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Community Service Innovation: Data Updates Google Maps for UMKM Promotion and Social Facilities

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INFORMASI ARTIKEL

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ABSTRAK

Pengabdian Kepada Masyarakat (PKM) dengan tema *"Inovasi Pengabdian Masyarakat: Pemutakhiran Data Google Maps untuk Promosi UMKM dan Fasilitas Sosial"* dilatarbelakangi oleh pesatnya perkembangan teknologi informasi, khususnya sistem informasi geospasial seperti Google Maps, yang berperan penting dalam mendukung berbagai aktivitas masyarakat. Mulai dari perencanaan tata ruang, promosi ekonomi lokal, hingga peningkatan akses terhadap fasilitas sosial. Tujuan utama kegiatan ini adalah melakukan pemutakhiran data pada platform Google Maps guna mendukung promosi Usaha Mikro, Kecil, dan Menengah (UMKM) serta fasilitas sosial di Dusun Eka Jaya. Kegiatan dilaksanakan melalui pendekatan partisipatif dengan melibatkan 30 peserta yang terdiri atas remaja dan masyarakat umum, menggunakan metode ceramah, diskusi, dan tanya jawab. Proses sosialisasi memaparkan pentingnya akurasi data spasial dan dilanjutkan dengan observasi langsung serta pemetaan ulang wilayah. Hasil dari pelaksanaan kegiatan pengabdian yang dilaksanakan oleh tim telah berhasil memperbarui titik lokasi agar akurat sesuai dengan ketepatan penandaan jalan, lokasi UMKM, dan fasilitas sosial di Google Maps. Selain itu, kegiatan ini juga berhasil meningkatkan literasi digital masyarakat, sehingga masyarakat mampu melakukan pemutakhiran data secara mandiri serta memanfaatkan Google Maps untuk pengembangan aktivitas sosial dan ekonomi, termasuk dalam transaksi digital. Dengan demikian, program PKM ini memberikan kontribusi teknis, sosial, dan ekonomi yang komprehensif dan berkelanjutan bagi kemajuan dan kesejahteraan masyarakat Dusun Eka Jaya.

Keywords:
Data update
Google Maps
UMKM

ABSTRACT

Community Service Program (PKM) with the theme "Innovative Community Engagement: Updating Google Maps Data for the Promotion of *UMKM* and Social Facilities" is driven by the rapid development of information technology, particularly geospatial information systems such as Google Maps, which play a significant role in supporting various community activities. These range from spatial planning and promoting the local economy to improving access to social facilities. The main objective of this program is to update data on the Google Maps platform to support the promotion of Micro, Small, and Medium Enterprises (*UMKM*) as well as social facilities in Dusun Eka Jaya. The activity was carried out using a participatory approach, involving 30 participants consisting of youth and community members, through lectures, discussions, and Q&A sessions. The outreach process emphasized the importance of spatial data accuracy and was followed by direct field observation and remapping of the area. As a result of this community service initiative, the team successfully updated location points to ensure accurate marking of roads, *UMKM* locations, and social facilities on Google Maps. Moreover, the activity significantly improved the community's digital literacy, enabling residents to independently update data and utilize Google Maps as a tool for developing both social and economic activities, including digital transactions. Thus, this PKM program provides comprehensive and sustainable technical, social, and economic contributions to the progress and welfare of the Dusun Eka Jaya community.

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I. INTRODUCTION

The development of digital technology has created significant dependence on digital devices, especially in the management of geospatial information which plays an important role in increasing efficiency in various sectors. (Haq et al., 2024) . According to (Rizal, M. I., El-Yunusi, M. Y. M., & Darmawan, 2024), geospatial information technology has developed rapidly, becoming a very important tool in various fields, including urban planning, environment, and transportation.

The use of geospatial technology is not only limited to the urban and industrial sectors, but has also penetrated rural areas as a strategy to encourage development based on local potential. Technology is a basic need for every individual, this is supported by the existence of activities carried out using technology, especially the internet (Chaniago, Fransisko Yasman Purnama, Boby Badriyah et al., 2024) . In the context of villages, geospatial information can be used to map natural resources, basic infrastructure, social facilities, and distribution channels for community production results. Not only that, the use of geospatial information systems also opens up opportunities for promoting village potential more widely, including to investors, tourists, and other development partners (Astuti et al., 2025) thus, socialization of the use of Google Maps and other geospatial platforms is an urgent need in increasing the capacity of village communities in the current digital era.

Dendang Subdistrict is one of the administrative areas located in Tanjung Jabung Timur Regency, Jambi Province. This region holds a strategic position due to its proximity to the Berbak River, which connects directly to the Batang Hari River. These rivers play a vital role as transportation routes, particularly for the distribution of key commodities such as coal and palm oil, which serve as the primary sources of livelihood for the local population. Dendang Subdistrict comprises six villages and one urban ward, namely Catur Rahayu, Jatimulyo, Kota Kandis Dendang, Koto Kandis, Kuala Dendang, Sido Mukti, and Rantau Indah Ward. One of the areas within this ward is Dusun Eka Jaya, which borders several other villages, making it a region with significant inter-regional connectivity.

Several studies have explored the benefits of Google Maps. Research by Septi & Ariesey, (2024), concluded that the Google Maps application can be a strategic tool to support the growth of micro, small, and medium enterprises UMKM. Likewise, research by Setyawan et al., (2024) indicated that integrating Google Maps into UMKM promotion has proven effective in expanding consumer reach and increasing sales potential, thereby contributing to higher profits. On the other hand, the process of registering business locations on this platform also encourages UMKM players to improve their digital literacy by utilizing technology as a promotional medium aligned with current developments.

However, the geographical and economic potential of Dendang Subdistrict particularly in Dusun Eka Jaya and its surrounding areas has not yet been fully integrated into the digital ecosystem. One of the key gaps identified is the absence of updated and publicly available spatial data regarding the UMKM as well as social facilities such as places of worship, health service centers, and educational institutions. In today's digital era, accurate location data on platforms like Google Maps is a vital tool for enhancing the visibility of UMKM and improving public access to essential services. The lack of such data not only limits the promotion of local businesses but also hinders the community's connectivity to basic services that should be easily accessible.

The strategic potential of the Eka Jaya Hamlet area which is close to the river that flows directly into the open sea. Rantau Indah Village has an area of 33.70 km^2 or 7.05% of the area of Dendang District (Murtado, 2024) . The strategic potential of the area should be able to optimize its development and other interests in Dendang District, especially in Eka Jaya Hamlet. In fact, a village needs a road that is included in the map, especially in areas that have potential for business. Spatial data through *Google Maps* is one of the steps to plan spatial planning, community economic development, natural resource management and data-based planning can be carried out.

The internet has great benefits, where it can be used as a means to introduce a product of goods and services (Sahetapy et al., 2024) . The use of *Google Maps* can be used to promote micro, small and medium enterprises (UMKM) in an area. Similar to the community service research conducted by Dhiya' Ayu Adibah et al., (2023), which stated that 40% of the community experienced an increase in knowledge in marketing and promoting UMKM through *Google Maps*. The spatial data of Dusun Eka Jaya on Google Maps contains errors and several road sections in the hamlet have not been recorded. In fact, if the community can optimize the use of Google Maps, it will have an impact on the ease of mapping development and infrastructure development, mapping natural resources, and business promotion.

Research conducted by Safitri et al., (2022), shows that creating Google Maps Points in a village is important because easy access to social facilities on Google Maps will make it easier for people from outside or from the local area to find the social facilities they need in critical situations such as Community Health Centers, Prayer Rooms or Mosques and other social facilities.

The purpose of this community service is to provide knowledge and improvements to Google Maps to the people of Eka Jaya hamlet, so that people from outside or inside can access Google Maps correctly and use Google Maps as a means of promotion or to easily detect the location of social facilities.

II. PROBLEM

Dusun Eka Jaya has sports facilities such as Volleyball Courts and Badminton Courts that have not been recorded in Google Maps. Meanwhile, UMKM have not been included in Google Maps. Based on the results of observations, the problems faced by the community are (a) people from outside and inside have difficulty finding social facility points, (b) people outside Dusun Eka Jaya have difficulty determining the correct path due to errors in spatial data in Google Maps, (c) people from outside have difficulty finding out about social facilities and UMKM in Dusun Eka Jaya.

Gambar 1. Location of Dusun Eka Jaya Tanjung Jabung Timur

III. METODE

Community Service Activities (PKM) were carried out directly or face-to-face, carried out in Dusun Eka Jaya on Monday, August 11, 2024. This activity involved teenagers and the wider community of Dusun Eka Jaya. The activity of presenting the results of improvements and methods of non-location was attended by 30 participants .

In this Community Service activity, the methods used are lecture, discussion, and question and answer methods. The approach method used is to provide understanding and explanation of the material and invite participants in the socialization activity to discuss Google Maps Data Updates for UMKM Promotion and Social Facilities. This community service activity takes place with several stages of methods in its implementation.

1. Lecture Method

The lecture method was used by the community service team as one way to convey information directly with the material displayed using PowerPoint regarding Google Maps Data Updates for UMKM Promotion and Social Facilities. The material is presented in a visual format so that participants can easily understand the material presented.

2. Discussion method

After the community service team delivered the material using the lecture method, the community service team conducted a discussion and question and answer method between the presenter and participants.

3. Implementation Process

In the process of implementing this community service program, the team took various measures to ensure that the data collected was valid and representative. One important step was documenting the activities through

video recordings and photos during interviews and field observations. Interview data were compiled into transcripts, which were then analyzed to identify the community's main needs related to digital mapping. Additionally, the attendance of community leaders and participants was recorded in attendance lists as evidence of their active involvement. To measure the impact of the socialization, the team also compared Google Maps data before and after the observations and used pre- and post-socialization questionnaires to assess the community's improved understanding of how to use Google Maps. All of these materials served as a crucial foundation for preparing the report and evaluating the success of the program.

The approach method used is to provide understanding and explanation of the material and invite the community to be more active in using technology. This activity took place by presenting the results of the road renovation on Google Maps which was displayed via *Power Point* , where the renovation data had been adjusted to the actual conditions. The data was taken after conducting observations between the PKM team and the youth of Dusun Eka Jaya. After conducting the presentation, a discussion was held with the community regarding Google Maps. The socialization activities carried out are expected to provide an understanding to the community, especially the Dusun Eka Jaya community in using Google Maps and promoting UMKM through Google Maps in order to get the right infrastructure mapping and increase the amount of income through promotions via Google Maps for UMKM Promotion and Social Facilities .

IV. RESULT AND DISCUSSION

The community service activities carried out contained material on the use of Google Maps. Google Maps is a web mapping service developed by Google. This service provides satellite imagery, road maps, 360° panoramas, traffic conditions and route planning for traveling by foot, car, bicycle or public transportation. This information system is very helpful in providing information to the public in seeing the area, the address they want to visit and is very helpful in conditions that are very much needed. The Google MAPS Information System uses the Vb.Net application (Harahap & Hidayatullah, 2018) .

Spatial data is data in graphic form that shows the location space or places (Ariandi & Agustini, 2016) . The spatial data contained in Google Maps Dusun Eka Jaya has errors in road placement and there are roads that are not detected and several social facilities that are not detected. Social facilities are facilities that can be used or utilized by the general public such as health centers, schools, places of worship, sports facilities, cemeteries and so on. The existence of social facilities can support economic, social and cultural life in an area (Rumengan et al., 2019; Sadali et al., 2018). Therefore, road repairs and additions are important in Dusun Eka Jaya.

Before starting the presentation of the results of the Google Maps overhaul, the speaker asked questions about how often Google Maps was used by the participants of the socialization. The participants who attended answered that it was rarely used, only when interacting when ordering *online shopping* or buying goods. Then the speaker explained what the Google Maps application was and began to explain the results of observations with the youth of Dusun Eka Jaya whose data had been *upgraded* on Google Maps.

Figure 2. Road Input and Repair Process

In Google Maps data, the road in Dusun Eka Jaya has an error from the main road to the entrance. The position of the school, cemetery, and other facilities leads to the wrong place. This improvement was made so

that people outside who want to enter Dusun Eka Jaya can access the correct road. It can be seen in Figure 3, where the Public Cemetery (TPU) should be on the right side of the road. However, in the spatial data on Google Maps it is on the left, there is a road error in the Google Maps satellite image. Then, the location of SDN 96 Rantau Indah is at a four-way intersection, in the Google Maps statelit data there is an error where there is only one intersection and on the corner of the road. Many mosques, fields, and roads have not been detected. If the existing data is accurate, the general public can easily search for social facilities using the web application, namely Google Maps (Cahyana & Fadlilah, 2021) .

Figure 3. Road data before the update

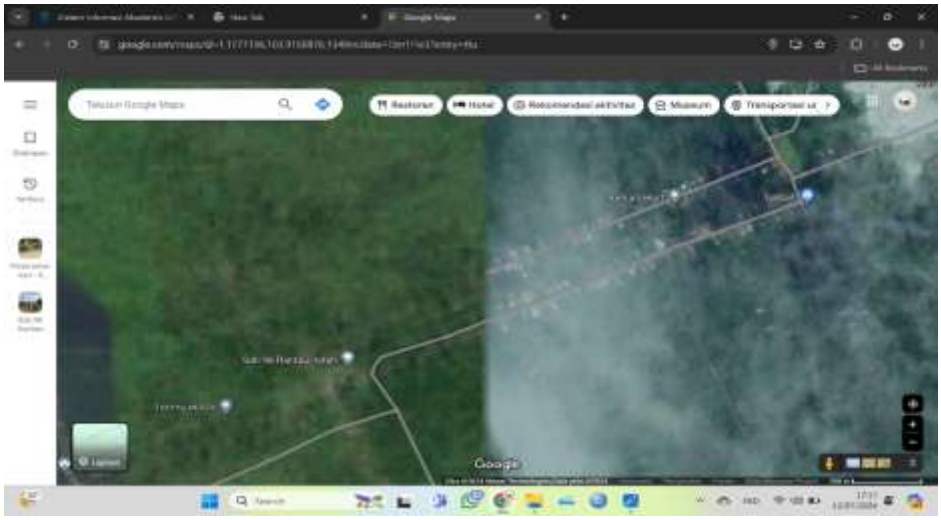

Figure 4. Dusun Eka Jaya Street which is not included in Google Maps

It can be seen in Figure 4, where social facilities such as fields and mosques do not have location tags. The road shown in the picture is not the right road, there are still errors and it does not match the original position of the road. In Figure 4, there has been a change where the TPU is on the right side of the road, SDN 96 is at the intersection where it should be.

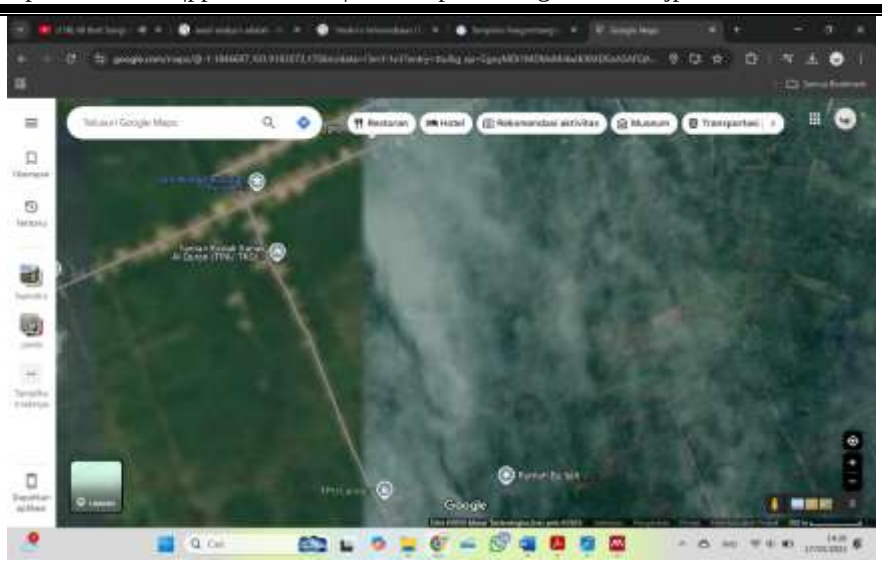

Figure 5. Map data after updating

Figure 5 shows the Eka Jaya hamlet road that was previously not recorded on Google Maps. Social facilities such as the Da'watul Mutaqin Mosque already have location tags. Several UMKM already have their own location tags, such as Tia Cell, Toko Bulek, Berlian Hos and so on. And there is the addition of a connecting road, namely a bridge from the right road to the left. Eka Jaya Hamlet is divided into 2 main roads because there is a tributary flow, where there is a right SK and a left SK there are 5 connecting bridges. This connecting bridge is used by the community to socialize with each other.

Figure 6. Eka Jaya Hamlet Road

The presentation of repairs and installation *of tags* was carried out smoothly, the public's enthusiasm for the socialization was also very good. There were several questions such as whether the placement of location tags could be done independently. The speaker answered that it could be done independently, just like adding roads. Then the discussion continued with the question of whether the map in the online shopping application was new. The speaker answered that yes, because the map on *Google Maps* is directly integrated with other applications that use data from Google Maps. By holding this socialization, it makes it easier for the public, especially mothers who are starting to shop *online* and sell *online* .

Figure 7. Presentation of material

Figure 8. Group photo of residents of Eka Jaya Hamlet

The socialization activity of Google Maps utilization carried out in Dusun Eka Jaya showed the importance of updating spatial data to support the accuracy of geolocation information in Dusun Eka Jaya. This is reinforced by research conducted by (Baary et al., 2012; Meidodga et al., 2023) , that spatial data is very important in geographic information systems because it can provide location information and function as a basis for implementing and supporting various activities .

Based on initial observations, various inconsistencies were found on the Google Maps map, such as errors in the placement of main roads and connecting roads, as well as inaccuracies in the locations of social facilities such as schools, mosques, public cemeteries (TPU), and fields. These inconsistencies not only confuse local communities, but can also hinder access for outsiders who want to visit the Eka Jaya Hamlet area, including in emergency conditions such as disaster management. In addition, the absence of location *tags* on social facilities and micro, small and medium enterprises (UMKM) indicates the minimal use of digital technology to support the economic and social activities of the local community.

Through this socialization activity, participants were given an understanding of the function of Google Maps and were invited to understand the importance of spatial data accuracy. The results of the improvements made with the youth of Dusun Eka Jaya showed significant changes, such as the placement of the TPU location which is now appropriate, the adjustment of the position of SDN 96 Rantau Indah at the intersection as it should be, and the addition of tags to the mosque and several UMKM. In addition, the connecting bridges between the two sides of the hamlet that were previously not recorded have now been included, reflecting the actual geographical conditions. This activity also increased the digital literacy of residents, as evidenced by their enthusiasm in discussing how to update data independently and the integration of Google Maps data with

online shopping applications. Thus, this activity not only improves the technical aspects of digital maps, but also provides positive social and economic impacts for the people of Dusun Eka Jaya.

V. CONCLUSION

The The socialization activity on the use of Google Maps in Dusun Eka Jaya has proven effective in raising community awareness and understanding of the importance of updating spatial data to support the accuracy of geolocation information. Observation and improvement data show a significant increase in the accuracy of mapping roads, social facilities, and UMKM locations on the Google Maps platform. These improvements clearly facilitate access for both local residents and outsiders in finding and utilizing facilities in Dusun Eka Jaya, especially in emergency situations that require a quick response. Beyond the technical aspects, this activity also contributes to enhancing the community's digital literacy, enabling them to independently update data and use Google Maps as a tool for developing social and economic activities, including supporting online shopping transactions. Therefore, this community service program delivers comprehensive technical, social, and economic impacts that greatly benefit the progress and welfare of the Dusun Eka Jaya community.

REFERENCES

Ariandi, M., & Agustini, E. P. (2016). Data Spasial Dan Non Spasial Penyebaran Penduduk Di Kecamatan Rambutan. *Seminar Nasional APTIKOM (SEMNASTIKOM)*, *1*(1), 292–297.

Astuti, T., Khawiswara, A., Prabandari, D., & Andira, D. (2025). Pemberdayaan Potensi Desa Tunggul Melalui Aktivasi Website dan Branding Desa sebagai Upaya Menghadapi Era Digitalisasi Empowering the Potential of Tunggul Village Through Website Activation and Village Branding as an Effort to Face the Digitalization Era. *JIIC: JURNAL INTELEK INSAN CENDIKIA*, *2*(3), 4656–4664.

Baary, E. A., Yuwono, & Budi Doyo. (2012). Aplikasi sistem informasi pertanahan berdasarkan jenis-jenis hak atas tanah di Kantor Pertanahan Kota Surabaya II (Studi Kasus Kelurahan Genteng, Kecamatan Genteng, Surabaya). *Geoid*, *8*(1), 224.

Cahyana, R., & Fadlilah, A. (2021). Pengembangan Aplikasi Perumahan Berbasis Mobile. *Jurnal Algoritma*, *18*(1), 113–118. https://doi.org/10.33364/algoritma/v.18-1.862

Chaniago, Fransisko Yasman Purnama, Boby Badriyah, F., Iranto, A., Maharani, B., Julianti, L., Khalifa, A., & Suci Rahmadani, H. (2024). Pencegahan Judi Online Terhadap Remaja Di Sekolah Menengah Atas Negeri 4 Tanjung Jabung Timur. *Pengambidan Kepada Masyarakat Nusantara(JPkMN)*, *5*(3), 3640–3646.

Dhiya' Ayu Adibah, Indah Respati Kusumasari, Lestari, A. S., Wahyuningsih, N., Maharani, N., Sanjaya, L., Putra, A. P., & Khomariah, A. (2023). Penggunaan Aplikasi Google Maps dan Imooji Sebagai Media Promosi UMKM Desa Tiyaran. *Jurnal Pendidikan Masyarakat Dan Pengabdian: DIKMAS*, *2*(3), 87–97.

Haq, A. A. (2024). Pemanfaatan Google Maps Sebagai Sarana Pemetaan UMKM dan Fasilitas Umum di Desa Pasinan Kecamatan Lekok. *Faedah: Jurnal Hasil Kegiatan Pengabdian Masyarakat Indonesia*, *2*(4), 67–81.

Harahap, R. R., & Hidayatullah, &. (2018). Sistem Informasi Google Maps Dengan Menggunakan Vb.Net. *Journal of Science and Social Research*, *1*(February), 36–41. http://jurnal.goretanpena.com/index.php/JSSR

Meidodga, I., Syahrin, A., Putra, R. T., Warfandu, F., & Bimasena, A. N. (2023). Pemanfaatan Data Geospasial dalam Mewujudkan Sistem Informasi Pertanahan Multiguna Bagi Multipihak. *Widya Bhumi*, *3*(1), 62–80. https://doi.org/10.31292/wb.v3i1.51

Murtado, M. (2024). Kecamatan Dendang Dalam Angka. In *Badan Pusat Statistik Kabupaten Tanjung Jabung Timur* (Vol. 13, Issue 2). https://doi.org/10.31503/madah.v13i2.534

Rizal, M. I., El-Yunusi, M. Y. M., & Darmawan, D. (2024). Literasi Digital, Pemanfaatan Media Pembelajaran dan Kemandirian Belajar: Kontribusinya terhadap Prestasi Akademik di SMA Intensif Taruna Pembangunan Surabaya. *Journal of Basic Educational Studies*, *4*(2), 905–917.

Rumengan, C. R. M., Kindangen, I. J., & Takumansang, D. E. (2019). Analisis Ketersediaan dan Kebutuhan Fasilitas Sosial Di Kota Kotamobagu. *Jurnal Spasial*, *6*(2), 375–387.

Sadali, M. I., Intizhar, F., & Aisyah, A. (2018). Analisis Ketersediaan Fasilitas Sosial di Kabupaten Banjarnegara, sebagai Pendukung Kondisi Darurat Bencana dan Pengembangan Wilayah. *Media Komunikasi Geografi*, *18*(2), 128. https://doi.org/10.23887/mkg.v18i2.12517

Safitri, W., Rismawati,) ;, Novi, ;, Hermiati, F., Hartati, N., & Huda, M. (2022). *Pelatihan Pembuatan Titik Google Maps Fasilitas Sosial Desa Mekarmukti Cikarang*. *5*(1), 2655–5956.

Sahetapy, H. V., Hahury, H. D., Metekohy, S., Siaila, S., Ramly, F., Bugis, M., Muspida, M., Tamtelahitu, J., Oppier, H., & Pattimahu, T. V. (2024). Pelatihan dan Pendampingan Pembuatan Tag Lokasi Usaha Berbasis Google Maps sebagai Upaya Promosi UMKM di Kota Ambon. *Jurnal Pengabdian Pada Masyarakat*, *9*(2), 534–541. https://doi.org/10.30653/jppm.v9i2.853

Septi, S. D. N., & Ariesey, R. R. (2024). Pemanfaat Google Maps Untuk Meningkatkan Penjualan Pada UMKM Seblak 55 Kelurahan Rungkut Menanggal. *Jurnal Pengabdian Kepada Masyarakat Nusantara(JPkMN)* , *5*(2), 2550–2255.

Setyawan, D. H., Cahyati, A. D., & Putra, P. (2024). Upaya Peningkatan Bisnis Dengan Digital Branding Pembuatan Lokasi Umkm Melalui Aplikasi Google Maps Di Desa Sirnajaya. *Jurnal An-Nizām : Jurnal Bakti Bagi Bangsa*, *03*(02), 67–74.