Incorporating Intellectual Property Rights and E-Commerce: Supply Chain Strategy to Strengthen the Competitiveness of SMEs

Dian Retnaningdiah[1], Siti Resmi[2], Indah Kurniawati[3], Beni Suhendra Winarso[4]
[1] *Universitas Aisyiyah Yogyakarta, Indonesia*
[2] *Sekolah Tinggi Ilmu Manajemen YKPN Yogyakarta, Indonesia*
[3,4]*Universitas Ahmad Dahlan Yogyakarta, Indonesia*
[1]*dian_rdh@yahoo.co.id*
[2]*sitiresmiamp@yahoo.com*
[3]*indahmila@gmail.com*
[4]*beni.winarso@act.uad.ac.id*

***Abstract*- This research aims to analyze the use of e-commerce and Intellectual Property Rights (IPR), especially the supply chain strategy for Small Business Enterprises (SMEs) as an effort to strengthen business competitiveness. This study uses an experimental design by providing intervention to respondents. Descriptive analysis was carried out to reflect the data obtained from the process of identifying the profiles of several SMEs and this study involved 40 SMEs in Yogyakarta. The data was processed using inductive analysis with paired sample t-test to find out the difference between e-commerce insights and IPR ownership before and after the experiment. One-Sample Kolmogorov Smirnoff is used to test data normality to determine different types of tests. The findings demonstrate that there are significant differences before conducting the experiment and after. The research shows that communication is a key tool ensuring the efficiency of supply chain cooperation as perceived seriously by the SME. The experiment indicates the significant level of 0.003 is lower than alpha of 0.05 for e-commerce. While the ownership of IPR such as trademarks showed significant gains as well, as indicated by the significant level 0.000 lower than alpha 0.05. The result of experimental method has made marketing techniques with e-commerce and IPR ownership.**

Keywords- *Intellectual Property Rights, E-Commerce, Supply Chain Strategy, Competitiveness, SMEs.*

1. Introduction

Strengthening the competitiveness of SMEs is a key factor for the success of SMEs in facing the challenges of the ASEAN Economic Community. According to Presidential Instruction No. 6 of 2014, one of the efforts is to improve competitiveness in order to face the MEA that is the development of Micro, Small, and Medium Enterprises (SMEs) focused on; first, improving the competitiveness of SMEs in terms of financing; second, developing the competitiveness of micro, small, and medium enterprises in order to increase legibility, capability, and competitiveness of SMEs; and third, encouraging the empowerment of the real sector and the competitiveness of SMEs. Based on data from 19 provinces, there are six main variables that shape the competitiveness of SME; resource availability and business environment, business capability, policy and infrastructures, research and technology; financing and partnership, and performances [12].

Recently the economic growth, especially in the Special Region of Yogyakarta (DIY) has increased compared to the previous period. However, the growth is only in terms of quantity and it is not offset by an increase in terms of quality. While the presence of MEA at the end of 2015 requires SMEs to improve their quality in order to have strong competitiveness. But in fact, a classic problem faced by SMEs is still an obstacle for businesses to increase competitiveness. Problems faced include low productivity, the quality of SME human resources in management, organization, mastery of technology and marketing, weak entrepreneurial spirit, and lack of access to capital, information technology, and markets and other factors of production [11]. innovation in brand marketing initiatives can be a function of the contribution made by a brand to its competitiveness [6].

In addition, a lot of micro small and medium industries that are not aware of the ownership of Intellectual Property Rights (IPR) will encourage micro-industry, small and medium to have binding legal force. Protection of SMEs products through IPR rights will strengthen Indonesia's competitiveness in facing the free trade of the ASEAN Economic Community (MEA). SME products that have been registered with IPR will have high legal protection and economic value because these products cannot be copied and stolen by other parties if there are other parties who produce them, of course, must have permission from their rights holders. This is where the economic value is protected by IPR [23]. The facilitated access to finance is to be combined with measures for best practice implementation, stimulation of innovation, registering of intellectual property and increasing the level of internationalization [1].

Based on the above explanation, it is necessary to solve the problem through experimental research on the problems faced by SMEs in D.I.Yogyakarta. Most SMEs are weak in the mastery of

Copyright © ExcelingTech Pub, UK (http://excelingtech.co.uk/)

information and marketing technology and the lack of awareness of IPR protection for the industry. The study begins with identifying the problems which often faced by the vast majority of SMEs, especially in the use of e-commerce that is not optimal as supporting the marketing and IPR not owned by SMEs to protect the brand of SMEs. This research is expected to generate some outputs in the form of realization of e-commerce for strengthening competitiveness through market expansion and ownership of IPR in form of Brands for SMEs to protect the brand or brand products produced by SMEs. This research is important to make a number of problems SMEs soon be overcome, namely the lack of marketing of the products of SMEs for SMEs do not take any advantage of e-marketing, the lack of mastery of the technology and marketing of MSMEs, weak information technology infrastructure related to the use of the internet as a means of SMEs for the dissemination of information more quickly and accurately, the weakness of SMEs in exploiting the advantages of using e-commerce is to the promotion media [10].

2. Literature Review

2.1 The Role of supply chain on SMEs in the Economy

SMEs is a business group that is resistant to the impact of the economic crisis. It is supported by the entrepreneurial spirit in the business world wrestle. SMEs have shown to have a role and contributed to the development of Indonesia. In 2012, SMEs recorded to contribute to Indonesia's GDP amounted to 59.09%. While in subsequent years, SMEs are expected to contribute even more than the GDP of Indonesia. The amount of the contribution is also evident from the high labor absorption SMEs which amounted to 91.6% of the entire workforce in Indonesia. Overall the SME sector can influence the development of the Indonesian economy. Keywords: GDP, Number of SMEs, Number of SME Workers, Investment, Exports [16].

Supply chain is a formation of a value chain network consisting of individual functional entities committed to providing resources and information to achieve the objectives of efficient management of suppliers as well as the flow of parts. The supply chain includes the entities from the origin point to the final consumption such as suppliers, customers and the organization itself.

In 2010, the number of SMEs units reached 52.2 million units scattered throughout Indonesia. The magnitude of this amount reflects the magnitude of the potential that can be developed and improved for SMEs to be able to make further contributions in this country. SMEs can last from several waves of crises that have occurred in this country, such as the economic crisis of 1997-1998 and the global economic crisis of 2008. While many large companies are collapsed and terminated, SMEs are able to absorb the unemployed to be able to work again. Currently, the Ministry of Cooperatives and Small and Medium Enterprises plans to create 20 million new small and medium enterprises in 2020. 2020 was a period that promises so many opportunities because in that year will be realized what was envisioned by the ASEAN leaders are set out in the Bali Concord II. Data. the growth achieved by MSMEs that in the 2013 period the value of exports increased by 9.29% or worth Rp. 182 billion. This is a success that must be borne out for MSMEs, which are almost 86.33% with capital. The new banking industry only disburses loans of 13.67% but it is still dominated by national public banks.According to Law Number 20 of 2008, the criteria for grouping small and medium enterprises are based on net worth and sales per year [22].

Viewing restrictions used by law as mentioned above, at least we know that in terms of capital, SMEs have limitations when compared to large companies. However, SMEs certainly have creative ideas that continue to grow. That is probably why an SME can still exist until now. The idea which is owned by the SMEs can be transformed into a very valuable asset, i.e. when the idea was poured into the form of a product that can then be protected by IPR system one of them with the brand and industrial design. SMEs have not been efficiently involved in open innovation. Among other initiatives that can help accelerate the path of SMEs towards the benefits of open innovation is a more efficient patenting process. Meanwhile, SMEs tend to better rely on IPR such as trademarks or industrial designs to protect IPR in open innovation [3].

2.2 E-Commerce in Improving the Competitiveness of SMEs

The magnitude of the role of SMEs in the economy of Indonesia requires many efforts to develop strategies and business tactics of SMEs. Advances in information technology (IT) can be utilized by SMEs in developing its business, in this case through e-commerce. Utilization of e-commerce in business operations will help in getting access to a wider market. SMEs can build networks to introduce internet-based businesses and their products. E-commerce as electronic commerce is similar to traditional trading, but it has certain advantages that can be directly helpful to increase revenues and profits. With the flexibility of electronic commerce can cut the costs of marketing with ease and sophistication in delivering information about goods and services directly to consumers wherever they are. Companies that do business electronically can also cut operating costs both in terms of selling place and labor. Implementation of e-commerce to provide benefits for the culprit in getting new customers [8].

E-commerce has advantages such as increasing the competitiveness of SMEs and getting export opportunities and other business opportunities can be done by utilizing the development of Information and Communication Technology (ICT) especially e-commerce. SMEs need to develop web sites and e-commerce as a means for the promotion and marketing of business products, thereby increasing

sales volume and increasing revenue [10]. Compared to traditional business models, e-commerce has several advantages, namely strength as shortening distribution channels, lower costs, no time restrictions, minimizing investment, easy to learn, flexible operations, etch [9]. electronic commerce (e-commerce) is widening the concept of business from a simple transactional approach to a broader and more complex concept of inter-firm co-operation [2]. Based on a survey of 292 Indonesian SMEs, it was found that perceived benefits, technological readiness, owner's innovation, owner's IT capabilities and owner's IT experience were the determining factors that influenced Indonesian SMEs in adopting electronic technology [15]. E-commerce can help SMEs penetrate global markets, but there are some obstacles that limit or prevent them from entering e-commerce that can be dealt with publicly. and personal support [19]. SMEs engagement with e-commerce and the third and fourth deal with SMEs engagement with e-business and e-marketing [13].

2.3 IPR for Improving SME Competitiveness

IPR are rights are legally related to the problems of the invention and creativity of a person or persons related to the protection problems of reputation in the field of commercial (commercial reputation) and action/services in the commercial field (goodwill). Over the years, the rather elastic IPR concept has been stretched to include not only patents, copyrights, trademarks, and industrial designs but also trade secrets, plant breeders' rights, geographical indications, and rights to lay [5]. stronger intellectual property systems engender higher levels of economic complexity [24]. companies still see IPR as relevance for the protection of their innovative capabilities [7].

IPR is protection for products produced by businesses. Business players, especially SMEs in the province D.I.Yogyakarta still many who do not have the HKI of their harvests. This is due to the lack of information on the management of HKI. Protection of SMEs products through IPR rights will strengthen Indonesia's competitiveness in facing the free trade of the ASEAN Economic Community (MEA). SME products that have been registered with IPR will have high legal protection and economic value because these products cannot be copied and stolen by other parties if there are other parties who produce them, of course, must have permission from their rights holders. This is where the economic value is protected by IPR. Thus, to boost innovation and economic growth, IPR policies need to be customized to industries as well as SMEs. Universally strong IPR policies are likely to discourage innovation and growth, causing some industries to suffer [4]. Batik's SMEs in Pekalongan and Yogyakarta reluctant to use IPR because the IPR registration system is complicated, old and feels expensive as well the glue of IPR enforcement in Indonesia [21]. In general, every thought creation, which has value, can be called an IP; however, to claim legal rights to it, it must be registered, like any tangible property [20].

Protection of MSME products can be done by registering HKI to maintain the level of originality of MSME products in dealing with ASEAN Free Trade. While product protection efforts MSMEs can be through the role of government, the role of non-government, the role of institutions and the role of MSMEs that itself. Implementation of IPR in the batik industry in Pekalongan not yet fully implemented, it is because the basis of batik business in Pekalongan was mostly domestic industries, in addition to their understanding of HKI is still lacking [17]. The obstacles in providing IPR protection include the limited knowledge of batik artisans about IPR, the low economic level of batik artisans, complicated IPR procedures and expensive patenting, and patenting motives is considered a futile job [18]. state that the protection of IPR policies towards creative economic products has been carried out by the government through legislation and policies related to the IPR sector. However, the level of public awareness and understanding of the importance of IPR, the communal nature of creative economic entrepreneurs in Indonesia, and the nature of IPR that must be registered for legal protection have led to the protection of IPR for creative economic entrepreneurs not yet optimal. The lack of regional alignments has an impact on the not yet optimal economic benefits received by creative economic entrepreneurs. Therefore, the government needs to intensify the promotion of IPR and facilitate the registration of IPR for creative economic entrepreneurs. Institutional and regulatory support at the regional level is also important to develop and protect creative economic product. the enforcement aspects of the IPR system are significant in explaining the relationship between innovation and the IPR system [14].

3. Research Method

This research is a quasi-experimental research with a pretest-posttest design control group control. Data was obtained by giving questionnaires to respondents and involving 40 MSMEs in Yogyakarta. Data on the pretest and posttest scores were tested for the distribution of data normality using one Kolmogorov Smirnoff sample. Then, the differences between them will be analyzed using the paired t-test if the data is normally distributed and using the Wilcox Signed Rank test if the data distribution is not normal, the use of parts to divide paper text is optional and left as a decision for the author.

4. Result and Discussion

4.1 Respondents Characteristic

The general picture SMEs craft in Yogyakarta in the study include the status of the respondent, the old business, forms of business entities, net worth, business location, number of employees, the development plan, the turnover of the year, the ownership of the Internet, proprietary IPR brand products, proprietary IPR

industrial design. The number of respondents was 40 SMEs while from this number well filled out a questionnaire with a total of 33 SMEs. A total of 33 SMEs later became respondents (samples) in this study. The results of data analysis related to the general description of MSMEs can be explained that the majority of respondents are the proprietorship, employed between 1 until 10 persons, have sales less than Rp100.000.000, started their business between 1 until 3 years, want to grow fast, 6) are located in their own house, don't have the e-commerce (internet), don't have IPR, have constraints in marketing and accounting.

4.2 Analysis and Discussion for the E-Commerce Design

4.2.1 Analysis of the normality test

Results of data normality test using one-sample Kolmogorov Smirnoff shown in Table 2. Based on these results indicate that the data prior to the intervention and data after the intervention has a significance of 0.515 and 0.271. This shows that the significance level is greater than the alpha level of 0.05. So it is concluded that the data were normally distributed. To perform the test the difference in value before the intervention and after the intervention using Paired Samples t-test if the data were normally distributed. Kolmogorov-Smirnov One-Sample Test Results can be seen in Table 1.

Table 1. The Result of One-Sample Kolmogorov-Smirnov Test

Analysis of difference test before and after the intervention. Based on normality test results, showing that the normal distribution of data, then for further testing using a Paired Sample t-test. The results are shown in Table 3. The test results show that the significance of differences before and after the intervention are 0,003. It shows that the significant level is smaller than alpha (5%). It can be concluded that the value of the SMEs which are calculated covering various aspects that are attitude, knowledge aspect and the aspect of skill showed significant difference in the time before by intervention with a value after being given intervention. *Paired Sample Test Results can be seen in Table 2*

Table 2. The Result of the Paired Sample Test

Paired Samples Test								
		Paired Differences				t	df	Sig. (2-tailed)
		Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	Before - After	2.923	.509	-2.703	-.630	-3.276	32	.003

One-Sample Kolmogorov-Smirnov Test			
N		Before	After
		33	33
Normal Parametersa,b	Mean	10.42	12.09
	Std. Deviation	2.346	1.569
Most Extreme Differences	Absolute	.142	.174
	Positive	.075	.129
	Negative	-.142	-.174
Kolmogorov-Smirnov Z		.818	.999
Asymp. Sig. (2-tailed)		.515	.271
a. distribution Test is Normal.			
b. Calculated from data.			

Implementation of experiments was conducted with intervention programs to respondents. Each respondent made in the design of e-commerce market place Tokopedia, bukalapak, and OLX and social media. With the help of mobile phones and laptops, each practice to enter into the products of the media that have been made. Results of the implementation of interventions in the form of program design making e-commerce by SMEs is the creation of the design of e-commerce by SMEs. The results of the implementation of e-commerce creation at the SMEs during the intervention can be seen in figure 1.

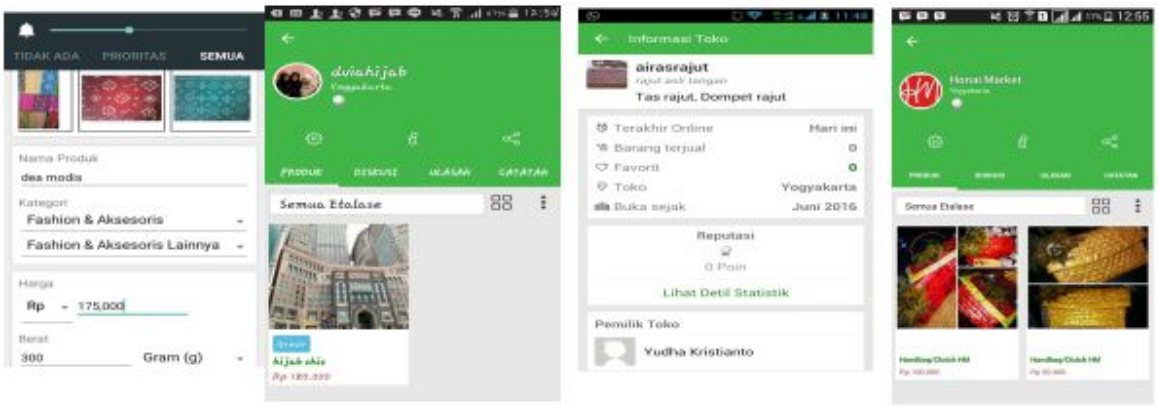


Figure 1. E-commerce Creation by Respondents

4.3 Analysis and Discussion for the Brand Logo Creation and Registration of Ownership of IPR.

4.3.1 Analysis of Normality Test

Normality test results data concerning IPR particularly for using one-sample Kolmogorov Smirnoff shown in Table 4. Based on these results indicate that the data before the intervention had a significance level of 0.200 and the data after the intervention has a significance of 0.001. This shows that the significance level is greater than the alpha level of 0.05 for the data before the intervention and the significant level is smaller than the alpha level of 0.05 for the data after the intervention. So that it can be concluded that the data distribution is not normal. To perform the test the difference in value before and after the intervention using the Wilcoxon signed-rank test. Results of Analysis and Discussion for Making Trademarks and Registration of IPR Ownership by the paired test can be seen in Table 3.

Table 3. The Result of the Paired Sample Test

One-Sample Kolmogorov-Smirnov Test			
		Before	After
N		30	30
Normal Parameter's	Mean	7.73	10.23
	Std. Deviation	2.180	1.165
Most Extreme Differences	Absolute	.102	.211
	Positive	.098	.155
	Negative	-.102	-.211
Test Statistic		.102	.211
Asymp. Sig. (2-tailed)		.200[c,d]	.001[c]

Analysis of difference test before and after the intervention. Based on the results of the normality test, indicating that the data distribution is not normal, then for further testing using a Wilcoxon signed-rank test. The results are shown in Table 5. The above test results show that the significance of differences before the intervention and after the intervention is 0,000. It shows that the significant level is smaller than alpha (5%). It can be concluded that the value of the SMEs of the knowledge, insight ownership of IPR, especially the brand showed a significant difference in the time before the intervention by the given value after the intervention. Wilcoxon marked rank test results can be seen in Table 4

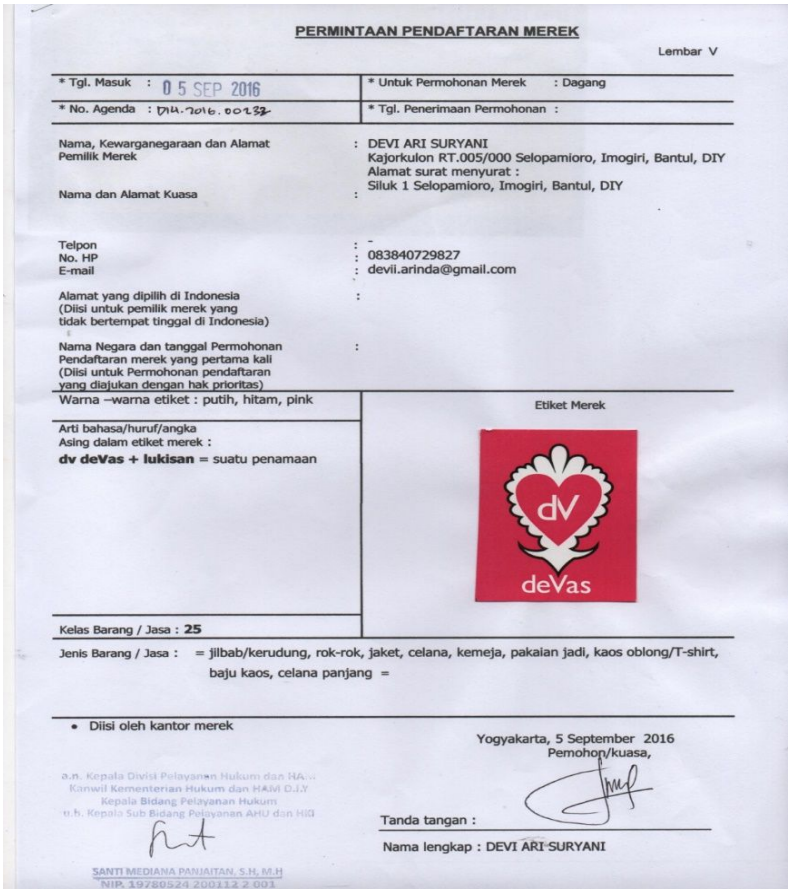
Table 4. Wilcoxon signed-rank test

Ranks				
		N	Mean Rank	Sum of Ranks
after – before	Negative Ranks	4[a]	6.13	24.50
	Positive Ranks	24[b]	15.90	381.50
	Ties	2[c]		
	Total	30		

Test Statistics[a]	
	after - before
Z	-4.087[b]
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

Implementation of experiments was conducted with intervention programs to respondents. Each respondent to create a logo to brand their business and make a registration for the ownership of IPR in the form of a brand for legalized in the Ministry of Law and Human Right. The results of the implementation of IPR especially brand logo creation at the SMEs during the intervention can be seen in figure 2.



PERMINTAAN PENDAFTARAN MEREK

Lembar V

* Tgl. Masuk : 05 SEP 2016
* Untuk Permohonan Merek : Dagang
* No. Agenda : [illegible]
* Tgl. Penerimaan Permohonan :

Nama, Kewarganegaraan dan Alamat Pemilik Merek : DEVI ARI SURYANI, Kajorkulon RT.005/000 Selopamioro, Imogiri, Bantul, DIY
Alamat surat menyurat : Siluk 1 Selopamioro, Imogiri, Bantul, DIY
Nama dan Alamat Kuasa :

Telpon : -
No. HP : 083840729827
E-mail : devii.arinda@gmail.com

Alamat yang dipilih di Indonesia (Diisi untuk pemilik merek yang tidak bertempat tinggal di Indonesia) :

Nama Negara dan tanggal Permohonan Pendaftaran merek yang pertama kali (Diisi untuk Permohonan pendaftaran yang diajukan dengan hak prioritas) :

Warna –warna etiket : putih, hitam, pink

Etiket Merek

Arti bahasa/huruf/angka
Asing dalam etiket merek :
dv deVas + lukisan = suatu penamaan

Kelas Barang / Jasa : **25**

Jenis Barang / Jasa : = jilbab/kerudung, rok-rok, jaket, celana, kemeja, pakaian jadi, kaos oblong/T-shirt, baju kaos, celana panjang =

• Diisi oleh kantor merek

Yogyakarta, 5 September 2016
Pemohon/kuasa,

a.n. Kepala Divisi Pelayanan Hukum dan HA...
Kanwil Kementerian Hukum dan HAM D.I.Y
Kepala Bidang Pelayanan Hukum
u.b. Kepala Sub Bidang Pelayanan AHU dan HKI

Tanda tangan :

Nama lengkap : DEVI ARI SURYANI

SANTI MEDIANA PANJAITAN, S.H, M.H
NIP. 19780524 200112 2 001

Figure 2. IPR logo brand made and registered by the respondent

5. Conclusion

SCM is perceived as an efficient mean to achieve successful international competitiveness. Statistically, it showed that there are significant differences in the time before and after the experiment indicated the significant level of 0.003 is lower than alpha of 0.05 for e-commerce. While the ownership of IPR such as trademarks showed significant gains as well, as indicated by the significant level of 0.000 is lower than alpha 0.05 This shows that the experiments conducted in this study correspond with the purpose of which is to achieve the strengthening of the capabilities of the competitiveness of SMEs through the use of proprietary e-commerce and HKI such as trademarks. By this intervention, the respondent changed in attitude, knowledge, and skill. It showed by their ability to make market place and registered the IPR to the Ministry of Law and Human Property Rights. Businesses with a SCM strategy require integration, cooperation and collaboration, which in turn demand aligned objectives, open communication, sharing of resources, risks and rewards. These results provide recommendations to SMEs increased knowledge and practices of marketing and business management with the use of information technology in an attempt to confront and to enter free trade, especially MEA which has prevailed and perform legal protection for the ownership of IPR in addition to the brand in an effort to protect products already generated.

6. Acknowledgment

This research was successfully completed with the help and support of many parties. We would like to thank those who have supported, in particular, the directorate general of research and development of the ministry of research, technology and higher education and the respondents. Accessed to finance must be combined with steps for implementing best practices, stimulating innovation, registering intellectual property, and increasing the level of internationalization.

References

[1] Ahmedova, S, "*Factors for Increasing the Competitiveness of Small and Medium-Sized Enterprises (SMEs) in Bulgaria*", Procedia - Social and Behavioral Sciences, Vol 195, pp. 1104–1112, 2020. https://doi.org/10.1016/j.sbspro.2015.06.155

[2] Awiagah, R., Kang, J., & Lim, J. I, "*Factors affecting e-commerce adoption among SMEs in Ghana*", Information Development, Vol 32, No. 4, pp. 815–836, 2016. https://doi.org/10.1177/0266666915571427

[3] Brem, A., Nylund, P. A., & Hitchen, E. L, "*Open innovation and intellectual property rights: How do SMEs benefit from patents, industrial designs, trademarks, and copyrights?*", Management Decision, Vol 55, No. 6, pp. 1285–1306, 2017. https://doi.org/10.1108/MD-04-2016-0223

[4] Cho, K., Kim, C., & Shin, J, "*Differential effects of intellectual property rights on innovation and economic performance : A cross-industry investigation*", Science and Public Policy, pp. 1–14, 2015. https://doi.org/10.1093/scipol/scv009

[5] Dutfield, G. M., & Roberts, T. W, "*Intellectual Property Rights. In Encyclopedia of Applied Plant Sciences (Second Edition, Vol. 2)"*, 2016. https://doi.org/10.1016/B978-0-12-394807-6.00036-8

[6] Gupta, S., Malhotra, N. K., Czinkota, M., & Foroudi, P, "Marketing innovation : A consequence of competitiveness", Journal of Business Research, Vol 69, No. 12, pp. 5671–5681, 2016. https://doi.org/10.1016/j.jbusres.2016.02.042

[7] Hagedoorn, J., & Zobel, A. K, "*The role of contracts and intellectual property rights in open innovation*", Technology Analysis and Strategic Management, Vol 27, No. 9, pp. 1050–1067, 2015. https://doi.org/10.1080/09537325.2015.1056134

[8] Hamill, J., & Gregory, K, "*Internet marketing in the internationalization of UK SMEs*", Journal of Marketing Management, Vol 13, No. 1–3, pp. 9–28, 2010. https://doi.org/10.1080/0267257X.1997.9964456

[9] Huang, Z., & Benyoucef, M, "*From e-commerce to social commerce: A close look at design features*", Electronic Commerce Research and Applications, Vol 12, No. 4, pp. 246–259, 2013. https://doi.org/10.1016/j.elerap.2012.12.003

[10] Jauhari, J, "*Upaya Pengembangan Usaha Kecil dan Menengah (UKM) dengan Memanfaatkan E-Commerce*", Jurnal Sistem Informasi, Vol 2, No. 1, pp.159–168, 2014. https://doi.org/2355-4614

[11] Kumalasari, L. D, "*Problem UKM Dalam Pengembangan Usaha: Studi Pada UKM di Desa Mulyoarjo Lawang Malang*", Jurnal Sosial Politik, Vol 3, No. 1, p. 58, 2017. https://doi.org/10.22219/.v2i2.4401

[12] Lantu, D. C., Triady, M. S., Utami, A. F., & Ghazali, A, "*Pengembangan Model Peningkatan Daya Saing UMKM di Indonesia : Validasi Kuantitatif Model*", Jurnal Manajemen Teknologi, 15(1), 77–93, 2016. https://doi.org/10.12695/jmt.2016.15.1.6

[13] Mazzarol, T, "*SMEs Engagement with E-Commerce, E-Business, and E-Marketing*", Small Enterprise Research, Vol 22, No. 1, pp.79–90, 2015. https://doi.org/10.1080/13215906.2015.1018400

[14] Papageorgiadis, N., & Sharma, A, "*Intellectual property rights and innovation: A panel analysis*", Economics Letters, Vol 141, pp. 70–72, 2016. https://doi.org/10.1016/j.econlet.2016.01.003

[15] Rahayu, R., & Day, J, "*Determinant Factors of E-commerce Adoption by SMEs in Developing Country : Evidence from Indonesia*", Procedia - Social and Behavioral Sciences, Vol 195, pp. 142–150, 2015. https://doi.org/10.1016/j.sbspro.2015.06.423

[16] Riswara, Y. H, "*Pengaruh Ukm terhadap Pertumbuhan Ekonomi Indonesia Tahun 1999-2016 (Universitas Islam Indonesia)*", Retrieved from https://dspace.uii.ac.id/bitstream/handle/123456789/7694/SKRIPSI_14313128_PENGARUH UKM TERHADAP PERTUMBUHAN EKONOMI INDONESIA TAHUN 1999-2016.pdf?sequence=2&isAllowed=y, 2018.

[17] Rongiyati, S, "*Protection of the Intellectual Property Rights on Creative Economic Products*", Negara Hukum, Vol 9, No. 1, pp.39–58, 2018. https://doi.org/10.22212/jnh.v9i1.1001

[18] Sari, I. P., Wulandari, S., & Maya, S, "*HKI pada Batik Tulis Indonesia (Studi Kasus Batik Tulis Tanjung Bumi, Madura)*", JURNAL EKONOMI PENDIDIKAN DAN KEWIRAUSAHAAN, 6, 2018. https://doi.org/10.26740/jepk.v6n2.p145-158

[19] Savrul, M., Incekara, A., & Sener, S, "*The Potential of E-commerce for SMEs in a Globalizing Business Environment*", Procedia - Social and Behavioral Sciences, Vol 150, pp.35–45, 2014. https://doi.org/10.1016/j.sbspro.2014.09.005

[20] Sharma, B, "*Patent. In Pharmaceutical Medicine and Translational Clinical Research*", 2017. https://doi.org/10.1016/B978-0-12-802103-3.00016-X

[21] Sinaga, V. S, "*Faktor-Faktor Penyebab Rendahnya Penggunaan Hak Kekayaan Intelektual di Kalangan Usaha Kecil Menengah Batik*", JURNAL HUKUM IUS QUIA IUSTUM, Vol 21, pp. 61–80, 2014. https://doi.org/10.20885/iustum.vol21.iss1.art4

[22] Suci, Y. R, "*Perkembangan UMKM (Usaha Mikro Kecil Menengah) di Indonesia*", Jurnal Ilmiah Fakultasi Ekonomi, Vol 6, No. 1, pp.51–58, 2017. Retrieved from https://media.neliti.com/media/publications/58432-ID-none.pdf

[23] Sukarmijan, S.-S., & Sapong, O. D. V, "The Importance of Intellectual Property for SMEs; Challenges and Moving Forward", UMK Procedia, 1(October 2013), pp. 74–81, 2014. https://doi.org/10.1016/j.umkpro.2014.07.010

[24] Sweet, C. M., & Eterovic Maggio, D. S, "*Do stronger intellectual property rights increase innovation?*", World Development, Vol 66, pp. 665–677, 2015. https://doi.org/10.1016/j.worlddev.2014.08.025