

THEDECONSULTING⁷

TC Whitepaper

Payment strategy for the industry

February 2021



Digitisation

and factory automation —

The development of the "Industrial Internet of Things" or "Industry 4.0" is in full swing in numerous industry segments and will bring about strong changes in commercial processes, especially in the settlement of goods and services. Currently, digital sales formats and business models that focus more on the use and less on the ownership of "capital equipment" are becoming more and more important. For the treasurers of industrial companies, it is vital to react to these trends.

New challenges in B2B payment processing

In the industry, traditional sales channels are increasingly being supplemented or replaced by digital sales channels on both the purchasing and the sales side. Consequently, a shift in business models away from the sale of production facilities and towards user-based approaches can be observed.

The "Industrial IoT" provides the basis for numerous new applications for the digital factory in various areas, from mobility and infrastructure to medical technology. As a result, the amount of transactions is decreasing whilst their number is increasing. Pressure on transaction costs is the expected consequence.

Industrial clients, just like consumers, increasingly expect both intuitive and instantly completed, finalised payment processes – on a global basis. Accordingly, the demands of external as well as internal customers on the treasury's range of services and thus on competitive solutions and fulfilment processes are rising sharply.

Efficient payment processing as a crucial success factor

Purchasing and sales processes in the industry are complex and labour-intensive. The digitisation increasingly provides data as a basis for the automation of transaction processing.

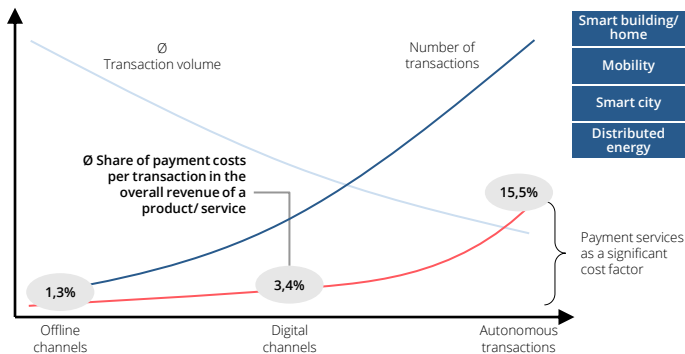
The assessment and allocation of services on the one hand and the corresponding payment on the other raise questions about efficiency, the future depth of added value and a suitable organisational model of the treasury in the area of payment and settlement. Initial approaches for the resulting analysis and fields of action are outlined below.

"Pay-per-use" offers that charge for actual services provided in real time or for the consumption of goods (e.g. operating hours, number of workpieces, capacity utilisation) are beginning to establish themselves in the industry.

The next step will be the ability to process autonomous transactions. Based on predefined rules, services are processed between different companies. Staff only intervenes in the case of major deviation alerts or during regular control cycles. Individual technical entities within such a system act decentrally, depending on their different roles (e.g. processing of workpieces in production lines carried out by robots from different suppliers).

The downsizing of service units to mitigate credit and delivery risk as well as the monetisation of services with very low value both lead to micro-payments – resulting in a high number of transactions with very low volume per transaction.

Requirement for efficient payment processing



These developments lead to a number of fundamental questions :

- How can these payments be processed efficiently?
- What possibilities for exchange exist? How are these to be evaluated with regard to the respective requirements?
- Which advantages do wallet and distributed ledger technologies, for example, offer for this shift in interactions?
- Which additional commercial services are to be mapped out in order to be able to ensure efficient processing?

The answers vary depending on the business model and the maturity of the industrial business models.

	Channel/ Mode of transaction	Time period	Payment offers	Financing	Platform services
Maturity ↑	Pay-per-use/ subscription, autonomous transactions	Realtime	Payment processing „Micro-payments“	Usage based financing	Efficient handling of order-to-cash processes and supplementary services incl. omnichannel applications
	Webshops, platforms & marketplaces	(Near) Realtime	Payment processing in digital channels	Financing in digital channels	
	Traditional sales via sales staff and commerce	Near time	Payment processing in "non-platform" business	Traditional financing offers	

Marketplaces as successful digital business models

Digital ecosystems not only increasingly determine our everyday life as consumers, but also influence the exchange of services in the industry. Segment-related solutions are bundled from a customer-centric perspective and offered on a central hub. In the process, the direct relationships between customers and suppliers are broken up, replaced by intermediary relationships and upgraded with added value services. As a result, the interaction between customer and provider is improved without the marketplace provider acting as a service provider himself.

Successful marketplaces create a network effect in which increased demand leads to increased supply – and vice versa. Digitisation serves as an enabler for high exponential growth dynamics in a wide range of industries and companies.

Payment processing

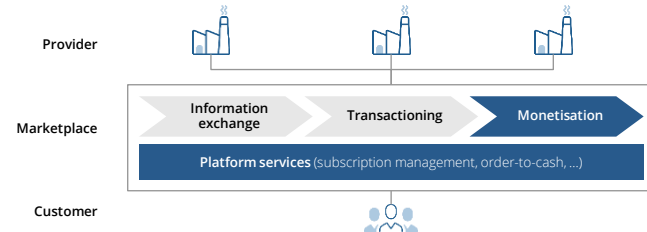
in digital business models —

Fields of action for Treasury

The Treasury's main areas of action in this regard are as follows:

- Regulatory-compliant identification of marketplace participants
- Cross-border transaction management
- Pay-outs outside of the own organisation
- Risk and liability management

In addition, the necessary and comprehensive supplementary services must be provided for marketplace operation. These include services such as order management (transaction recording, metering, pricing), billing & tax management (accountable invoices), payment (payment initiation), accounting (mapping of invoice-relevant processes) and dunning (processing and monitoring of payment disruptions).



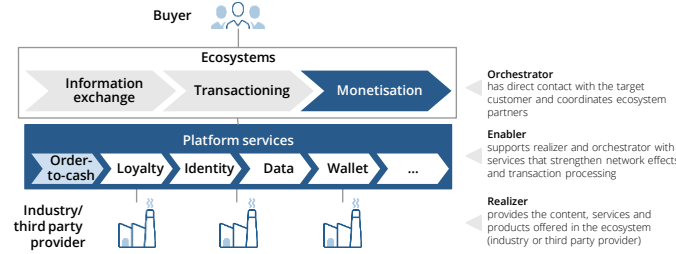
M2M

"Machine-to-machine" approaches offer many possible applications, making the performance of processes such as production, maintenance and payment even more efficient. M2M describes technologies that enable connected devices in ecosystems to exchange data and perform certain stipulated exchange activities autonomously without human intervention. In particular, the provision of a micro-payment platform plays a central role for IoT applications.

For M2M, an integrated transaction and payment solution should also be developed so that the purchase of services and payments from machines within the ecosystem can be initiated autonomously based on predefined rules. A multidimensional smart contracting system with corresponding payment triggering offers a basis for this.

Complementary commercial services

A major challenge is the integration of payment into upstream or downstream commercial service chains, the so-called "order-to-cash process". The process steps range from the onboarding of participants in marketplaces and the categorisation of purchases to reconciliation and exception handling. A seamless customer experience is provided by optimised onboarding, sales and compliance processes in the form of a uniform, cross-platform identity. An e-wallet is suitable for high-frequency transactions with small tickets, for example.



The industry can present these services in the treasury itself, create partnerships with other companies or purchase the services from third-party providers. The complementary services contribute significantly to strengthening the role of treasury as an enabler of digital business models with corresponding positioning and revenue options.

Role models

Companies can choose between different organisational models for payment processing, depending on whether they want to offer central services as enablers only or also provide such services themselves. Depending on the strategic orientation, aspects such as the direct (internal) customer relationship with the operators of the business

models, transparency and uniform (global) control of liquidity flows of digital business models or the realisation of synergies through uniform systems and settlement processes are in the focus.

Achieving cost advantages for settlement partners through increased purchasing power via volume concentration will also play an important role in the decision-making process. Depending on the depth of value creation to be adjusted in a strategically and economically sustainable manner, companies can choose between various role models with different advantages and disadvantages:

- **Centralisation of procurement**
Realisation of purchasing advantages via volume bundling, external cooperation partners as contractual partners for the service providers in the company, simple and fast implementation, but high dependency on cooperation partners
- **Payment gateway**
Own payment gateway, reduced dependence on payment service providers, scaling via volume, acceptance contracts with cooperation partners
- **Payment facilitator**
Treasury as central contractual partner for organisation of payment flow, high strategic control over business model and transaction data, regulatory (global) licences required for payment processing with third parties

The digitisation of the industry within the framework of "Industry 4.0" requires a change in mindset for the entire value chain in order to secure your own competitiveness and innovative strength. Efficient payment processing for innovative business models and sales formats plays a central role in this.

Thede Consulting (TC) supports your company in defining a suitable payment transaction offer for all relevant markets, determining both the depth of value creation and the organisational model to allow you to serve external and internal customers in accordance with your requirements. TC analyses the economic viability of such a solution for you, describes implementation paths and supports you in the selection of suitable partners. When setting up a future-proof treasury service offer, we advise your company with practical experience and expert knowledge and jointly implement the planned steps.

TC is working on the next generation of seamless and cross-channel payments.

At European level, we support decision-makers from the financial and mobility services segments as well as wholesale, retail and loyalty in the strategic development and implementation of innovative products and digital processes.

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