



Emerging Risks Report

2022

Emerging Risks

The main emerging risks identified by the Company are those that lead to the possible disintermediation of the acquiring products, in the long term, or that significantly affect the continuity and security of its business

For this reason, in order to mitigate such threats and identify emerging business risks, we have a specific process for monitoring and managing emerging risks, based on benchmarks and market best practices.

An emerging risk may in fact become a corporate risk, and be monitored as such, or it may be dismissed as unrepresentative to the Company as understanding of its behavior increases. The tendency is that an emerging risk "evolves" from longterm to medium-term, and consequently to short-term, being absorbed as a de facto corporate risk or discarded.



IDENTIFY

Observe the factors that **influence** or **may influence the future of the business**:

- Macroeconomic;
- Environmental and climate;
- Social;
- Geopoliticians;
- Technological;
- Regulatory.

Sources used as reference:

- Global risk report issued annually by the World Economic Forum;
- Reports from reputable consulting firms in the market;
- Reports from companies and portals specialized in risk management;
- Reports issued by the Basel Committee.



EVALUATE

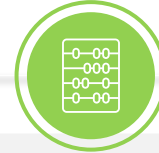
Classify the level of impact as follows:

- **Low:** no impact on Cielo's business or strategy;
- **Medium:** indirect impact on Cielo's business, as it may influence the business or strategy of its non-critical suppliers;
- **High:** indirect impact on Cielo's business, as it may influence the business or strategy of its critical suppliers;
- **Very high:** direct impact on Cielo's business or strategy.

Classify the materialization

horizon:

- (i) short** (up to 3 years),
- (ii) medium** (from 3 to 5 years) and
- (iii) long** (over 5 years).



MONITOR

Monitor the risks identified **through reliable sources of information** for updates that may influence the level of impact or the deadline for materialization.

At least annually, the **risks** must be **reassessed** considering:

- **Company's strategic** plan;
- Change in the risk **materialization period**;
- Review of the **impact attributed** to the risk;
- Review of the **prioritization assigned** to the risk.



REPORT

- Communicate to the **Board of Executive** and the **Risk Committee** about the emerging risks identified and their impact and timeline for materialization.
- Risks listed as priorities are published in a **public report** on the Sustainability Website and referenced in the **Reference Form**.

**Popularization of
unregulated
currencies
(cryptocurrencies) and
decentralization of
central bank**

CONTEXT AND IMPACT

With the popularization of digital media and the growing technological development that allows more people to have access to the internet, payment in paper money has become rarer and the subject of discussion in several countries. In Brazil, this context gained strength through the PIX electronic payment system, launched by the Central Bank (Bacen) in 2020.

Trends indicate that in the future global economies will mostly prioritize card payments, payments through electronic means or through cryptocurrencies (digital currencies).

In 2021, the Central Bank of Sweden began testing its cryptocurrency (e-krona) as a cash complement, allowing users to make payments, deposits and withdrawals through a mobile app. The United States Federal Reserve System (“Federal Reserve”) included in its work plan for 2022 the discussion regarding the supervision of the cryptocurrency market.

CONTEXT AND IMPACT

The popularization of digital currencies issued without backing, regulation and enforcement can bring a systemic risk to all market participants. Since Cielo acts as a platform for payment transactions, the eventual increase in the use of payments using digital currencies (unregulated) in place of “traditional” payment methods (regulated currencies), could impact the company's business model.

If the stability and solvency of private institutions that issue and control the issuance of digital currencies are not observed and controlled, in the event of these institutions' inability to honor their obligations (bankruptcy), a global economic crisis is possible.

CONTEXT AND IMPACT

Considering that Cielo operates in the commercial base of multisector of the economy, an economic crisis scenario would potentially generate a retraction of consumption activities, which could have an impact on the company's economic and financial results. Additionally, we can mention as a threat to Cielo the use of means of payment that exclude Cielo from the flow of payments.

This risk and, at the same time, opportunity demonstrate that the business model of the entire financial and payment market will need changes to be more dynamic, intelligent, and secure.

Cielo has in place an annual strategic planning cycle: a mechanism used to assess risks and opportunities for the Company, and which aims to define the Company's business strategies, aiming at the continuity of the business and the creation of long-term value.

The following activities are included within the strategic planning cycle:

- Assessing market trends;
- Assessing regulatory and technological changes;
- Mapping the strategic position of Cielo and its competitors
- Reviewing the strategic ambition;
- Identification of priority segments of action;
- Defining strategic initiatives to be developed by the Company;
- Identifying skills needed to implement the strategy; and
- Other aspects considering the payments market, the competitive environment and the economy as a whole.



Quantum Computing

CONTEXT AND IMPACT

The possibilities generated by quantum computing open a new horizon for technological development and allow us to envision a future with computers capable of solving more complex tasks in increasingly shorter times.

Quantum computers will demonstrate an advantage over classical computers in solving a variety of computational and modeling problems. Some issues may become treatable for the first time, enabling new functionality and presenting new risks to conventional security measures.

CONTEXT AND IMPACT

Although quantum computing will bring new opportunities and make it possible to solve problems in an agile way, there is a possibility that, in the future, quantum cyber-attacks will be able to break complex cryptographic keys in a short time when compared to classical computing, making the cyber environment, privacy and information security are extremely vulnerable.

However, currently this technology is quite difficult to replicate due to the need for very specific environmental conditions for data processing to take place correctly.

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