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# Analysis of the Market and Needs of Small and Medium-Sized Enterprise Sector in Context of Liquidity Management

Analiza rynku i potrzeb sektora małych i średnich przedsiębiorstw w kontekście zarządzania płynnością finansową

## Introduction

Liquidity is one of the key criteria for assessing the financial health of companies. Its level should be optimal, i.e. sufficient to settle obligations to counterparties on time, but also not excessive, resulting in a deterioration in the profitability of assets. A company's liquidity is also one of the key elements in assessing the financial situation of an economic entity and an indicator of its credibility in the market. It is widely accepted that a company's possession of liquidity determines its continued existence in the economy. Loss of liquidity is the most common direct reason for the bankruptcy of enterprises.

The level of liquidity usually depends on the industry in which the company operates. If a company has a low level of liquidity, it may have problems paying its debts on time, but when it is over-liquid, working capital is not optimally used, leading to a decrease in its profitability (Nesterowicz, Nakonieczny & Nesterowicz, 2022).

Financial liquidity in small and medium-sized enterprises (SMEs) is maintained primarily as a hedge against the risk of losing the ability to pay liabilities on an ongoing basis in full and within the applicable deadlines. The potential increase in the risk of losing liquidity, and consequently losing a positive image with contractors, translates into higher rates of the cost of capital financing SMEs and contributes to lowering the efficiency of the company's operations, which is expressed in a lower projected increase in the value of SMEs (Michalski, 2013).

BIG InfoMonitor commissioned Karella Research (Big InfoMonitor, 2021) to conduct a study aimed at finding an answer to the question: why do companies

in Poland go bankrupt? The interviewed managers, representing small and medium-sized companies, pointed to continuous payment delays resulting in payment bottlenecks as the reasons for the rising wave of bankruptcies. Bankruptcy of counterparties was also an important reason. However, the main reason for bankruptcies, according to respondents, was misguided managerial decisions. This was followed by responses such as unfair competition, the extension of payment terms by customers, a sudden drop in demand for goods or services and a lack of qualified staff. The loss of financial liquidity translates into a decrease in the financial results of enterprises, mainly due to an increase in operating and financial costs and a decrease in sales. Deterioration of financial results leads to the loss of the company's ability to service existing debts and to incur new ones. Loss of financial liquidity is the first symptom of company bankruptcy (Dawidziuk, 2019).

Other foreign studies show that one of the tasks of the credit risk assessment is forecasting the bankruptcy of the enterprise. This has been a key issue since the 2007/2008 financial crisis. The aspects of corporate bankruptcy are considered and analyzed by practitioners of financial institutions and scientists. New technological possibilities have also emerged. It is worth noting that machine learning enables the development of bankruptcy prediction models (Lombardo et al., 2022).

According to the Keralla Research Institute (BIG InfoMonitor, 2021) in a study carried out for the BIG InfoMonitor Debtor Register, at the end of 2021, 43% of commercial companies have unreliable payers delaying payment for more than 60 days. There has been a marked increase in companies delaying payments to business partners. Previously, this problem was indicated by one in three companies. Data from BIG InfoMonitor's Debtor Register and BIK's credit information database show significant increases in companies' arrears when it comes to paying contractors and finance companies. Only in the third quarter of 2021, liabilities overdue by min. 30 days liabilities increased by PLN 1.3 billion, and over the year by more than PLN 4 billion to PLN 38.5 billion. Late payments are indeed not spreading rapidly, but apparently in many cases the already existing arrears are being strongly aggravated. Under such conditions, relationships with unreliable customers become even riskier.

## 1. Methods to counteract payment bottlenecks

Having and maintaining liquidity is a necessary condition for the continuity and growth of a company. In the event of liquidity problems in the short term, a company can maintain its ability to repay its obligations by using external financing. There are many scientific publications on the methods of eliminating payment backlogs, especially on the Polish market (Ćwiakowski, Liput & Wierzbicka, 2020). Actions focused on reducing payment backlogs cover the legal and market environment. The declared purpose of the Act (Act of 19 July 2019 amending certain acts to reduce payment backlogs, Journal of Laws 2019, item 1649) is to improve the legal aspects of commercial transactions in order to reduce the negative phenomenon of the so-called payment backlogs, i.e. untimely payment of receivables resulting from transactions in economic circulation, accumulating on the market.

According to the Ministry of Economic Development, Labour and Technology (2018) the magnitude of costs resulting from payment congestion is higher for smaller entities and lower for large enterprises (as a % of total costs incurred). The realities of today's economy often force entrepreneurs to take measures to increase or regain lost liquidity. To meet the needs of entrepreneurs, debt collection and factoring companies are creating a range of solutions, such as factoring, debt monitoring or debt collection by order, thus setting new trends on the financial market.

Factoring is becoming an increasingly popular instrument that, as an answer to payment backlogs, provides financing for day-to-day operations and improves a company's liquidity. "Factoring is a financial arrangement where the supplier sells accounts receivable to the factor against a premium and receives cash for immediate working capital needs" (Kouvelis & Xu, 2021). Factoring allows the entrepreneur to pay its obligations on or before the due date.

It should be noted that the deterioration of the economic situation in Poland has not weakened the condition of the factoring sector. Companies affiliated with the Polish Factors Association (Polski Związek Faktorów) purchased receivables with a total value of PLN 223 billion in the first two quarters of 2022. This is 33.2% more than a year earlier, when the result was PLN 167.4 billion. Factoring services are currently used by 22.3 thousand domestic companies. They have transferred 10.8 million invoices for financing (Polski Związek Faktorów, 2022).

Contract debt collection has also gained in popularity (Enloe & Neff, 2022). Debt collection companies in 2021 accepted 7.7 million receivables (excluding external investment funds) with a nominal value of PLN 31.9 billion, of

which 86.6% were consumer receivables and 13.4% were corporate receivables. The average value of receivables accepted for handling in 2021 was PLN 4,141 (the previous year: PLN 4,275). Debt collection companies, as of the end of 2021, handled 17.0 million active receivables (excluding external investment funds) with a nominal value of PLN 123.2 billion, of which 82.7% were consumer receivables and 17.3% were corporate receivables. Among the total primary creditors for consumer claims, the largest groups were: banks (74.7%) and loan companies (13.4%; Statistics Poland, 2021). It is worth noting that entrusting the collection of distressed receivables to debt collection companies is a common practice used in many industries, but, surprisingly, very little is known about effective debt management in third-party debt collection. Recent research suggests that the production of additional information is an important function of the debt collection industry. Information collected in the third-party debt collection process is valuable for predicting collection rates (Kriebel & Yam, 2020).

Another effective tool for significantly speeding up payments by counterparties is monitoring of receivables. Thanks to it, entrepreneurs such as suppliers of products or services have a better chance of maintaining financial liquidity. Moreover, the use of such a tool brings long-term benefits, as systematic monitoring improves the payment discipline of recipients. It brings benefits such as: improving the company's liquidity, speeding up the process of timely payment, stabilising the company's financial sphere, and disciplining the payment of counterparties (Inve System, 2022). Receivable monitoring and collection activities have a positive relationship with profitability. The literature review provides such knowledge in the context of research and profitability of SMEs at home and abroad (Ahmed & Mwangi, 2022).

## 2. Tools available on the market to improve liquidity

The research purpose is analysis of available market solutions for monitoring receivables and debt collection. Therefore, a review of IT tools offered on the market was made. Companies carrying out monitoring and debt collection use a variety of solutions. In practice, the activities undertaken are usually based on telephone contact with counterparties and paper correspondence. Full monitoring of receivables is used much more frequently in large companies due to the size of their turnover and greater difficulty in controlling the inflow of receivables. At the same time, it should be noted that many entrepreneurs, in

the case of smaller amounts, do not collect them for fear of losing a counterparty or the costs of the process being too high compared to the possible benefits.

Table 1 compares the functionalities of selected monitoring and debt collection tools.

Table 1. Comparative analysis the functionalities of selected monitoring and debt collection tools

Functionalities of selected monitoring and debt collection tools	Automatic identification of overdue receivables	Predicting liquidity levels well in advance	Management of liquidity, taking into account one's own preferences as to its level	Automatic use of data stored in the databases of financial and accounting programmes (systems)	Access to external funding in the event of problems with liquidity	Soft automatic debt collection	Debt collection office	Debt exchange	Automatic reminders about the payment deadline (text message, e-mail)	Automation of dispatch traditional letters	Generation of counterparty reliability reports	Monitoring counterparty payment discipline	Rating	Enforcement process	Investment and financing planning
VINDICAT	X	-	-	-	-	X	X	X	X	-	X	X	-	X	-
Fintrack	-	-	-	-	-	X	-	-	X	X	X	X	-	-	-
eCollector	-	-	-	-	-	-	-	-	X	X	X	X	-	-	-
CofaPay	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-
Programme Analysis Receivables	-	-	-	-	-	-	-	-	-	-	X	X	X	-	-

Legend:

X - has a function

- - does not have the function

Source: own study basen on: CofaPay information brochure, n.d.; Euler Hermes Polska, n.d.;

EWindykator. Internetowy System do Windykacji, n.d.; Amicable Debt Collection, n.d.

A wide range of monitoring and debt collection tools allows the optimal solution to be tailored to the needs of the business. Some of them offer a wider range of functionalities. It can be noted that all of the tools analysed have one feature in common. It is the offer of generating counterparty reliability reports

and counterparty monitoring, regarded as basic functions of this type of market solution.

Against the background of the tools available on the market for monitoring and collecting receivables, there is a lack of applications offering automatic identification of overdue receivables, which would allow companies to diagnose counterparties with outstanding payments faster. Also, missing from the range of market applications is the possibility to quickly access external financing in the event of liquidity problems, as well as the calculation of a customer rating based on an analytical system. Thus, it is possible to point out the direction of possibilities for the development of modern technologies that would automatically use data collected in the databases of financial and accounting systems used in companies and thus increase the quality of management information. On this basis, it was decided to carry out a survey on market needs as well as to diagnose problems related to the liquidity of the SME sector.

### 3. Research methods

The research purposes were formulated as follows:

- identification of companies' liquidity problems and its management,
- analysis of available market solutions for monitoring receivables and debt collection,
- analytical function of IT tools for liquidity management used by companies,
- indicator evaluation focused on using a new IT tool for liquidity management,
- assessment of the indicator related to using the individual functions of the IT tool,
- getting to know companies' preferred purchase price for the tool,
- identification of the features of IT tools most relevant to the business.

The following research questions have been posed:

1. What problems do companies see in terms of financial liquidity and its management?
2. What IT tools for managing financial liquidity are used by enterprises?
3. What part of enterprises is and what is not interested in using the new IT tool for financial liquidity management?
4. What part of enterprises is interested in using particular functions of an IT tool?

5. What is the preferred purchase price for the tool by companies?

6. What features of IT tools are most important for enterprises?

The results of the research will be presented in the order of the above questions. Qualitative and quantitative research methods were used. Among the qualitative methods, a diagnostic survey was used. An online survey technique CASI (Computer-Assisted Self-Interviewing) was also used, which is part of the quantitative methodology of market and opinion research. The tool implemented to carry out the research was an online questionnaire aimed at stakeholders. Desk research was also used, consisting of an analysis of already existing data available on the market for tools for monitoring and collecting receivables and managing corporate liquidity. A survey on the problems and needs of corporate liquidity management was conducted using the CASI method. The time range of the research covered the period from January to March 2022. The survey was addressed to 500 entities from the sector of small and medium-sized enterprises conducting business activity in Poland. The answers were provided by employees of the financial departments.

The survey involved 237 respondents (feedback of survey questionnaires: 47.4%) representing micro, small and medium-sized pre-enterprises operating in the trade, manufacturing and services sectors. The sample selection was random. Frequency tables were used to present the research results. Table 2 presents the structure of the research sample.

Table 2. Structure of the research sample

Sector	Share %	Size businesses	Share %
Trade	26	Micro	63
Production	14	Small	29
Services	60	Medium	8
Total	100		100

Source: own study.

The most numerous group of respondents were enterprises from the services sector (60%), which is due to the high representativeness of this sector in Poland. The trade sector was represented by 26% of companies, and the production sector by 14% of the total number of enterprises participating in the survey. When characterising the participating enterprises by size, it can be noted that micro-enterprises dominated (63%), small companies accounted for 29% and medium-sized companies for 8% of the research sample.

## 4. Results

The first research purpose which is identification of companies' liquidity problems and its management has been achieved. The results of the survey indicate that the most common problems reported by companies in terms of financial liquidity and its management include customers' failure to pay their debts on time (37.55%), as well as the company's periodic loss of liquidity or its level being too low (21.94%). Other barriers worsening financial liquidity include insufficient monitoring of payment discipline of individual counterparties (15.61%), as well as insufficient effectiveness of the debt collection process, resulting in some receivables being uncollectible (15.19%). Respondents also indicated barriers related to insufficient automation of the debt collection process (10.97%), lack of easy and quick access to external financing in case of liquidity problems (10.55%) and difficulties in accurately predicting the level of financial liquidity and efficient liquidity management (8.02%). The least problem, in the opinion of the respondents, is related to accurate prediction of the level of financial liquidity and efficient liquidity management (8.02%). This is a surprising result, given the scale of the occurrence of the previously indicated problems. They have a direct impact on the efficiency of liquidity management. A possible reason for this state of affairs is low awareness of respondents regarding the very essence of liquidity management, as well as the methods and tools that can be applied in this regard. Furthermore, 15.61% of the surveyed companies do not experience any of the above problems, with this phenomenon occurring most frequently in the trade sector (16.12%) and least frequently in the manufacturing sector (8.32%).

Table 3 presents detailed data on problems with financial liquidity and its management, taking into account the sector affiliation of the surveyed enterprises.

Table 3. Problems with financial liquidity and its management, taking into account the sectoral affiliation of the surveyed enterprises (share %)

Problems	Total	Trade	Production	Services
Late payments by customers	37.55	37.10	31.25	39.16
Periodic loss of financial liquidity or its too low level	21.94	19.35	15.63	24.48
Difficulties in accurately predicting the level of financial liquidity and efficient liquidity management	8.02	4.84	9.38	9.09
Lack of easy and quick access to external financing in the event of liquidity problems	10.55	9.68	18.75	9.09

Insufficient monitoring by the enterprise of the payment discipline of individual contractors	15.61	19.35	9.38	15.38
Insufficient effectiveness of the debt collection process, as a result of which some of it is uncollectible	15.19	24.19	9.38	12.59
Too low level of automation of the debt collection process	10.97	12.90	9.38	10.49
None of the above problems	15.61	16.12	8.32	13.28

Source: own study.

Another research purpose is analysis function of IT tools for liquidity management used by companies. The purpose has been achieved (table 4).

Table 4. Functions of IT tools used to manage financial liquidity by the surveyed enterprises, taking into account their size and sector affiliation (share %)

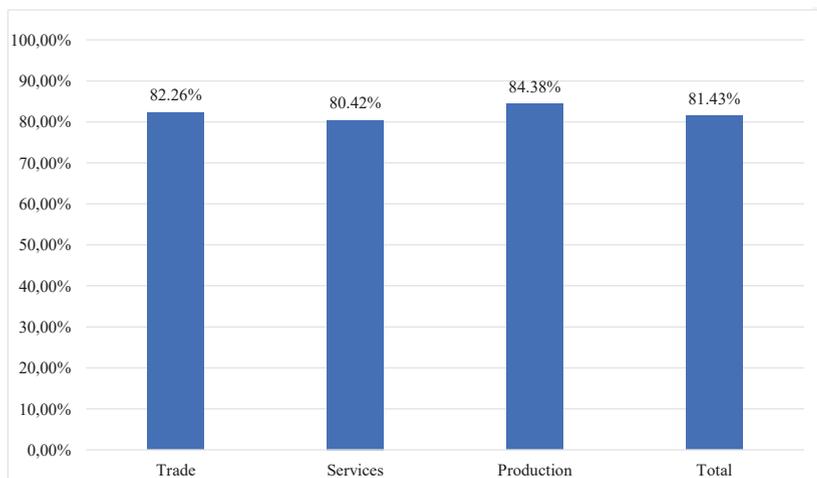
Functions of IT tools	Total	Sector			Size of businesses		
		Trade	Services	Production	Micro	Small	Medium
Automatic identification of overdue debts	16.88	17.74	16.08	18.75	16.11	17.39	21.05
Monitoring the payment discipline of individual contractors	17.30	19.35	14.69	25.00	14.09	23.19	21.05
Predicting the level of financial liquidity well in advance	8.86	8.06	6.29	21.88	8.05	7.25	21.05
Managing financial liquidity, taking into account own preferences as to its level	9.28	8.06	9.09	12.50	9.40	8.70	10.53
Easy and quick access to external financing in case of liquidity problems	5.91	4.84	4.20	15.63	4.70	7.25	10.53
The use of the so-called soft debt collection, e.g. by sending automatic notifications to contractors about payment dates for individual invoices or requests for payment	18.14	16.13	20.28	12.50	17.45	18.84	21.05
Automatic use of data collected in the databases of financial and accounting programs (systems) used in the company	12.24	17.74	10.49	9.38	8.72	15.94	26.32
No use of the above functions	32.07	30.65	32.17	34.38	36.24	27.54	15.79

Source: own study.

The most popular function used by respondents is the so-called soft debt collection, which is realised, for example, by sending automatic notifications to contractors about payment deadlines for individual invoices or calls for payment. Its use was indicated by 18.14% of all enterprises, with the largest proportion from the services sector (20.28%). A comparable proportion of respondents (17.30%) use monitoring of individual counterparties' payment discipline, with the highest percentage in the manufacturing sector (25%). Companies also use automatic identification of overdue receivables (16.88%). Similar patterns are apparent when considering the breakdown of enterprises by size. Particularly in medium-sized enterprises, the percentage increases significantly above 20% for functions such as: automatic use of data collected in the databases of financial and accounting programmes (systems) used in the company (26.32%), automatic identification of overdue receivables (21.05%), monitoring of payment discipline of individual counterparties (21.05%), prediction of the level of financial liquidity well in advance (21.05%), use of so-called soft debt collection (21.05%).

In the context of diagnosing the inadequate utility functions of the tools available on the market, as well as the plans to launch a new liquidity management tool on the market, information on companies that have not yet used IT tools for this purpose seems to be crucial. They account for 32.07% of the total number of respondents, of which 30.65% are engaged in trading activities, 32.17% in services and 34.38% in manufacturing. An interesting relationship can be observed with regard to the size of the entities. Micro-enterprises have the highest share of non-users (36.24%). Among small enterprises, this indicator assumes a value of 27.54% and among medium-sized companies – 15.79%. This means that the larger the economic entity, the more it uses IT tools for liquidity management. The companies surveyed, regardless of the specifics of their business, report a desire to acquire a tool with new functionalities that are not offered on the market. Businesses feel that there are deficiencies in terms of predicting the level of financial liquidity well in advance, managing financial liquidity taking into account their own preferences regarding its level, and automatically using data collected in the databases of financial and accounting programmes (systems). It is also crucial for them to have access to external financing in case of liquidity problems, as well as to plan investments and financing. Their attitude is definitely open to making changes in the functioning of the organisation to improve liquidity management. In all sectors, this interest is above 80% (average for all sectors: 81.43%). It is highest in the manufacturing sector at 84.38%, in the trade sector: 82.26%, while in the services sector: 80.42% (diagram 1).

Diagram 1. Enterprises interested in purchasing the tool, taking into account their sector affiliation (share %)



Sources: own study.

Lack of interest in acquiring a tool with new platform functionalities was shown by 18.57% of respondents. The highest percentage was in the services sector (19.58%), slightly lower in the trade sector (17.74%) and the lowest in the manufacturing sector (15.62%).

When analysing respondents' interest in the various functions of the tool, it is apparent that monitoring the payment discipline of individual counterparties, as well as predicting the level of liquidity well in advance, is a priority for each business sector. More than 30% of respondents in each sector indicate the importance of these functions. Payment monitoring to ensure liquidity, by preventing late payment of obligations, is of interest to, in turn: 45.16% of trading companies, 34.97% of service companies and 31.25% of manufacturing companies. Equally important to them is the function of predicting liquidity levels well in advance. This is extremely important because, in addition to ongoing monitoring of cash balances and analysing sources of potential risks, it is also valuable to search for the optimum liquidity level, i.e. the optimal structure of assets and liabilities for the company (at a given level of risk acceptable to managers). Such a function of the tool would improve the quality of management information. Interest in this function was reported by 35.48% of companies in the trade sector, 36.36% in the services sector and 46.87% of companies in the manufacturing sector. Also noteworthy is the demand for automatic identification of overdue receivables, where for trade, services and manufacturing it is respectively: 29.03%, 31.47% i 34.38%. Less desirable features include the use of so-called soft debt col-

lection, e.g. by sending automatic notifications to counterparties about payment deadlines for individual invoices or payment reminders. In this case, there was less than 20% interest by sector. It can be seen that the functions that are most popular among the surveyed companies are those that enable the monitoring of counterparties' payment discipline, the automatic identification of overdue receivables and the prediction of liquidity levels well in advance (table 5).

Table 5. Enterprises interested in purchasing the tool, taking into account individual functions (share %)

Functions of IT tools	Trade	Services	Pro- duction	Total
Automatic identification of overdue debts	29.03	31.47	34.38	31.22
Monitoring the payment discipline of individual contractors	45.16	34.97	31.25	37.13
Predicting the level of financial liquidity well in advance	35.48	36.36	46.87	37.55
Managing financial liquidity, taking into account own preferences as to its level	29.03	22.38	28.13	24.89
Easy and quick access to external financing in case of liquidity problems	25.81	18.88	25.00	21.52
The use of the so-called soft debt collection, e.g. by sending automatic notifications to contractors about payment dates for individual invoices or requests for payment	17.74	18.88	12.50	17.72
Automatic use of data collected in the databases of financial and accounting programs (systems) used in the company	16.13	10.49	28.13	14.35

Source: own study.

The research also aimed to determine the price at which companies would be willing to purchase a new liquidity management application. The results of the research indicate that the highest interest in acquiring the tool by companies occurs with the gross price for a one-month subscription falling between PLN 100 and PLN 150. The willingness to purchase was expressed by 46.77% of trading companies, 40.63% of manufacturing companies and 38.46% of service companies. This is the price optimum of consumers (table 6).

Table 6. Readiness of enterprises to purchase the tool at a gross price falling within the respective amount ranges (share %)

Gross price ranges in PLN (for a one-month subscription)	Trade	Production	Services
50–75 PLN	20.97	37.50	20.98
100–150 PLN	46.77	40.63	38.46
175–300 PLN	17.74	9.38	22.38
No interest in buying	14.52	13.00	18.18
Total	100.00	100.00	100.00

Source: own study.

Referring to the willingness of companies to purchase a tool at a price not exceeding the individual amount levels, it can be seen that from the ceiling of PLN 200, interest in buying a tool decreases (for PLN 275, interest in the trade and manufacturing sector is 0% and in the service sector only 1%). This was supported by 91% of respondents.

The research purpose was identification of the features of IT tools most relevant to the business. Respondents rated the relevance of IT tool features using a five-point Likert scale, with the following qualitative ratings assigned to each value:

- 1 – no materiality,
- 2 – low materiality,
- 3 – average significance,
- 4 – high materiality,
- 5 – very high materiality.

In interpreting the survey results, the focus was on analysing the features that respondents considered to be very important (rating 5) and important (rating 4). The most important, from the point of view of potential users, features of IT tools (very important, according to the survey results) are failure-free (63.71% of total indications), security of stored data (56.54%) and speed of operation (48.10%). This was followed by features such as the possibility of free testing before purchase (32.91%), easy access to technical support (30.38%) and intuitive operation (26.58%) (table 7).

Table 7. Evaluation of the significance of features of IT tools (share %)

Characteristics	Significance level							
	Very big				Big			
	Total	Trade	Services	Production	Total	Trade	Services	Production
Failure-free (doesn't freeze)	63.71	64.52	65.73	53.13	25.74	24.19	24.48	34.38
Speed of operation	48.10	67.74	43.36	62.50	12.66	20.97	17.48	28.13
Intuitive operation	26.58	25.81	27.27	25.00	28.69	33.87	27.97	25.00
Possibility of easy integration with other tools used in the company	25.74	20.97	27.97	25.00	24.05	35.48	20.98	15.63
Attractive design of the user interface	3.80	4.84	2.80	6.25	10.13	9.68	11.19	6.25
Security of stored data	56.54	58.06	57.34	50.00	5.06	4.84	5.59	3.13
Compatibility with various devices (including mobile)	24.05	22.58	25.17	21.88	26.16	29.03	27.27	15.63
Personalization for easy access to the most frequently used functions	13.92	12.90	13.99	15.63	29.54	30.65	30.07	25.00
Easy access to technical support	30.38	32.26	28.67	34.38	26.58	27.42	28.67	15.63
Possibility to test it free of charge before buying	32.91	41.94	30.77	25.00	21.52	14.52	25.17	18.75
Low purchase price	24.05	29.03	23.78	15.63	20.68	17.74	21.68	21.88

Source: own study.

Not without significance is the possibility of easy integration with other tools used in the company (25.74%) or compatibility with various devices, including mobile devices (24.05%). Enterprises also attribute importance to the low purchase price (24.05%) and the possibility of personalisation for easy access to the most frequently used functions (13.92%). The smallest percentage relates to the attractive design of the user interface (3.80%).

## Conclusions

The *raison d'être* of any business is its customers, who purchase the products, goods or services it offers and through this provide it with the cash resources it needs to continue operating. In this age of intense global competition for customers, those organisations that are able not only to meet their expectations, but also to exceed them, gain the upper hand. In the vast majority of industries, we are dealing with a so-called customer market, where supply exceeds demand. This also forces the originators of new solutions to make a reliable diagnosis of the market in order to best recognise its characteristics. To this end, the author's research was carried out to complement the analysis of liquidity management methods carried out. The key findings of the research indicate that the loss of financial liquidity is one of the main reasons why companies go bankrupt. Legal changes are anticipated to provide creditors with a higher level of protection and more severe sanctions for unreliable counterparties. Problems with financial liquidity of enterprises are growing in the Polish economy, which, on the one hand, is a result of the economic downturn, but on the other hand, is a consequence of unfair practices in terms of timely payment of obligations by business entities. More than 37% of the companies surveyed indicate that customers do not pay their debts on time, with this problem being most prevalent in the services sector (39.16%). Nearly 22% of companies face the problem of periodic loss of liquidity or its level being too low. This is also the most common problem in the services sector (24.48%). More than 15% of respondents admit that they do not sufficiently monitor the payment discipline of individual contractors. This problem is most prevalent in trading companies (19.35%). Insufficient effectiveness of the debt collection process, resulting in some receivables being uncollectible, is indicated by 15.19% of surveyed organisations, with a higher rate in the trading sector (24.19%). The smallest problem in the opinion of the respondents is related to the accurate prediction of the level of financial liquidity and efficient liquidity management (8.02%). This is a surprising result, given the scale of the occurrence of the previously indicated problems. They have a direct impact on the efficiency of liquidity management. A possible reason for this state of affairs is the low awareness of respondents regarding the very essence of liquidity management, as well as the methods and tools that can be used in this regard. There are tools available on the market to protect companies against the loss of financial liquidity, but they do not meet all the requirements of entrepreneurs. From the users' point of view, the most important features of IT tools are: faultlessness, security of stored data and speed of operation.

The most popular function of IT tools currently used by respondents to manage financial liquidity is the so-called soft debt collection, which is realised, for example, by sending automatic notifications to counterparties about payment deadlines for individual invoices or calls for payment. They make similar use of monitoring the payment discipline of individual counterparties. Companies also benefit from automatic identification of overdue receivables. There is also a regularity that manifests itself in the fact that the larger the economic entity is, the more it uses IT tools for liquidity management. The SME sector is a high-tech sector in need of change. Businesses have precise requirements and needs with regard to liquidity management tools. More than 81% of respondents are interested in purchasing a modern tool. Its most desirable functions, according to the respondents, are: automatic identification of overdue receivables, monitoring of payment discipline of individual counterparties and predicting the level of financial liquidity well in advance. The optimal level of the gross sales price of a one-month subscription for using the tool is between PLN 100 and PLN 150. The vast majority of respondents (91%) would like to use a free trial version of the tool. Almost 55% would be able to pay an annual subscription, while less than 40% would opt for a licence for an unlimited period.

There is no doubt that the market for specialised business software to manage liquidity in companies is attractive and promising. Success there will depend on the strategy pursued by the originator and the business model it chooses. It will also be important to optimally profile the product in terms of customer needs and expectations.

Despite legislative measures aimed at increasing the level of protection of creditors against unfair practices by debtors, the problem of payment congestion will not be resolved. As the possession of liquidity by an enterprise is a necessary condition for its survival, the competence of managers in the field of liquidity management is of crucial importance. Unfortunately, it seems that owners of primarily micro and small enterprises have insufficient awareness of the need for liquidity management. Thus, they do not have effective tools designed for this purpose. This undoubtedly represents a significant opportunity for the emergence of new market solutions that can fill a niche in the market. In order for this to become possible, it will be necessary to apply demand-driven influencing, for example by undertaking well-considered marketing activities. A trend supporting these efforts will be the anticipated increase in the use of IT tools by entrepreneurs to analyse data and make better managerial decisions.

## Bibliography

### Normative Acts

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## Streszczenie

Podstawy teoretyczne: Niniejszy artykuł dotyczy analizy rynku narzędzi do monitorowania i windykacji należności oraz zarządzania płynnością finansową przedsiębiorstw. Przedstawia także wyniki badania ankietowego dotyczącego problemów i potrzeb w zakresie zarządzania płynnością finansową w sektorze małych i średnich przedsiębiorstw (MSP). Zatory płatnicze są problemem dotyczącym polską gospodarkę od wielu lat. Zjawisko to przybiera na sile. Nieterminowe płatności przekładają się na płynność finansową przedsiębiorstw. W wyniku tego pojawia się tzw. łańcuch zadłużeń, który polega na tym, że jeżeli jeden podmiot nie otrzymuje należnych mu pieniędzy w terminie, to nie ma on również środków, którymi mógłby spłacić własne zobowiązania wobec innego podmiotu. Ten z kolei ma ten sam problem w stosunku do kolejnego. Wskutek tego powstają zatory płatnicze. Ich przyczyny są rozmaite. Opóźnienie w terminowym regulowaniu zobowiązań może wynikać z powodu wspomnianego „łańcucha zadłużeń” albo z sytuacji, w której przedsiębiorca toczy spór o właściwe wykonanie umowy. Na

polskim rynku dostępne są instrumenty wspomagające zarządzanie płynnością finansową przedsiębiorstw, jednakże przedsiębiorstwa zgłaszają niedostateczne ich funkcje oraz użyteczność.

Cele badawcze: Cele badawcze zostały sformułowane następująco:

- identyfikacja problemów przedsiębiorstw w zakresie płynności finansowej i zarządzania nią,
- analiza dostępnych rozwiązań rynkowych do monitorowania należności i windykacji,
- analiza narzędzi informatycznych do zarządzania płynnością finansową wykorzystywanych przez przedsiębiorstwa,
- ocena wskaźnika zainteresowania korzystaniem z nowego narzędzia informatycznego do zarządzania płynnością finansową,
- ocena wskaźnika zainteresowania korzystaniem z poszczególnych funkcji narzędzia informatycznego,
- poznanie preferowanej ceny zakupu narzędzia przez przedsiębiorstwa,
- dentyfikacja cech narzędzi informatycznych najbardziej istotnych dla przedsiębiorstwa.

Metody badawcze: Zastosowano jakościowe i ilościowe metody badawcze. Wśród metod jakościowych zastosowano sondaż diagnostyczny. Wykorzystano także technikę ankietyzacji internetowej CASI (Computer-Assisted Self-Interviewing), wpisując się w ilościową metodologię badań rynku i opinii. Narzędziem wykorzystanym do przeprowadzenia badań był kwestionariusz internetowy skierowany do interesariuszy. Wykorzystano także *desk research* – badania źródeł wtórnych, polegające na analizie już istniejących, dostępnych danych na temat rynku narzędzi do monitorowania i windykacji należności oraz zarządzania płynnością finansową przedsiębiorstw.

Założenia badawcze: przeprowadzenie badania ankietowego dotyczącego problemów i potrzeb w zakresie zarządzania płynnością finansową w przedsiębiorstwach.

SŁOWA KLUCZOWE: płynność finansowa, windykacja należności, zobowiązania MŚP

## Summary

Theoretical background: this article deals with a market analysis of tools for monitoring and collecting receivables and managing corporate liquidity. It also presents the results of a survey on the problems and needs of liquidity management in the SME sector. Payment bottlenecks have been a problem affecting the Polish economy for many years. This phenomenon is gaining in strength. Untimely payments affect the financial liquidity of enterprises. As a result, a so-called chain of debts emerges, whereby if one entity does not receive the money due to it on time, it also does not have the funds with which to pay its own liabilities to another entity. This entity, in turn, has the same problem in relation to another. The result is payment bottlenecks. The reasons for this are varied. Delay in timely payment of obligations may result from the above-mentioned “chain of debts” or from a situation in which the entrepreneur is in dispute over the proper performance

of a contract. Instruments supporting the management of corporate liquidity are available on the Polish market, but companies report insufficient functionality and usefulness.

Purpose of the article: The research objectives were formulated as follows:

- identification of companies' liquidity problems and its management,
- analysis of available market solutions for monitoring receivables and debt collection,
- analytical function of IT tools for liquidity management used by companies,
- indicator evaluation focused on using a new IT tool for liquidity management,
- assessment of the indicator related to using the individual functions of the IT tool,
- getting to know companies' preferred purchase price for the tool,
- identification of the features of IT tools most relevant to the business.

Research methods: Qualitative and quantitative research methods were used. Among the qualitative methods, a diagnostic survey was used. Also, the online survey technique CASI, Computer-Assisted Self-Interviewing, was used, which is part of the quantitative methodology of market and opinion research. The tool used to carry out the research was an online questionnaire aimed at stakeholders. Desk research was also used, consisting of an analysis of already existing, available data on the market for tools for monitoring and collecting receivables and managing corporate liquidity.

Research objective: Conducting a survey on liquidity management problems and needs in companies.

**KEYWORDS:** liquidity, debt collection, SME liabilities

### Nota o autorze

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