presence & solid customer base (loyalty) • Young & fashionable target market who are apt with newly emerging trends (sustainability) 	<p>Weaknesses</p> <ul style="list-style-type: none"> • No established recycling scheme • The second hand market is not big (almost like fast fashion) due to very diversified product mix and ever-changing designs of the products • First steps of product life cycle not communicated to target customers
<p>Opportunities</p> <ul style="list-style-type: none"> • New technologies in fashion industry regarding sustainable practices • Support and guidance from LVMH resources • Raising consciousness from the key target market (the Millennials & Gen Z) regarding sustainability 	<p>Threats</p> <ul style="list-style-type: none"> • Fast emerging sustainable fashion segment • Sustainable practices are usually costly • Inter-maison competition ex) stella mccartney

In comparison to other houses under LVMH, Kenzo is more of a high-end house rather than a luxury house and has more diverse, fashionable, on-trend product portfolio and design rather than staples and classics. Kenzo's previous Creative Directors, Humberto Leon and Carol Lim, have described Kenzo's identity as: "Beyond tradition collections," "not high but wide," "mass market audience," and "spontaneity takes control." While this aspect of the brand identity makes Kenzo stand out from other high-end maisons, it also creates a problem of having shorter product life-span and difficult recycling schemes due to varying designs and materials.

Refer to Appendix-2 for link

Kenzo Situation Analysis: Why Kenzo?



Kenzo's Current Initiatives

Member of BCI (Better Cotton Initiative) Since 2017

Promotes ethical cotton production regarding child labor, habitat loss, environmental pollution and sustainable workplaces.

Awareness Program with Raw Material & Suppliers

Acquired animal and vegetal raw materials. Also established regulation compliance on banned or hazardous chemicals

Digital Pop-up Installations #NoFishNoNothing

Called attention to overfishing, pollution, and the destruction of marine life in collaboration with Blue Marine Foundation via offline and digital marketing

How is this information communicated?

Challenge: Lack of platform to communicate presale practices

Although Kenzo has claimed that their sourcing and production processes are sustainable, the customers were left with no clue in terms of where they could access this information, and furthermore, if this information is credible. This is due to Kenzo's lack of platform where the brand and customers can communicate as well as the brand can share reliable (certified) information to the customers, engage them further into the sales cycle.

Were the internal practices sustainable?

Challenge: Questions on internal sustainability

After the implementation of this project, a question remained if Kenzo has adopted any internal strategies to minimize the brand's impact on environment rather than just calling for actions from the external parties.

Key Question: How can Kenzo establish an internal system to advocate sustainability while increasing customer engagement?

Target demographic and the increasing importance of sustainability in the fashion industry



Fashion industry consumer shifts and trends:

- 1** **Digitalization** and **personalization** of brand's communication with customers
- 2** **Credibility** behind **sustainability** claims
- 3** **Transparency** and reinforced **trust**

Consumer shifts towards sustainability:

66% of all consumers more willing to pay more for sustainable goods

52 percent of Millennials agree that they always research for background information before buying, compared with **45 percent** of Gen Z consumers and **41 percent** of baby boomers.

9 in 10 Generation Z consumers believe companies have responsibility to address sustainability issues

Importance of **targeting** Millennial and Generation Z customers

(The State of Fashion, McKinsey) **350 Billion USD** more details
Millennial and Gen Z
in United States spending power

150 Billion USD
Spending Power of Gen Z in
the United States

40%
Gen Z of global
consumers by 2020

To build brand loyalty and expand to a younger target demographic Kenzo must first reinforce customer trust

Customer Journey with the implementation of blockchain solution



Implementation and purpose of blockchain in the Kenzo customer journey

Shopping

Scan Blockchain QR Code

Purchase

After-Care

Upcycling

The customer is able to view key metrics and Key Performance indicators in the tag attached to each product. The tag has a QR code and NFC tag which is a link to the Public Key to the information on the product's history.

Key metrics on carbon emissions, water usage and hours used to create the product. It also shows how much carbon and water you will be saving by purchasing the product (in comparison to industry average)

With the combination of the product quality and storytelling 2.0 made possible by the blockchain platform: customers will be compelled to purchase the product through a mixture of transparency, emphasized product uniqueness and brand engagement

The original QR code and NFC tag can be brought back to the store in case the invoice is lost and used to verify the age of the product.

Customers can choose to donate their product for future upcycling or have their product (bag, t-shirt, sweater) repurposed and redesigned to fit the ever-changing fashion trends to increase product life-span. Whether or not customers will donate or take home the upcycled item depends on the state of the product.

This is a proof of authenticity of Kenzo's commitment to sustainability.

Items shown include:
A map of the location of sourced products
Number of intermediaries
Types of primary materials

Holistic aftercare will be provided to the customers in case of any damage.

Allows Kenzo to utilize blockchain information before customer purchases the item

Storyline type of map with key information and metrics to engage customer with the product and emphasize uniqueness of each item

Comprehensive after-care serves to increase product life. Kenzo's products have a shorter life cycle due to rapidly changing fashion trends and the evolving designs of the Maison.

Upcycling gives you the option to add value to the product and increase its product life. This helps reduce waste and engage users in beginning-to-end environmental consciousness.

Educates customers and provides transparency

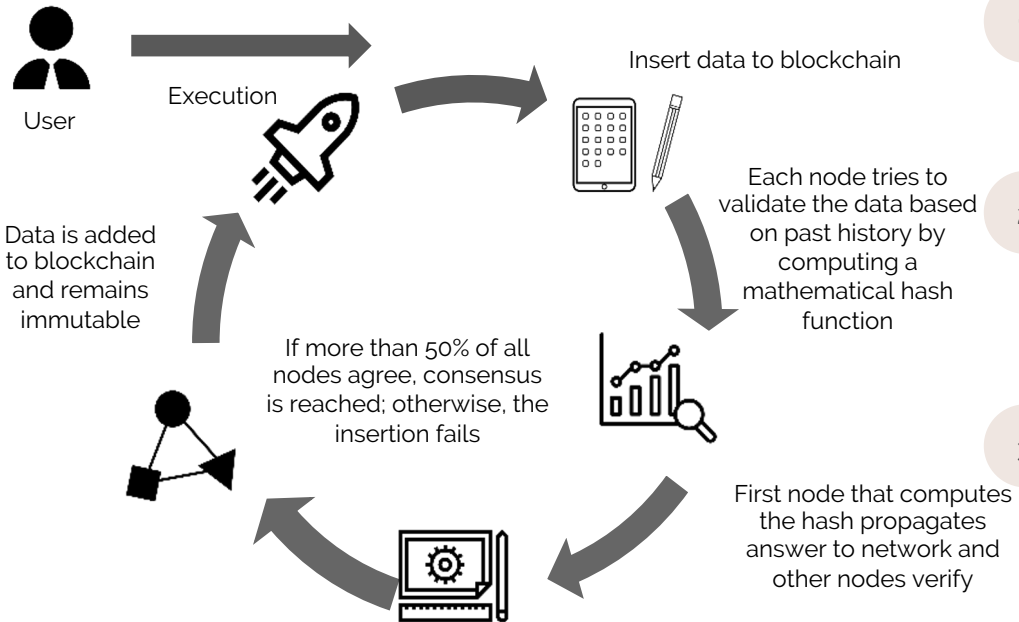
What is blockchain and why we are using it



Definition

A single source of truth: Decentralized, open, distributed ledger that stores data in a public manner serving as proof of Kenzo's sustainability initiatives

A normal blockchain



Key Advantages

- 1 Transparency:** blockchain stores data publicly, giving full traceability in supply chain. This provides wide variety of data to our customers in which they can base their **sustainable purchase** on.
- 2 Immutability:** unchangeable data ensures validity which increases the credibility of information for customers to rely on. This can help increase the **customer engagement and trust** by reducing uncertainties.
- 3 Decentralization:** increases participation of network and prevents malicious cyber-attacks.

(How blockchains could change the world, Mckinsey & Company)

Solution overview sustainability and business value



Sustainability Impact	Brand Value Impact	
Solution	Implementing blockchain solution throughout the entire supply chain of Kenzo matched with extending Kenzo's product lifecycle through holistic aftercare and upcycling	
Targeted Customers	All customers with emphasis on environmentally conscious customer groups such as millennials and Generation Z demographics	
Value	Sustainability impact	Customer Value
	<ol style="list-style-type: none"> 1) Allows Kenzo to hold suppliers and intermediaries accountable and clearly identify bottlenecks in the process of sustainability auditing 2) Motivates Kenzo to engage in sustainable practices 3) Engages customers in committing to sustainable purchasing habits and extending product lifecycle 	<ol style="list-style-type: none"> 1) Improve brand image and reinforce trust through a storyline approach available to customers through the QR code 2) Establish Kenzo's sustainable status in a competitive fashion industry as unique selling point of differentiation 3) Reinforce customer awareness/engagement to promote brand loyalty

Normal Databases vs Blockchain



Decentralization

Transparency

Immutability

Normal Databases

If the centre authority controlling the blockchain suffers from power outage or gets hacked, then the entire system fails, making normal databases vulnerable to external failures.

Databases are usually internal and not released to the public. Hence, there is hardly any transparency into the type and content of data that is stored, forming lack of consumer trust

Data operators can easily modify data entries even long after the data is added. They can manipulate the data according to their wishes, so there is no way to ensure data validity within the network

Blockchain

Peer-to-peer network leverages the entire network power to other computers, hence there is no single point of attack. This can ensure data to be safely protected within the blockchain.

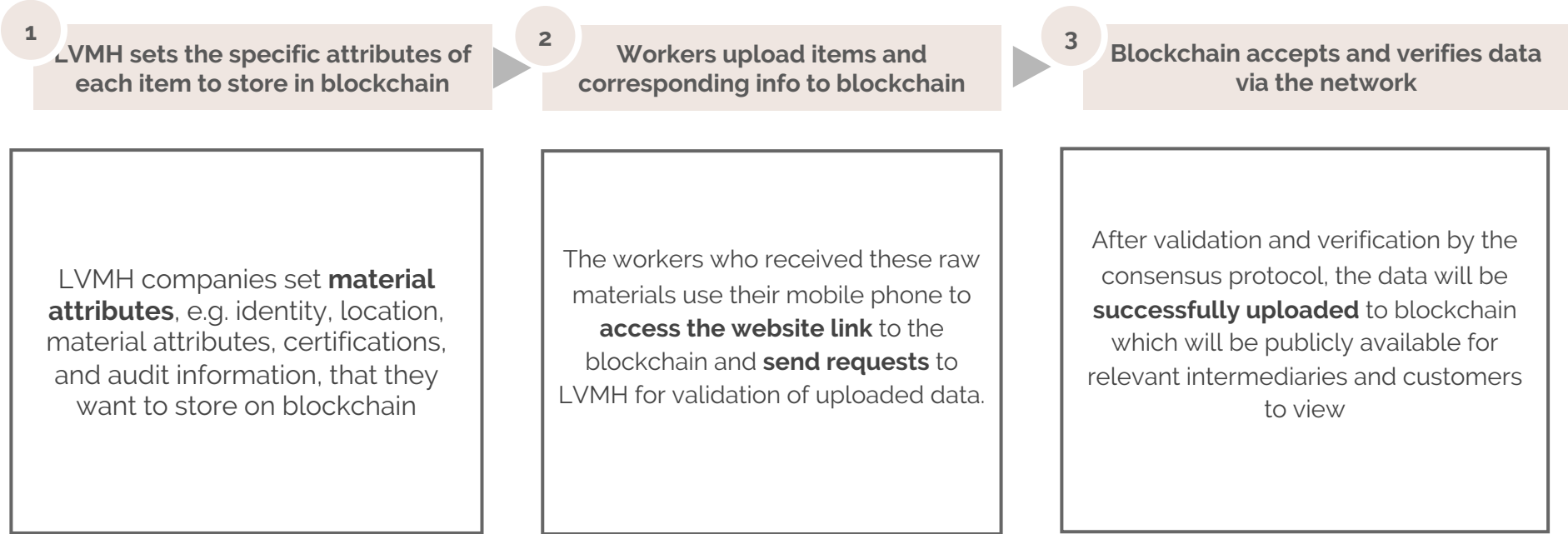
The nature of the blockchain is fully transparent that everybody can view

Creates radical transparency through a trust mechanism enabled by all members of the chain making the entity of the business footprint auditable without disclosing competitive advantage

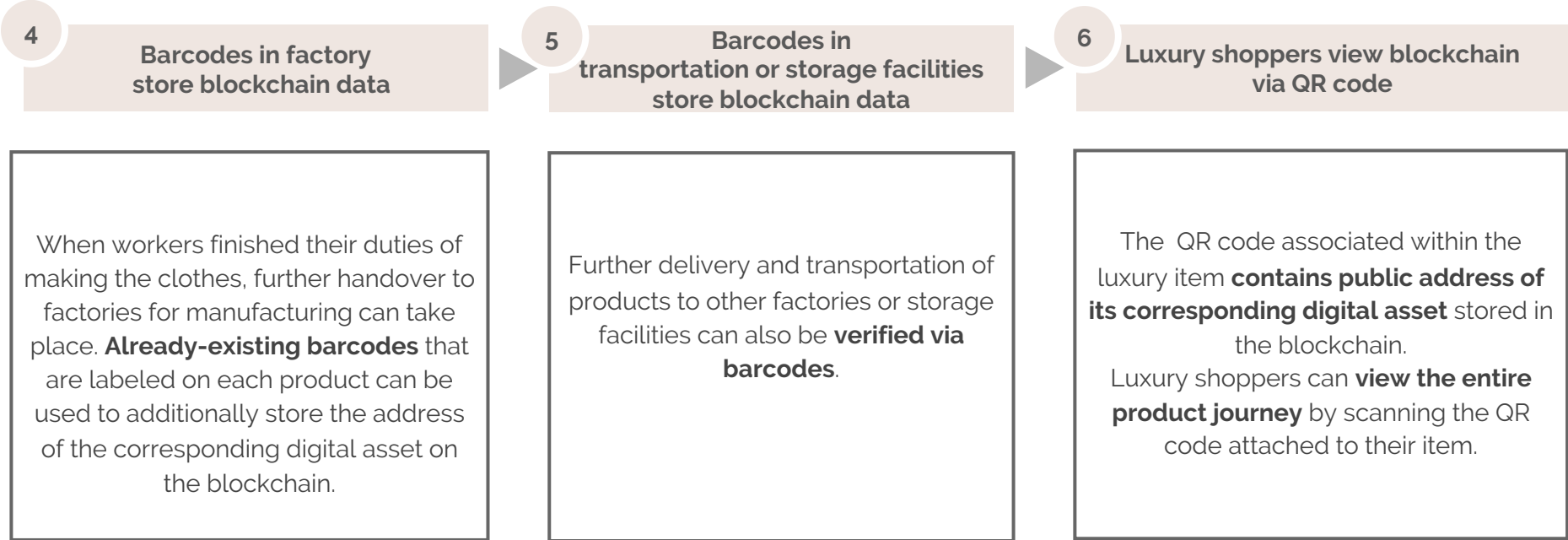
Cannot change data once added, ensuring 100% accurate and valid data. This will promote true and transparent data being stored, boosting consumer trust that is important.

(Blockchain in Logistics and Supply Chain: Trick or Treat?, HICL)

Flow of blockchain implementation



Flow of blockchain implementation

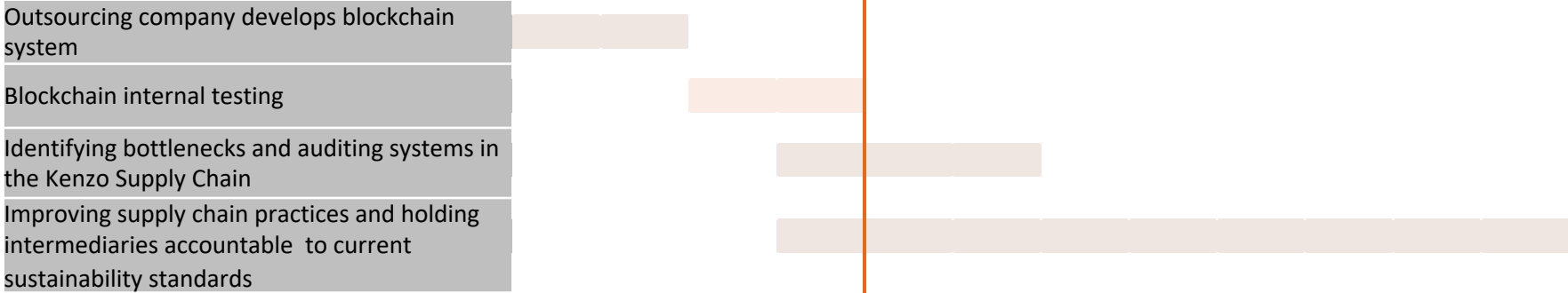


Implementation Timeline

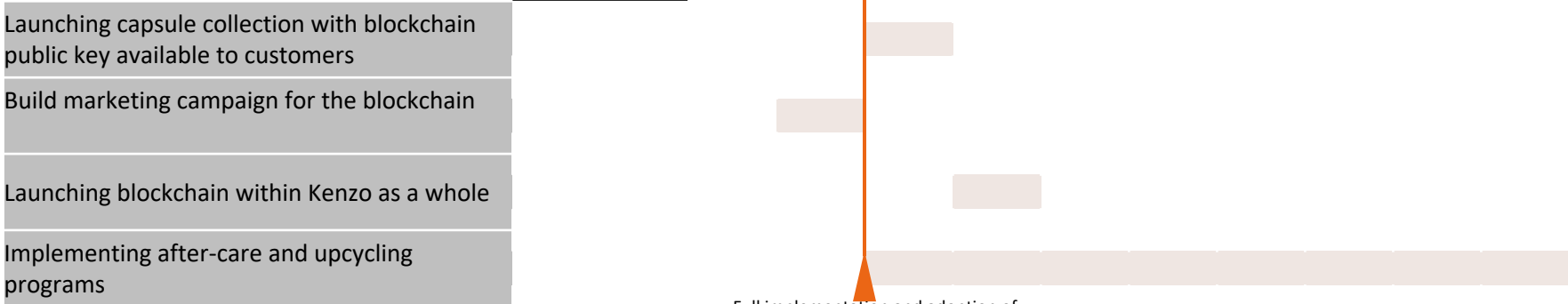


2020				2021				2022			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

Blockchain Internal Implementation



Blockchain External Implementation

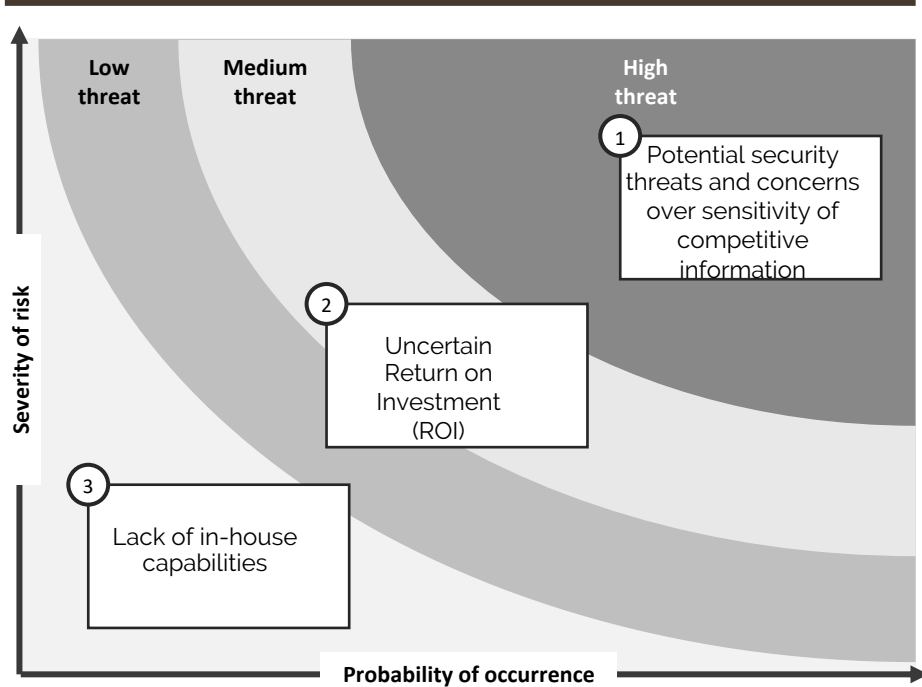


Full implementation and adoption of blockchain internally complete

Having a thought-through scenario analysis ensures stability of blockchain's strategic implementation within Kenzo



Risks



Mitigation of risks

- 1 Public and private key cryptography allow to make distinction between type of information available to customers. A public key is widely distributed, whereas the private key is kept within the Kenzo team.
- 2 While initial return of investments will be low financially, brand value and marketing opportunities brought with the implementation will engage both existing and new customer bases
- 3 The implementation of blockchain is feasible due to LVMH's existing initiatives with AURA in the parfums market. To apply blockchain technology to Kenzo, external parties will be invited to develop and manage the technology. Moreso, an implementation trial will be created by launching the blockchain with a capsule collection to mitigate risks and identify key issues if any arise.

Objective

Ensuring **privacy** for LVMH and its customers while **maintaining sufficient transparency** in its supply chain

Asymmetric Encryption

- Identities are displayed online but in the form of **public addresses** that are encrypted into **random strings of characters** via **hash function** (a complex mathematical function)
- Our blockchain system adopts an **additional layer of security** through encryption of identities using **asymmetric cryptography** (public key and private key)

Implementation

- **Public key** is stored within the QR code of each luxury item which can be used to view only the **encryption-free transactions**
- **Private key** is given to LVMH retail-store operators so they can view more **detailed information and specific identities**

Impact

- Customers and LVMH competitors can view **limited but sufficient** information
- LVMH itself have **full transparency and control** of their own data

Key Resources of Blockchain Development: Is it Cost-effective to Develop? Why Outsource?



Example

City	Annual Salary	Market Dynamic
United States	120K-158K	<ul style="list-style-type: none">1. Digital enterprises are interested in blockchains' capability2. Salary for developers is the highest in the US3. Demand for Blockchain developer is growing



As the demand for blockchain technology continues to increase, developers' wages are predicted to increase. It will become more costly to develop blockchain in-house



Key Resources

- 1 The cost of hiring blockchain developers and other supporting functions to implement, integrate and monitor the software
- 2 Time and time value of money of recruiting talents, identifying needs and performing testings
- 3 Skills and understanding about blockchain



The Optimal Solution

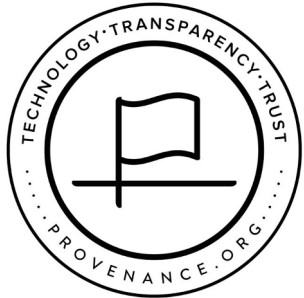
To use offshore or nearshore software development services to cut blockchain development costs
Software Outsourcing

Blockchain Outsourcing Options



Key Objective

To cut blockchain development cost and acquire professional advisory from specialists who have industrial experience



EUR
799
per
month

Provenance

To build trust with transparency by providing **workshops** to enterprises, **system design** that would cater to client's needs and existing infrastructure, **content creation** to facilitate storytelling and **intelligence** to drive reflections and improvements.



Case to
case
basis

ConsenSys

It has partnered up with LVMH on the **AURA** project that specifically targets **Louis Vuitton** and the **Parfum category**. With most of the benefits similar to Provenance, it highlighted that certification and claims are verified by **third-party attestors**, allowing any information to be updated and validated in **real-time** to strength trust.



Case to
case
basis

PegaSys

PegaSys, a company of ConsenSys, is a commercially licensed Ethereum platform which provides additional **enterprise features** such as **security configurations**, **event streaming** and **advanced monitoring** aside from the basic benefits of blockchain.

Cost Prediction Based on the Industry Benchmark



The following chart shows the approximate cost that would be induced over 4 sales years if Kenzo were to adopt the blockchain technology:

Cost (US\$)	Year 1	Year 2	Year 3	Year 4	
Initial Platform Build	50000				
Onboarding/Deployment	3400	360	350	130	
Cloud Cost	8800	8400	8000	7500	
Maintenance Cost	1650	1640	1630	1620	
Monitoring Costs	1940	1930	1870	1870	
Consulting Fee	12000	12000	12000	12000	
Total Estimated Cost Per Year	65790	24330	23850	23120	137090

It is predicted that the starting year will induce the highest cost due to the fee for the initial building of blockchain platform. This stage includes setting up the QR code and distribution system if Kenzo chooses to share the information with the customer this way.

Although the initial cost could be high, the cost distribution shows that over the period of time, the estimated cost decreases. This mean that the blockchain expenses will take up less and less of profit margin as time passes from the launch.

However, it is important to stress that this strategy is intended to **1) improve brand image, 2) establish Kenzo's sustainable status in a competitive fashion industry 3) reinforce customer awareness/engagement**. Since increasing profit is not the primary goal of this project, Kenzo should only aim to maintain current profit margin or even to sacrifice. Increase in sales and profit should be a long-term, secondary goal that comes in hand with stronger customer loyalty and induction of new customer segment (environmentally conscious consumer group)

Source: EY group

Objective

1. To strengthen consumers' connections to products and reduce disposal
2. To establish positive brand image and increase emotional relationship with the brand
3. To increase customer loyalty and trust

TARGET GROUP:

Millennial and Generation Z are aiming at achieving their needs for self-actualisation. They are keen to gain emotional rewards and express themselves by supporting good causes. They value beyond the craftsmanship of products, but also how the brand make them feel

Implementation

Invite key opinion leaders and celebrities on social media platforms to get involve in making video contents that do not merely focus of product offerings, but to document the most authentic and genuine journey of our capsule collection to reinforce the storytelling purpose after blockchain

KEY PARTNER:



Research

- Emotionally connected consumers are 52% more valuable to a brand than those who are just satisfied (Otley 2016)
- Emotionally attached consumers are a brand's highly profitable market segment (Rossiter and Bellman 2012)
- More than 55% of their respondents were more likely to buy the product if they loved the brand story

After-Care Scheme

Improves the sustainability aftercare system for Kenzo's post life product to reduce landfill, waste, and non eco-friendly practices.

Upcycling Scheme

Provides customers with a chance to rework old items at Kenzo's store Locations by professionals. Provides incentive for customers to keep their old items with extended product life span.



Due to very diversified product mix and ever-changing designs of the product the Kenzo product's lifespan is short therefore there is a need to increase product life span and reduce the need of disposal while enhancing the customer experience and engagement to build a long-lasting customer relationship and strengthen brand loyalty.

Current Experience

1. Offers both in-store and shipped repairs under case-to-case basis
2. Will not repair items if they have been repaired by a third-party
3. Offers one year warranty, which is not guaranteed

Implementation

1. Use of **blockchain** technology for the estimation of remaining lifespan of the product after repairs and proof of product authenticity
2. Guaranteed 3-year warranty, which is higher than industry average

Advantages

1. Brand image: timeless and beyond season
2. Customer loyalty
3. First-mover advantage

Requirements

1. The item has to be authentic
2. The item has to be over 3 years old
3. The item can only be reworked at the official Kenzo locations

Quality Control

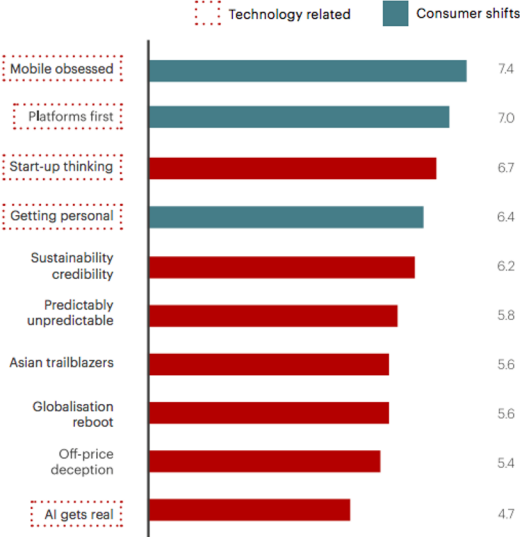
1. Use of **blockchain** for the verification of authenticity & life of the product
2. Only accept products that have been modified/repaired at Kenzo locations which can be double-checked using blockchain public key

Advantages

1. Consumer loyalty
2. Extends product lifecycle and reduces landfill
3. Unique item
4. Sense of validation (reward for loyal customer)

Executives generally viewed consumer shifts enabled by technology as the most important trends in 2018

Exhibit 2:
Perceived impact of 2018 trends
 Average rating of respondents (1-10)



Question: Looking back at 2018 so far, how much have the following trends impacted your business?

Source: BoF-McKinsey State of Fashion Survey

Volatility, uncertainty and shifts in the global economy is still foreseen as the industry's #1 challenge

Exhibit 3:
Main challenges for year ahead

	2017	2018	2019
1 st	Dealing with volatility, uncertainty and shifts in the global economy	Dealing with volatility, uncertainty and shifts in the global economy	Dealing with volatility, uncertainty and shifts in the global economy 15% of respondents
2 nd	Sales and profitability growth	Competition from online and omnichannel	Competition from online and omnichannel 13% of respondents
3 rd	Competition from online and pure-play players	Value chain improvement and digitalisation	Speed of changing consumer preferences 7% of respondents
4 th	Supply chain improvement	Decreasing foot traffic and offline retailing pressure	Need to achieve greater sustainability and transparency 7% of respondents

Question: What do you think will be the single biggest challenge for the fashion industry next year?

Source: BoF-McKinsey State of Fashion Survey

The views of Gen Z and millennial consumers are critical. Together, these cohorts represent around \$350 billion of spending power in the US alone (~\$150 billion spent by Gen Z⁵⁴ and ~\$200 billion by millennials)⁵⁵ and Gen Z alone will account for 40 percent of global consumers by 2020. But concern over environmental and social issues is not restricted to younger consumers.

Kenzo brand identity: <https://www.vogue.co.uk/gallery/kenzo-interview-humberto-leon-and-carol-lim>

Freelance Blockchain Developer Hourly Rate <https://www.codementor.io/freelance-rates/blockchain-developers>

Provenance <https://www.provenance.org/business/platform>

ConsenSys <https://consensys.net/solutions/>

PegaSys <https://pegasys.tech/>

Storytelling in marketing: <https://www.mckinsey.com/featured-insights/innovation-and-growth/telling-a-good-innovation-story>

Emotional branding speaks to consumer's heart: the case of fashion brands: <https://link.springer.com/article/10.1186/s40691-018-0164-y>

Basics of Blockchain, A paper from Hamburg International Conference of Logistics Conference (HICL),

https://tore.tuhh.de/bitstream/11420/1447/1/petersen_hackius_blockchain_in_scm_and_logistics_hicl_2017.pdf

How Blockchain works, McKinsey & Company

<https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/how-blockchains-could-change-the-world>

Total Cost of Owning Block Chain Solutions, EY Group [https://www.ey.com/Publication/vwLUAssets/ey-total-cost-of-ownership-for-blockchain-solutions/\\$File/ey-total-cost-of-ownership-for-blockchain-solutions.pdf](https://www.ey.com/Publication/vwLUAssets/ey-total-cost-of-ownership-for-blockchain-solutions/$File/ey-total-cost-of-ownership-for-blockchain-solutions.pdf)

Risk Analysis and Cybersecurity

https://www2.deloitte.com/content/dam/Deloitte/se/Documents/risk/DI_2019-global-blockchain-survey.pdf