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**FINANCIAL MANAGEMENT CALCULATIONS AND APPLICATIONS THAT
AFFECT MICRO, SMALL AND MEDIUM ENTERPRISES DURING AND
AFTER THE COVID-19 PANDEMIC**

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Abstract

The drastic economic changes caused by the COVID-19 pandemic have significantly affected Micro, Small and Medium Enterprises, MSMEs. In this study, we evaluate the financial management calculations implemented by MSMEs and the applications used to help them overcome the problems of increasing revenue generation, promotion, product knowledge and finance faced during and after the pandemic, we mention MSMEs Applications. Through online surveys and interviews with MSMEs, we found that most MSMEs experienced a decrease in revenue and liquidity issues during the pandemic. However, most MSMEs also admitted to using apps to help them manage their promotions as well as their finances, such as keeping track of marketing products, educating potential customers, expenses and income, managing receivables and payables, and seeking funding. Our results show that our financial management calculations and suggested MSMEs apps can help MSMEs overcome financial, revenue generation, promotion and product knowledge issues faced during and after the pandemic, but support from government and private institutions is needed to help MSMEs overcome liquidity issues and gain access to promotion and product knowledge. We also found that MSMEs that use apps are faster in adjusting to the conditions: digital business, changing economy and have better prospects in overcoming financial, promotion and product knowledge problems faced. The IT Adoption seems to have a positive perspective to support a sustainable development in MSMEs activities. We suggest that MSMEs can use the B.E.S.T financial management application and calculations that we presented in this journal, with financial efficiency and an estimated 150% increase in results with a 25% trial and error calculation.

Keywords: Micro Small Medium Enterprises; Economy during and after pandemic COVID-19; Indonesia and Russia business regulation; Financial Management Calculations.

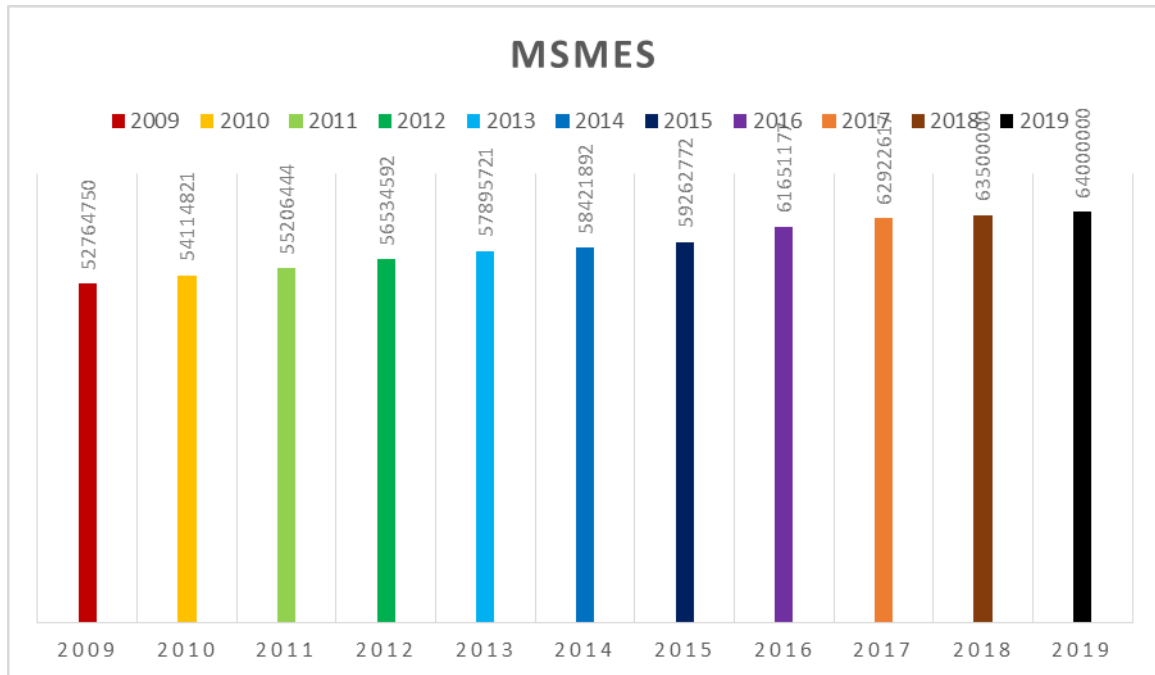
Introduction

The MSMEs purposes, these are commercial enterprises operated by business entities or natural persons associated with productive economic enterprises in accordance with Law No. 20 of 2008 enacted by the Ministry of MSMEs. Law of the Republic of Indonesia number 20/2008 concerning MSMEs:

1. A harmonious and well-being society according to Pancasila and the Republic of Indonesia of the 1945 Constitution must be realized through the advancement of the national economy according to economic democracy;
2. Comply with the Obligations of Legislative Regulations;
3. Number of People's Councils of the Republic of Indonesia;
4. XVI / MPR-RI / 1998 concerning Political Economy, In the context of a democratic economy, micro, small and medium enterprises need to be strengthened as an integral part of the national economy with their conveniently position, role and potential for achieving an increasingly balanced and just national economic order.

In Indonesia, MSMEs are protected and have a legal such as the Presidential Decree No. 19/1998 and several other regulations. about 8 percent of the total also updated by go-online.

1. MSMEs are commercial enterprises managed by business entities or natural persons associated with prolific economic venture according to the criteria set out in Law No. 20 of 2008.
2. Criteria for small businesses based on Law no. 9 of 1995 are as follows:
 - a. Has a net worth of at most Rp. 200,000,000,- (two hundred million IDR) or 13.883,16 \$ (thirteen thousand eight hundred eighty three point sixteen USD) or 1.028.762,98 ₺ (one million twenty-eight thousand seven hundred sixty-two point ninety-eight Ruble) (exchange rate Rp. 14.405,94 = 1 \$ = 194,41 ₺) excludes land and buildings for business property;
 - b. Have an annual sales result of at most Rp. 1,000,000,000,- (one billion IDR) or 69.401,30 \$ (sixty-nine thousand four hundred and one point thirty USD) or 65.143.814,90 (five million one hundred forty-three thousand eight hundred and fourteen point ninety Ruble);
 - c. Belong to Indonesian citizens;
 - d. Be independent and not a subsidiary or branch of an unowned or controlled company that is not directly or indirectly associated with a small business or large corporation;
 - e. Forms of incorporated companies, including sole proprietorships, unincorporated companies, or cooperatives.
3. Data collected by the Ministry of Cooperatives and MSMEs are:



From charts and tables we can see that every year Indonesia has increased its MSMEs every year because of how easy it is to build MSMEs in Indonesia. The table is only to simplify the data that we show to you and the colour that represent each year is only for aesthetic. MSMEs contribute 60.34 percent of the total national Gross Domestic Product (GDP) and contribute 58.18 percent of total investment. With this it can be said that MSMEs are the backbone of the Indonesian economy and from the ongoing pandemic, from 60 million companies 30 millions or 50% from total of MSMEs in Indonesia have closed its operation temporarily. MSMEs are also a group that is vulnerable to surviving a pandemic situation, for example, consigned goods micro merchants who only get a small profit and have to return their money for the merchandise they sell.

Based on data from the Indonesian Institute of Sciences (LIPI), if the pandemic does not end, 85.42 percent of MSMEs will only be able to survive for one year. The government has allocated a stimulus of IDR 123.46 trillion specifically for MSMEs.

Meanwhile in Russia, the Small and Medium-Sized Enterprises regulation, SMEs regulation is governed by the Federal Law "On Development of Small and Medium-Sized Enterprises in the Russian Federation" which was enacted in 2005. This law defines the criteria for determining the size of an enterprise and establishes support measures for SMEs, including access to credit, government procurement opportunities, and tax benefits. Additionally, there are several government agencies responsible for the development and support of SMEs in Russia, including the Small and Medium Business Support Agency and the Development Corporation of the Russian Federation. These agencies provide a range of services to SMEs, including business development support, financial assistance, and access to export markets.

The Federal Law "On Development of Small and Medium-Sized Enterprises in the Russian Federation" is a legislation to support and promote the SMEs development in the country. The law defines the criteria for determining the size of an enterprise and establishes a legal framework for the support of SMEs. The law provides for various measures to support SMEs including:

1. Access to credit and other financial resources;
2. Government procurement opportunities;
3. Tax benefits and preferences;
4. State support for the protection of the rights of SMEs;
5. Simplification of the procedures for the registration, liquidation and re-registration of businesses;
6. State support for the development of export activities of MSMEs.

Additionally, the law establishes the Small and Medium Business Support Agency, which is responsible for the development and support of SMEs in Russia, and the Development Corporation of the Russian Federation, which provides financial assistance and other support to SMEs. This law is considered as a significant step forward in the development of SMEs in Russia, it aims to make it easier for entrepreneurs to start and develop businesses, as well as access to the financial resources and state support.

There have been some innovation developments in public policy for entrepreneurship in Russia, such as:

1. Attempts to make procurement contracts more accessible to MSMEs, resulting in MSMEs receiving more than 2.1 trillion in procurement contracts in 2017;
2. The creation of the Federal Company for SME Development in 2015, which has helped SMEs access more credit, with twice the volume of credit received by MSMEs in the first eight months of 2017 compared to 2015;
3. Special tax systems have been implemented for SMEs, such as the simplified taxation system (STS) for companies with an annual income of 150 million rubles, and the single tax on imputed income (STII), which is a simple tax system for SMEs with 100 employees or less that allows them to pay one tax instead of several with complex calculation methods;
4. The Ministry of Economic Development has implemented a program since 2005 that offers direct and indirect support measures, such as grants for starting a business, subsidies for production modernization, subsidies for social enterprises, subsidies for young entrepreneurs, and infrastructure support for consulting, finance, property, innovation, and export. However, funding for this program has decreased from 7.5 billion rubles in 2017 to 5 billion rubles in 2018 and the number of SMEs supported has also decreased;
5. "The Supervisory and Audit Activities Reform" aims to reduce the administrative burden on SMEs by reducing bureaucratic procedures and using a risk-based management and monitoring approach. reduced the total number of company inspections by 22%;
6. The Ministry of Economic Development and JSC "Delovaya Sreda" have developed the first national platform for knowledge transfer and services for SMEs. In 2016, 541 MSCs (Business Support Centers) were opened in 39 regions of Russia.

Entrepreneurship and SMEs in Russia. In a transition economy like Russia, one of the state's tasks is to work with the private sector to create a legal framework that recognizes and defines the existence of SMEs. This strategy contains many important goals for the development of SMEs in Russia. The main goals are:

1. Turnover rate of SMEs is 2.5 times higher than 2014;
2. Labor productivity of SMEs doubled compared to 2014;
3. Manufacturing share of total SMEs turnover - 20%;
4. Percentage of SMEs employees in total workforce - 35%.

The strategic goal of SMEs is to provide 40% of GDP by 2030. The annual growth rate of this share is said to be more than 1%. As of the end of 2016, Russian territory had 330 objects supporting business infrastructure. In 2016, over 167.000 MSMEs received government assistance, 39.509 new jobs were created and 303.800 jobs were saved. The creation of regional export centers contributed to the increase in the number of export companies, from 10.600 in 2014 to 30.100 in 2017.

In our opinion that the funds issued by the government should be used to develop platforms or applications. The MSMEs aim, to align of harnessing IT technologies and certain infrastructure in Business activities to stimulate Micro, Small, and Medium Enterprises. Easily accessible for people who want to set up companies and companies that are already running. in the application or platform, you can list the shares of each company that have been verified directly by the local government and can make investment easier for users of this platform.

Methods

The platform on which we embed the idea, we can also create a system called "Ride-Hailing." Ride-hailing is a platform designed to connect customers with sellers. Moreover, the platform can be accessed from a mobile app so that it can reach all segments, and provide a one-stop app that supports MSME business activities as it offers various services designed to increase efficiency and flexibility. The application that we as authors describe and propose, has cloud-based storage so as not to make the smartphone's internal memory full, uses end-to-end encryption technology, leaves no traces on the cloud server, has an automatic message destruction time, starting from one second to one week. This application is like a Channel, very suitable for one-way information dissemination or broadcast in the form of writing, photos, videos, documents, and other file types quickly, can be used for various needs, ranging from games, translating languages, downloading files, to payments supported by certain providers such as Ovo, Dana, Jenius, OCTO Mobile, Debit and Credit Cards, LinkAja, PayPal, Apple Pay, Paymentwall, Yandex.Money, Stripe, Ravepay, and others e-money and e-wallet.

If it gets support from the government and private sector from Indonesia and Russia for knowledge transfer, can partner with companies in Indonesia and Russia, this application will be sought to have symmetric encryption technology like the Telegram application called MTProto with 256-bit AES encryption, RSA 2048 and Diffie-Hellman, this application allows users to create more than one account or multi-profile, attempted to be hyperlinked with content on TikTok, Instagram, Facebook, and YouTube applications. This application has an independent Standard Operating Procedure, SOP, without eliminating the SOP of each country. Through one of the Bot Payment API pages, developers can develop payment programs to shopping with the following Application Bots. The app can be downloaded on Google Play for Android and App Store for iOS on iPhone. Has status or story features such as WA Status, Instagram Story and Direct Messaging Story.

This strategy we can assume that direct and indirect delivery of goods can be done more easily and safely for both sellers and buyers. Due to the increasing number of COVID-19 patients and the uncontrolled spread, we recommend this method to make transactions safer. However, we have another problem that online transactions in Indonesia are not as good as in other countries including Russia, but this problem can be resolved by implementing a third party as a middleman for transactions. Why do we

need an agents? This answer is quite simple because during this pandemic we cannot create a more capable transaction structure for buyers and sellers.

Indonesia is one of the biggest country for MSMEs, with total of 60+ millions from the data that we gather. With this ongoing pandemic the platform that we shared the idea of can be implemented on will lift up our economy with how easy it is to access, with help from middleman and Ride-Hailing we hope we can creat established digital market in Indonesia. But this platform will not make any companies success within week because companies also have to adjust the competition from the platforms provided for communal use, therefore there must be careful planning from each company.

From careful planning come careful marketing, the strategy we can use is Strength, weakness, opportunities and Threats, SWOT. We hope that with this strategy MSMEs in Indonesia can make a strategy that is right on target according to their respective markets. MSMEs must also be innovative in their product lines and must always be up to date. It is not only the products are updated and the way of marketing is like updating advertising with new photos or videos with the use of products sold to the market.

Indeed, according to the Central Bank of Russia Federation, Банк России, the rate of long-term loans extended to SME's has decreased annually from 17.8% in 2015 to 10.8 percent in 2019. In 2019, the number of the most critical subject SMEs decreased in the Yaroslav and Magadan regions, in The Chechen Republic, Komi, Mari El, Adygea, Altay, and the city of Moscow. According to Mikhail Semenov, CEO of Warehouse Services with QB delivery, many furniture, office equipment and other office equipment have arrived for storage since March 2020, and the share of such orders has increased by 30%. QB is an on-demand self-storage startup based in Moscow, Russia. According to the QB page on the LinkedIn website on December 9, 2020, as much as USD 410,000, we are optimistic about applications that focus on MSME's for Indonesian and Russian trade assuming B.E.S.T can increase to USD 615,000, 150% basis point from the previous year, trial and error considerations with 25%, to USD 512,500.

This principle of financial management was proposed by the author based on retail industry management knowledge under the name B.E.S.T, Basory Economic Solution of Trouble. In order to analyze the liquidity of a company, it is necessary to have a detailed classification of liquidity categories based onvarious criteria: by level of risk, on a specific date, in relation to standards, etc.

An application system recommended by the authors to embrace the lost decades of Indonesia and Russia. The term Lost Decade was originally coined by him to refer to the economic crisis that lasted his decade in Japan in the 1990s. Where was the period of economic stagnation that made him one of the longest economic crises in recorded history. Grim economic forecasts show that three-quarters of businesses are struggling to find the skills and workforce they need. This requires changes in government policies, such as more flexible immigration regimes and tax cuts, to stimulate investment.

Results and Discussion

The author hopes that the proposal, including B.E.S.T. calculation and creation of various series of mobile-friendly MSME applications, able to increase the Indonesia and Russia GDP. Russia's Gross Domestic Product increased by 4.7% year-on-year, y.o.y, in

2021 during the pandemic. This number is 0.74% higher than the -2.7% figure announced in 2020. With a GDP of \$ 1.77853 trillion in 2021, Russia ranks 11th of 196-country public GDP ranking. The qualified value of Russia's GDP increased by \$ 294,114 million y.o.y Russia's per capita GDP in 2021 will be \$12,219, up \$2,064 from \$10,155 in 2020. To see how GDP per capita has evolved, it's quite interesting to go back a few years and appeal this data to 2011 (where the GDP per capita in Russia was \$14,306). In ranking countries by GDP per capita, Russia ranks 68th out of 196 countries with published GDP.

An example: Indonesian MSME company, Gendhis Bag, is engaged in the production of women's bags: made from natural materials such as agel - one of the natural fibers obtained from the cutting process of the young leaves of the gebang tree, corypha gabanga BL, rattan, seaweed, mending, to bamboo, the production capacity of 1,000 to 5,000 pieces, with an average price of IDR 250,000 per fruit, using the lowest calculation: 1,000 fruit multiplied by IDR 250,000 produces IDR 250,000,000. So by the author's calculations, the presence of the application will increase to 150%, IDR 375,000,000, with 25% being trial and error, the company is expected to get an increase of IDR 312,500,000.

Simple Financial Statement*			
ACCOUNT	BALANCE		
	DEBIT		CREDIT
Cash	Rp	53.000.000	
Equipment	Rp	10.000.000	
Paid-up capital			Rp 50.000.000
Accounts Payable			Rp 5.000.000
Salary Expense	Rp	2.000.000	
Revenue			Rp 10.000.000
Total	Rp	65.000.000	Rp 65.000.000

*Before using the MSME application

There is a need for an application that can accommodate and calculation MSME businesses, because Indonesia and Russia are free markets for MSMEs before, during, and after the Covid health pandemic According to economists, the financial management system is very important. In our opinion, as the authors, this application will help businesses to achieve sales targets and market acquisition, the next year's sales must be able to reach 150%, from the previous year's sales point basis, with a calculation of 25% trial and error.

Simple Financial Statement*			
ACCOUNT	BALANCE		
	DEBIT		CREDIT
Cash	Rp	132.500.000	
Equipment	Rp	25.000.000	
Paid-up capital			Rp 125.000.000
Accounts Payable			Rp 5.000.000
Salary Expense	Rp	2.000.000	
Operating	Rp	3.000.000	

Expenses			
Operating Income		Rp	7.500.000
Revenue		Rp	25.000.000
Total	Rp	162.500.000	Rp 162.500.000

*Estimated results from the MSME applications used

It's a good idea to start income-expenditure analysis by comparing the time report data to the previous data for all data income. Income from the sale of goods, products, labor, percentage of income from other organizations. As a enlarge of such comparison, can identify the increase in income and the reasons for its decrease or increase.

Conclusion

We recommend that the company use a application information technology, financial management calculations and business account. The reason some people use personal accounts for business purposes is to avoid taxation. The tax officer asked the bank to check the transactions of startup activists and still be taxed.

In this journal, it is discussed about how financial management calculations can help MSMEs to overcome the problems faced during the pandemic and how technology applications can help MSMEs to overcome these problems such as increased revenue generation, promotion, product knowledge. This journal shows that proper financial management calculations and technology applications can help MSMEs to survive, thrive during and after the COVID-19 pandemic by using B.E.S.T is estimated and expected to achieve 150% profit and 25% trial error.

The Indonesian Tax Directorate has recognized a variety of startup and MSMEs companies in Indonesia and has determined the taxes that these startup businesses are subject to. The startup business tax is the same as in traditional trade. Taxes borne by startups and MSMEs are Value Added Tax / VAT and Income Tax / IT. The Startups with revenue less than Rp 4.8 billion can opt-out of being certified as a taxable entity. However, They are subject to income tax at a rate of 0.5% of their gross income. Income tax is levied on gross income, which is cumbersome for most startups. The solution is to give still loss-making startups the chance to qualify as taxable entrepreneurs/TEs. TEs are subject to 25% income tax on their net profits and don't have to pay a cent if they lose. The tax office imposes a tax on their 10% of the server preservation costs arising from the commissioning. The conclusion of the research in this journal shows that the COVID-19 pandemic has had a significant impact on MSMEs in Indonesia and Russia.

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