



Università
Ca' Foscari
Venezia

DIGITAL FINANCE

DIGITAL PAYMENTS, CRYPTO ASSETS AND SMART CONTRACTS

Lecture for the Master Course of Science in Business Administration “Innovation in Banking and Digital Finance”
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Avv. Roberto Ferretti

Adjunct professor of Business and Digital Law at the Ca' Foscari University of Venice
Partner at Annunziata&Conso

roberto.ferretti@unive.it

<https://www.linkedin.com/in/roberto-ferretti-7057991>

THE FOUR PILLARS OF THE 2020 RETAIL PAYMENTS STRATEGY



Pillar 1: Increasingly digital and instant payment solutions with pan-European reach



Pillar 2: Innovative and competitive retail payments market



Pillar 3: Efficient and interoperable retail payment systems and other support infrastructures



Pillar 4: Efficient international payments, including remittance

THE 2023 FINANCIAL DATA ACCESS AND PAYMENTS PACKAGE

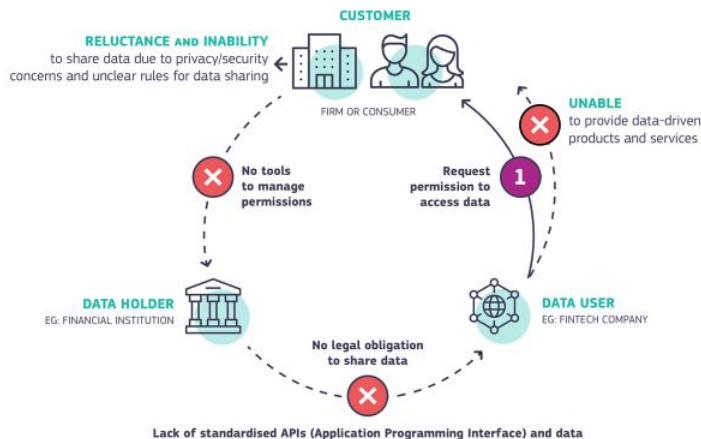
The
Commission
has
proposed
two sets of
measures:

Revision of the Payment Services Directive (PSD2)

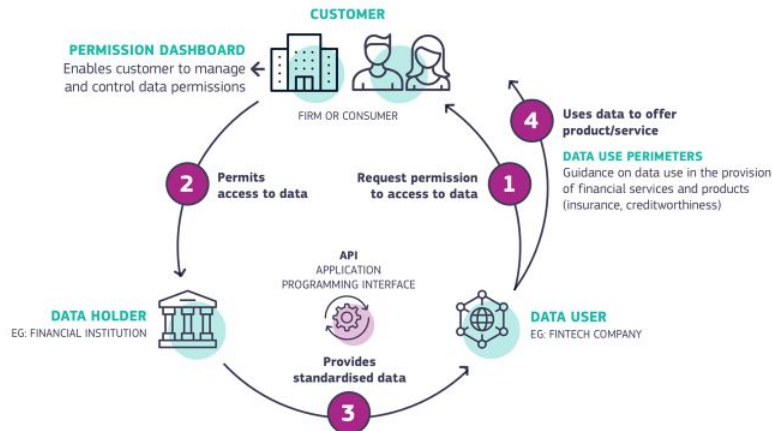
Legislative proposal for a framework for Financial Data Access

LEGISLATIVE PROPOSAL FOR A FRAMEWORK FOR FINANCIAL DATA ACCESS. THE ISSUES AND THE DESIRED OUTCOME

The issues



The desired outcome



WHAT IS THE AIM OF THE REGULATION?

- The MiCAR ([regulation \(EU\) 2023/1114](#)) establishes uniform rules for issuers of crypto-assets not regulated by other EU financial services acts and for providers of services in relation to such crypto-assets (crypto-asset service providers)
- The rules cover:
 - transparency and disclosure requirements for the issuing, offering to the public and admitting of crypto-assets to a trading platform
 - the authorisation and supervision of crypto-asset service providers and issuers of asset-referenced and electronic money tokens
 - the operation, organisation and governance of the issuers and crypto-asset service providers
 - protection for holders of crypto-assets and clients of service providers
 - measures to prevent insider dealing, unlawful disclosure of inside information and market manipulation

SMART CONTRACTS SOME EXAMPLES

■ Real Estate

- **Fractional Ownership:** Smart contracts can enable fractional ownership of properties by tokenizing them. This allows multiple investors to purchase tokens representing portions of the property, facilitating shared ownership and reducing barriers to investment
- **Automated Property Transfers:** Smart contracts can manage property sales by including terms like price and closing date. Once conditions are met, ownership is automatically transferred, eliminating the need for intermediaries like escrow services

■ Supply Chain Management

- **Counterfeit Prevention:** Platforms like Datahash use smart contracts to track products, helping prevent counterfeiting in industries such as wine
- **Inventory Management:** Smart contracts can automate inventory tracking and payment processes throughout the supply chain, ensuring real-time data updates and efficient transaction processing

SOME EXAMPLES (CONT'D)

- Financial Services

- **Decentralised Lending:** Smart contracts power decentralised lending platforms, allowing peer-to-peer lending without traditional intermediaries
- **Automated Insurance:** Claims: Smart contracts can verify documentation and process insurance claims automatically if conditions are met, streamlining the claims process

- Gaming

- **In-Game Transactions:** Smart contracts can facilitate secure and transparent in-game transactions, such as buying or selling digital assets, without the need for third-party oversight

SOME EXAMPLES (CONT'D)

- **Healthcare**
 - **Clinical Trials Management:** Smart contracts can automate data collection and ensure secure data sharing between healthcare institutions during clinical trials
- **Intellectual Property**
 - **Digital Rights Management:** Smart contracts can help manage intellectual property rights by automating licensing agreements and royalty payments
- **Voting Systems**
 - **Secure Voting:** Smart contracts can ensure transparent and tamper-proof voting processes by recording votes on a blockchain and automating the counting process

A man with a beard, wearing a blue denim shirt, is leaning over a desk, focused on a laptop. He is in a workshop or office environment with various mechanical parts and tools visible in the background. The lighting is warm and focused on the man and his work.

Innovation in Banking and Digital Finance

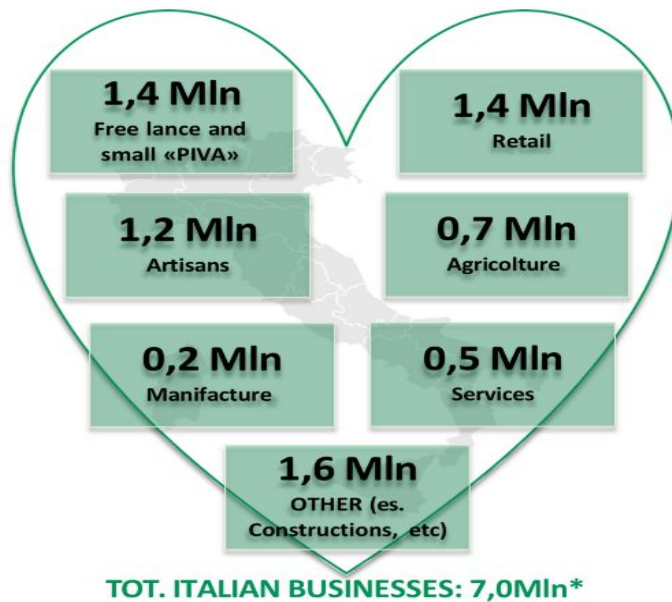
Banking context and evolution The AideXa case

Roberto Nicastro, Chairman AideXa

ROME – MARCH 11, 2025

AideXa is tailored for the heart of the country

The biggest European market of small businesses



Source: Unioncamere-InfoCamere, Movimprese. *Total inclusive of «P. IVA» not registered CCIAA



Why heart of the Country (*“piccolo è un fatto”*)

- ⊕ 50% of new jobs
 - ⊕ >30% of Italy's private GDP
 - ⊕ bastion of social cohesion
 - ⊖ less productive
 - ⊖ low salaries
 - ⊖ tax evasion
- ↓
- ↑ number of micro-companies keeps increasing (4,3m)
 - More digitally savvy / helped by platforms
 - Selected by past “Darwinian” crisis

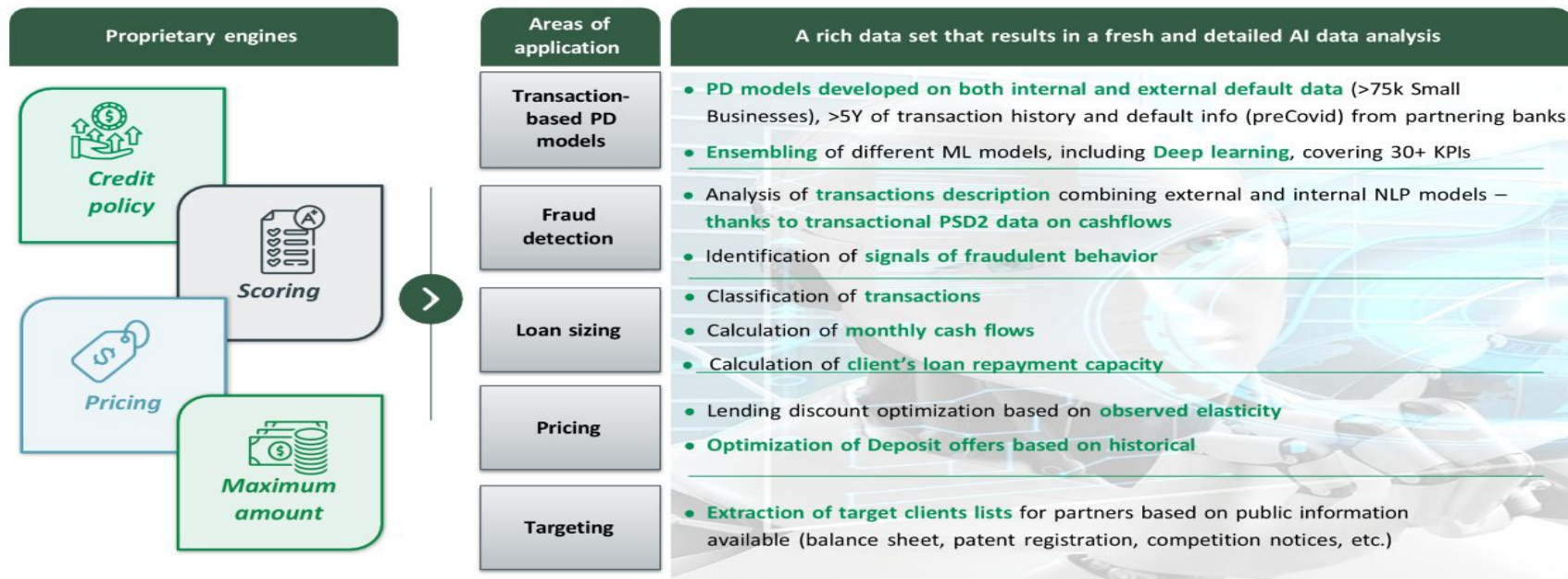
Open banking allows a new competitive paradigm

Levers for Small Business Credit Assessment	Weight for credit decision	Availability to competing banks	
		Before Open Banking	After Open Banking
Customers' Financials		✓	✓
Customers' Credit Track Record		✓	✓
Customer C/A Flows		- (*)	

Open Banking: The customer can grant **visibility** in real time of its own bank accounts to third parties, to receive **new services and offers**

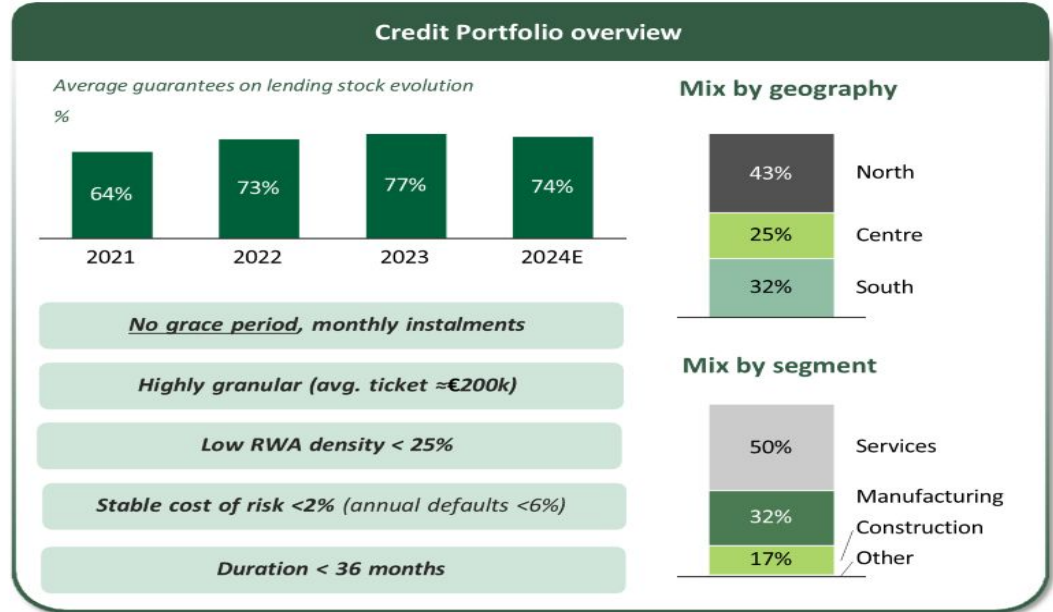
(*) Only available to the main customer bank

Companies' public and transactional data are analyzed by AI models to extract risk and sales insights



Focus on Small businesses and guarantees reduces risks and enables capital light model by further lowering RWA density on top of SME supporting factor ...

Lending client (median)	
Turnover	€1.6mm
Employees	9
Company age	11 years
Number of credit facilities	6
Volume w other credit institutions	€0.5mm



AideXa has a unique digital, tech and agile business model vs traditional banks

...but also different from a pure fintech:

- ✗ Risk appetite
- ✗ No MVP
- ✗ No gradual equity top-ups
- ✗ More rigid \$ incentive schemes
- ✗ Less flexible processes

		Traditional banks	VS	AIDEXA
Digital, innovation, agility	IT architecture	1-10% cloud		100% cloud
	Physical branches	Main channel		None
	Average age (<i>employees</i>)	≈ 45 – 50		≈ 33
	Data lake (<i>proprietary</i>)	Often not available		Full proprietary
	Technological platform	Rigid and designed for internal		Scalable and opened to BaaS
	% FTE tech / total FTE	<10%		>35%
Distinctive commercial effectiveness	Commercial processes	Manual with branch support		Digital native and paperless
	Time to Yes	30 – 60 days		15 min – 10 days
	Time to disbursement	30 – 60 days		4 – 25 days
	Credit automation process	Incomplete and onerous		95% supported by AI algorithms
	PSD2 – data usage	Absent (largely in banking system)		Yes

We are accelerating our growth, quickly establishing a solid trajectory ...

Scaling-up growth on-going



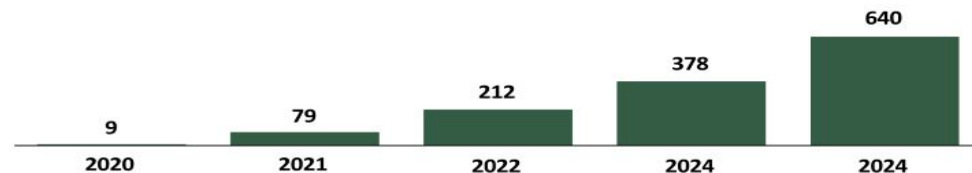
- Completion of the «Test & learn» phase in 1H 2021 for credit scoring with solid PDs and default rates in line with expectations
- **Strong commercial acceleration in client acquisition**, products and volumes since 2022 with boost post introduction of guaranteed loans
- Progressive acceleration since 2022 due to extension of credit product duration (up to 60 months) and network expansion



Gross loan origination since launch €mm, 2020-24

Stock YE

≈ 420



Client growth stock #k, 2020-24

Average ticket (Small Business loans)

≈ €200k

