



From POS provider to tech innovator



Open Finance is changing the way people use and move money. Its goals - to prompt innovation, increase competitiveness and help businesses/consumers better understand and utilise their finances – are also key objectives of Cielo, Brazil's leading electronic payment provider.

Alongside these objectives, Cielo wanted to transform itself from a simple point of sale (POS) payment provider to a widely-recognised tech facilitator and innovator. To do so, in 2014 the company moved onto an API Management platform, supported by API specialist firm, Sensedia.

Since then, Cielo has gone from strength to strength; at its core an Open Innovation strategy with projects delivering change at an unprecedented rate.

The projects

Cielo first changed its business model and architecture supporting online solutions. This included programming languages, adopting microservices and APIs, cloud-data processing, using big data providers, rolling out developer apps and ensuring teams could work within a more agile environment.

Its teams developed a business platform to enhance the digital end-to-end customer experience, using analytics and big data to support informed decision-making, helping customers predict sales figures and trends. Portable machines with QR code reading and

NFC technology, intelligent terminals and new payment and transfer solutions were introduced and Cielo provided white-label technology for brands with digital wallets, such as Bitz and Bradesco.

Solutions included:

- **Superlink** – for customer's selling goods without a website. Partnered with a logistics company, Cielo delivers ordered goods within 24 hours
- **Checkout Cielo** – adds a payment page to customers' websites
- **Cielo e-commerce API** – for websites/apps with transaction analysis, support features and data intelligence
- **Promo** – systems to create events, gifts, discounts and loyalty programmes
- **Cielo Management** – an online sales app with predictive sales and receipt-tracking functions
- **Cielo Pay** – a digital wallet app focused on a 'long tail' audience, performing all transactions, including debit card issue, via a single application
- **Lighthouse** – analyses activity within a users' peer group, giving insights into customers' income profiles, purchasing behaviour and sales patterns
- **Cielo store** – personalised apps offering: digital web tools, sector specific support, PD Vend (management tracking), POS control tools, Finder (tracking Cielo POS equipment) and media/sales support.

Cielo stats

- 6.9 billion transactions – around 15% of Brazilian householders – captured every year
- Accounts for 9% of Brazil's GDP
- Covers 99% of Brazil's territories
- 100% availability
- Technical capacity to support 14,000 sales per second
- 100% of sales monitored 24/7
- Around 50% of Brazil's online businesses use a Cielo e-commerce solution
- Has capacity to support 8 x the volume of Brazilian e-commerce transactions
- Uses AI system with machine learning and best anti-fraud tool in the market

Cielo also used in-house teams to run;

- **Innovation labs** - developing proof of concept, testing new tech hypotheses, implementing scalable solutions
- **Open innovation programmes** - developing added-value services with senior management teams mentoring start-ups (140+ registrations from Brazil, Portugal and Costa Rica) and hosting hackathons/developer meetings
- Internal tech content validation.

Developer portal

Having introduced external REST APIs in 2015, Cielo now has a portal with over 15,000 external developers integrating their apps and products. Out of the 60+ APIs in production, 10 are openly documented and include ones for:

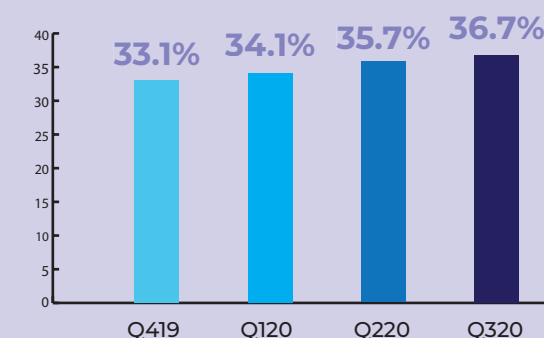
- **E-commerce**
- **QR Code payments**
- **Omni-channel payments**
- **A promotions platform**
- **A LIO smart terminal (integrated to a LIO platform)**

Pandemic pressure

When Covid-19 took hold, Cielo's innovation supported customers. During 2020, the company reported a 45% increase in e-commerce revenue, a 1000% increase in QR code payments via Cielo Pay (52 million transactions between March and August 2020) and a 300% increase in demand for Superlink.

Cielo also developed QR codes so its machines could take payments from people receiving emergency Government aid (instead of them having to go to banks to transfer money). Between May and November, **4.5 million transactions per month were recorded.**

Increase in SME income contribution



Future innovation

Cielo is partnering Facebook in its new WhatsApp payment platform, set to trial in Brazil this year, and there are plans to introduce a digital currency, white-label platforms for accounts and wallets, new credit products, more value-added services and innovation events.

Today Sensedia manages and runs:

- Cielo's SaaS API Management platform
- The developer experience – via a dedicated team
- An API monitoring service
- API exposure and microservices development consultancy services.

Mission accomplished when it comes to becoming a widely-recognised tech facilitator and innovator.

Cielo API use

- 15,000 registered external developers
- 60 APIs in production
- 10 freely-documented in open portal
- 300 partners using APIs

Sensedia

Sensedia has extensive experience in helping financial services providers develop and implement online solutions that enable them to thrive in an Open Finance/Open Banking environment. With offices in the UK, Brazil and Peru, Sensedia is recognised by its peers as a strong performer and visionary.

Find out more about Sensedia and Cielo

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