Microsoft Project Application in Optimizing Activities for Compiling Activity Programs at the Lapadde Village Office

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ABSTRACT

Information and communication technology is necessary for every government and private agency. As one of the government agencies, Lapadde Village, Parepare City, requires knowledge and communication technology to compile activity programs. From these problems, Lapadde Village staff need a solution that can help in compiling a reasonable, timely, quality program of activities according to the budget that has been provided. The method used to solve this problem is MS Project Application Training. MS application. Project is one of the software that can be used to manage scheduling, budget, and resources in an activity plan. The training activities are carried out in several stages, namely, presentation of Project Management and MS Project materials, problem analysis according to the case studies determined by the participants, and MS Project implementation in case studies equipped with training modules. This training results in participants knowing the MS Project application, its features, and how to implement it in the activity program.

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INTRODUCTION

Technological developments have influenced all areas of life, including politics, business, culture, arts, and education. Technological developments have affected all areas of life, including politics, business, culture, skills, and education (Bagi et al., 2022). Information and communication technology (ICT) has become necessary for every public and private authority. The ability to use information and communication devices (ICT) is one of the critical factors in reaching Indonesian human resources from other countries (Suryaman et al., 2022). The ability of human resources to use ICT tools is also crucial so that human resources in Indonesia can follow human resources from other nations (Angkarini et al., n.d.). In the government sector, information technology is used to improve bureaucracy and improve services to implement good governance (Powa et al., n.d.). A sub-district is a legal community unit with territorial boundaries and the right to regulate and manage the local community's interests (Pemerintah RI, 2004). Sub-districts are required to improve the quality of human resources to speed up the process of providing services to the community.

Lapadde Village is one of the government sectors in Ujung Kota Parepare District, with an area of 99.33 km2. Activities carried out in the sub-district office include preparing activity plan programs and budget plans. Sub-district staff must properly utilize information and communication technology in preparing activity programs. The technique for measuring the success of an activity program is the timeliness and cost used. Therefore, for the activity program to run well, it needs to meet the program preparation criteria, so it is necessary to have ready resources to handle it. Based on this problem, the Lapadde Village, Ujung Kota Parepare District, asked the Bacharuddin Jusuf Habibie Institute of Technology to send a facilitator from the Information Systems Study Program to help improve the Information and Communication Technology competency of the Lapadde Village staff.

The Bacharuddin Jusuf Habibie Institute of Technology Information Systems Study Program had previously conducted training activities to help teachers at SMAN 3 Parepare support active, innovative learning (Tri et al., n.d.). The aim of this PKM activity is MS Project Application training activities for Lapadde Village staff to make it easier for them to manage activity programs so that these activities can be on time, within budget, and of the best quality. This training in Lapadde Village discusses Project Management and MS Applications. Projects. PKM activities carry out MS training. Project to help employees manage projects to increase employee productivity. Utilization of MS Applications. Project on PKM activities (Homepage et al., n.d.) to make it easier for consultant staff to create work schedules to make them more efficient.

METHOD

Figure 1. shows the implementation method used in this Community Service activity. Stage 1 identifies problems in general; the team leader carries out this stage by looking at the conditions of the use of information technology in the Parepare City government sector. Stage 2 is setting the target, namely the Parepare City Subdistrict office. This office is the largest subdistrict in Parepare City, but in several activities carried out, ICT has yet to be implemented. Stage 3 carries out observations by discussing with the sub-district head and staff the need for ICT tools in preparing activity programs. In the 4th stage, the PkM team for the ITH Information Systems study program designed a training activity to develop an activity program sing the MS Application. Projects.



FIGURE 1. Implementation Method

Training activities were carried out at stage 5. This activity was carried out at the Lapadde Subdistrict Office, Parepare City; participants in this training were subdistrict staff and the subdistrict planning team who prepared a program of activities that would be carried out in Lapadde Subdistrict every year. Stage 6 evaluates the training provided, and stage 7 prepares a report on training activities.

RESULT AND DISCUSSION

The implementation of PkM activities at the Lapadde Village Office, Parepare City, on Tuesday, 18 July 2023. This training activity was attended by staff, the Lapadde Village planning team, and Hasanuddin University KKN students who were based in Lapadde Village. Stage 1 is giving a posttest to training participants. Stage 2 presents material about Project Management and the stages of carrying out a project. Stage 3 is MS Project material and distributes the Training module in Figure 2. This Training Module contains material related to creating an MS Project account, an explanation of the MS Project features, and several examples of MS Project implementation in government activities, especially sub-districts.



FIGURE 2. Training Module

Stage 4 participants analyze the activities designed and implemented in the MS Project. In this practicum, participants are directed to conduct a case analysis of the activities to be developed. Participants have created and implemented several MS Project activity programs, including the Lagaligo Posyandu Activity and Flood Management Activities. During the training process, discussions took place between participants and presenters regarding the features and structure of the project to be designed. The final stage of this activity is giving a posttest to participants to measure the success of the training provided. Pretest and posttest activities use Quizizz.

The following are the results of the Pre-Test given to participants before training. In Table 1 are the pretest results. The number of participants who took the pre-test was 14, and the accuracy result was 56%. Figure 3 is a chart that describes the pre-test results.

TABLE 1. Pre-Te	TABLE 1. Pre-Tes Result		
Game Type	Live Quiz		
Participants	14		
Total Attempts	14		
Class Accuracy	56%		



FIGURE 3. Pre-test results

In Table 2 are the post-test results, namely the test given after the training activity. The post-test activity was attended by 14 participants, the same as the number of pretest participants. The class accuracy result was 64% compared with the pre-test, which was 56%; this training activity increased participants' knowledge regarding the MS Project in preparing activity programs in Lapadde Village. Figure 4 is a chart that describes the post-test results.



FIGURE 4. Post-test results

After carrying out the pre-test and post-test, participants also compared the results of preparing activity plans before and after MS training. Projects. Before undertaking MS training. The Lappadde Village Project Staff uses MS Excel, as in Figure 5, and uses MS. Project in Figure 6.

Ma	Nama Kagiatan	Tanggal mulai	Tanggal barakhir	Diava
140	Nania Kegiatan	ranggarmular	ranggai berakini	Diaya
1	Melakukan Himbauan Kemasjid	18 Juli 2023	18 Juli 2023	Rp. 50.000,-
2	Mengatur kursi dan meja	18 Juli 2023	18 Juli 2023	Rp. 200.000,-
3	Mempersiapkan perlengkapan posyandu	18 Juli 2023	18 Juli 2023	Rp. 100.000,-
4	Pendaftaran	19 Juli 2023	19 Juli 2023	Rp. 500.000,-
5	Pelaksanaan	19 Juli 2023	19 Juli 2023	Rp. 1.000.000,

FIGURE 5. Preparation of Activity Plans using MS Excel

	Project			
=	KEGIATAN POSYANDU LAGALIGO VIII	Kisi Papan Garis waktu Bagan	Orang Goals ···	
$\hat{\omega}$	18 Jan - 19 Jul	_	2	
\checkmark	Nama 💛	Mulai \smallsetminus	Selesai 🗸	
	1 O VPerancangan	18/7/2023	18/7/2023	
	2 () Melakukan himbauan ke masjid	18/7/2023	18/7/2023	
	3 🔿 YPersiapan	18/1/2023	18/7/2023	
	4 🔿 Mengatur kursi dan meja	18/7/2023	18/7/2023	
	5 () Mempersiapkan perlengkapan posyandu	18/1/2023	18/1/2023	
	6 🔿 YPelaksanaan	19/7/2023	19/7/2023	
	7 () Pendaftaran	19/7/2023	19/7/2023	

FIGURE 6. Preparation of Activity Plans using MS. Projects

Based on the training results, the preparation of activity plans using MS. Projects are more optimal because training participants can use MS features. Projects, for example, start date-end date. In MS Excel, you create it manually, whereas in MS Project, you only click on the start and finish features. With the ease and completeness of MS Project features, training participants can easily prepare activity plans, and the project team and project progress can access them will also be displayed.

Utilizing Microsoft Project in preparing activity plans at the Lapadde District Office can make identifying the types of activities and their progress more manageable. Staff/employees still use MS Excel to prepare activity plans and create manual Tables. MS Project is an application used to build projects such as creating schedules, determining resources, managing budgets, and analyzing activity progress (Piraveenan, 2019). In several studies, MS Project makes it easier to plan in terms of initial project planning, budget estimation phase, project scheduling phase, and determining human resources (Amaechi et al., 2022; Mahamid, 2011).

CONCLUSION

Based on the post-test that was carried out and the discussions held during the activity, it can be concluded that the training participants received information related to Project Management, stages of preparing a project, MS Project features, and their implementation in the activity program that will be designed. This training activity is needed by sub-district staff to improve services to the community by

implementing ICT, namely the MS Project Application. Apart from that, participants are also given modules that can be used when preparing other activity programs.

The results of this training also make it easier for participants who previously used MS Excel to use MS Project. Participants can be optimal in preparing activity plans because MS Project provides features that MS Excel does not have and can see project progress, form teams, and see the name of the team responsible. Thus, this training provides information regarding MS Project features and prepares activity plans using MS Project.

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REFERENCES

- Amaechi, C. V., Reda, A., Butler, H. O., Ja'e, I. A., & An, C. (2022). Review On Fixed and Floating Offshore Structures. Part II: Sustainable Design Approaches and Project Management. In Journal of Marine Science and Engineering (Vol. 10, Issue 7). MDPI. Https://Doi.Org/10.3390/Jmse10070973
- Angkarini, T., Adelina Tanamal, N., Bahasa Inggris, P., & Bahasa Dan Seni, F. (N.D.). PELATIHAN ANIMASI POWERPOINT INTERAKTIF UNTUK MEMBUAT MEDIA PEMBELAJARAN DI LKP BMC LEBAK JAYA PANDEGLANG.
- Bagi, P. M. P., Kemdikbud, P., Novita, I., & Juliasari, N. (2022). Training Ms. Project For KEMDIKBUD Employees (Ministry of Education and Culture). KRESNA: Jurnal Riset Dan Pengabdian Masyarakat, 2(2), 271–280. Https://Jurnaldrpm.Budiluhur.Ac.Id/Index.Php/Kresna/
- Homepage, J., Leman, D., Aplikasi Project Dalam Perencanaan Proyek Pada PT Berlian Jaya Mandiri Konsultan Dedi Leman, P. M., & Paramitha Lubis, C. (N.D.). J-PEMAS STMIK Amik Riau. Https://Doi.Org/10.33372/J-Pemas.V4i1.941
- Mahamid, I. (2011). Risk Matrix for Factors Affecting Time Delay in Road Construction Projects: Owners' Perspective. In Engineering, Construction and Architectural Management (Vol. 18, Issue 6, Pp. 609–617). Https://Doi.Org/10.1108/09699981111180917
- Pemerintah RI. (2004). UNDANG-UNDANG REPUBLIK INDONESIA NOMOR 32 TAHUN 2004 TENTANG PEMERINTAHAN DAERAH. UNDANG-UNDANG REPUBLIK INDONESIA.
- Piraveenan, M. (2019). Applications Of Game Theory in Project Management: A Structured Review and Analysis. In Mathematics (Vol. 7, Issue 9). MDPI AG. Https://Doi.Org/10.3390/Math7090858
- Powa, A. A., Kaawoan, J. E., & Pangemanan, F. N. (N.D.). Pemanfaatan Teknologi Dan Informasi di Dinas Komunikasi Dan Informatika Statistik Dan Persandian di Kabupaten Minahasa Tenggara. JURNAL GOVERNANCE, 1(2), 2021. Www.Mitra.Go.Id.
- Suryaman, H., Cahyaka, H. W., Handayani, K. D., & Suryanto, M. (2022). PELATIHAN MICROSOFT PROJECT BAGI GURU-GURU SMK DI WILAYAH KERJA 4 PROVINSI JAWA TIMUR (Vol. 5, Issue 02). Http://Jurnal.Unipasby.Ac.Id/Index.Php/Abadimas
- Tri, A., Da, P., Rosmiati, K., Tunnisa, R., Rahman, N. I., Pusung, D. F., Razak, N., Fadillah, H., Nurhalizah, S., Fatwa, S., & Apriliyani, A. W. (N.D.). Abdimas Umtas: Jurnal Pengabdian Kepada Masyarakat LPPM-Universitas Muhammadiyah Tasikmalaya Utilization of Google Workspace as A Productivity and Collaborative Tool in Supporting Active, Innovative, And Creative Learning at SMAN 3 Parepare.