# IMPROVING TECHNICAL TRAINING PERFORMANCE WITH KNOWLEDGE MANAGEMENT PRINCIPLES

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#### Abstracts

XYZ Corporation implements "Khatulistiwa" Program as one of its Employee Development Programs (EDP) which main purpose is to accelerate learning process for fresh graduate new employees in the first five years of their career. Based on the survey result and the focus group discussion, there are two valid root causes of the problem, which are training planning process quality and training execution quality. The focus group discussion also resulted in business solutions to solve the problem by considering KM Metrics (Participation, Capture and Reuse) including: improve planning process and availability of training information by improving web-based information system, add more Guided Experience (GE) program and utilize IBU Subject Matter Expert (SME) to reduce dependency on overseas instructor as well as to encourage participation, capture and reuse of information within business unit, and using technology for implementing long distance learning (tele-conference training, etc).

#### **Research paper**

Keywords: Employee development, knowledge management, training planning process, training execution

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## Introduction

Employee development is a key contributor to a company's competitive advantage (Noe, et.al, 2012). It helps employees to understand their strengths, weaknesses, and interests. It is a necessary component of a company's effort to compete in the new economy, to meet the challenges of global competition and social changes, and to incorporate technological advances and changes in work design. Four approaches are used for employee development: formal education, assessment, job experiences, and interpersonal relationship (Noe, 2005). Hernez-Broome & Hughes (2004) concluded that mentoring, job assignment, 360-degree feedback, executive coaching, and action learning are the most prevalent leadership development practices in the 21st century.

All people enter organizations with a formed personality and some initial experiences and values depending on the culture, which will, in turn, influence their efficiency and performance. therefore, great attention must be paid to work values of the employees and the issues which affect them, especially in organizations that are complex in their structure and culture. (Salamzadeh, et al, 2014).

Further study conducted by Mehrabani & Mohammad (2011) concluded that training activities have an impact on the relationship of "leadership development" on "organizational effectiveness" and is a necessary part of leadership development program. Therefore, it can be concluded that employee development method consists of many approaches: formal education (courses, seminar), assessment/feedback, job assignment, interpersonal relationship (mentoring, coaching), action learning and training. From knowledge management perspective, some of these employee development

program approaches, which are courses and seminars, are part of knowledge sharing activities. This statement is a conclusion from four modes of knowledge sharing mentioned by Nonaka & Takeuchi (1995) and the statement from Noe (2005).

XYZ is one of the world's leading integrated energy companies. In Indonesia, XYZ operates through three of its subsidiaries, XYZ Sumatera, XYZ Kalimantan and XYZ Geothermal and is organized in IndoAsia Business Unit (IBU). Employee Development Program in XYZ IBU is managed by Human Resource (HR) Department which by hierarchy is located under XYZ Sumatera organization. HR Department scope of service covers all of XYZ IBU, including XYZ Sumatera, XYZ Kalimantan and XYZ Geothermal.

XYZ Corporation implements "Khatulistiwa" Program as one of its Employee Development Programs which the main purpose is to accelerate learning process for out-of-college or fresh graduate new employees in the first five years of their career. The program's curriculum is divided into three components: trainings, job assignment and mentoring. Currently XYZ in IBU-Indonesia faces some challenges related to the implementation of one component of the program, which is training.

Based on its November 2014 HR People Development Scorecard, there are only 48% of IBU-Indonesia "Khatulistiwa" Participants who are "On-Track" for technical trainings compliance. The other 52% are either in "Flag" or "Off-Track" status (see Error! Reference source not found.). Definition of each status is shown in Table 1.

If this condition is remained unresolved, this will delay the graduation of many "Khatulistiwa" Participants which in turn could not meet the main purpose of this program to accelerate the participant's technical competency in the first five years.

Table 1. Definition of "Khatulistiwa" Technical Training Compliance Status

Status	Definition	
On Track	Completed 95% or more of recommended technical training based on the	
	number of months in Programs.	
Flag	Completed less than 95% and more than 75% of recommended technical	
	training.	
Off Track	Completed 75% or less of recommended technical training years.	

On the other hand, XYZ Corporation has implemented Knowledge Management to improve its competitive advantage by enabling the corporation to create organization that learns faster and better than competitors through benchmarking, sharing and implementing best practices, learning from experience and continuous individual learning and personal growth.

This study is conducted to help solve the low "Khatulistiwa" Technical Training performance. In line with XYZ CEO's message to utilize Knowledge Management in solving knowledge related problem in PT. XYZ, this study will, therefore, integrate employee development at "Khatulistiwa" with Knowledge Management Framework. By using KM Framework (People-Process-Technology), this study will:

- Investigate the root-causes of low training performance in "Khatulistiwa" program.
- 2. Develop improvement plan to resolve that condition.

The scope of this study is limited to the following extents:

- 1. The scope of the study covers only the technical training components of the "Khatulistiwa" Program.
- 2. The scope of the study covers only XYZ IBU Indonesia organizations.
- 3. The improvement plans which will be implemented are the ones which are under the authority or job circumstances of HR department. Any other improvement plans that must be done by other department/supporting department should be assessed in a separate study.

## Literature Review

## Conceptual Framework

Based on Knowledge Management Framework by Garfield (2007), there are three major components for successful Knowledge Management program implementation: People, Process and Tools.

People play important part in the success of implementation of knowledge management program. It serves as enabler as well as the doer of the program. Participants as doers have significant impact on the program success by their participation and ability to implement the learning to the real jobs (Dalkir, 2013). Leaders as enablers also have significant impact on the program success. Leaders have the authority to release or not release their members to attend the training based on the consideration of business needs and their organization situation. Leaders also have the responsibility to ensure that their "Khatulistiwa" participant's members meet with the program objective and that they are able to implement their learning in order to improve their capability.

Process plays important part in the success of the program. "Khatulistiwa" Program is basically arranged and facilitated by HR department. HR department has the responsibility to ensure the program is well managed and measured so that the objective can be met. HR department also responsible to ensure the training content is aligned with corporate curriculum. HR must also maintain good workflow in planning and executing the program.

For "Khatulistiwa" technical training program, technology is required especially for tracking, archiving and reporting technical training implementation.

## Procedure in Exploring the Problems

To identify the possible root causes of the problem faced by "Khatulistiwa" program, an email was distributed to 12 people who are "Khatulistiwa" participants, "Khatulistiwa" alumni, and "Khatulistiwa" mentors. The respondents were chosen based on following criteria:

- "Khatulistiwa" participants who has been in the program for at least
   years. This is to ensure that they already have certain level of knowledge and experience in "Khatulistiwa" Program execution.
- "Khatulistiwa" alumni who graduated from the program within the last 2 years. This is to ensure that they still remember their experience during joining "Khatulistiwa" Program.
- "Khatulistiwa" mentors who are currently active in mentoring "Khatulistiwa" participants. This is to ensure that they understand the expectations from "Khatulistiwa" programs.

The email consists of problem overview about training compliance. The respondents were given 4 days to provide their opinions about possible root cause of the problem. Other than that, they were also asked for relevant survey questions related with those possible root causes. Survey questions that were gathered from the respondents were then used to further develop the questionnaire for this study. From all of the respondents, some of them responded via email, and some of them responded via verbal discussion/interview.

Based on email responses, there are several possible root causes have been identified that could affect "Khatulistiwa" Technical Training Performance related to each KM components mentioned earlier. These possible root caused are then validated by "Khatulistiwa" Process Advisor. The summary of the possible root causes are shown in

Table 2.

Table 2. Possible Root Causes for Low "Khatulistiwa" Technical Training

Components	Possible Root Causes	Variables		
People	Lack of awareness from "Khatulistiwa" Participant, because			
	of:	Awareness		
	a. Lack of program knowledge from participants			
	b. Participants put training in lower priority compared to			
	personal leave/days off.			
	c. Participants don't think graduating from "Khatulistiwa"			
	program is important.			
	Lack of awareness and support from the Leader of the			
	"Khatulistiwa" Participants related with "Khatulistiwa" Technical Training, because of:			
	a. Lack of socialization			
	b. Leaders are not willingly support the program (merely to comply with company regulation)			
Process	Leaders didn't find the outcome of training program has significant contribution to their organizations.			

Performance

Components Possible Root Causes		Variables
		Quality
	1. Training schedule was conflicted with other important schedule (Business trip, leave or day off).	Planning Process
	2. Leader of the "Khatulistiwa" Participants were aware of the requirement however they were hesi- tate to release their members to attend training be- cause of too many training days required in one year for "Khatulistiwa" Participants.	Quality
	3. Leaders of the "Khatulistiwa" Participants were hesitate to release their member because they didn't have enough resources to cover the jobs during training.	
	4. Leaders of the "Khatulistiwa" Participants didn't allocate budget for the required training at that year	
	Training class was not available/cancelled.	Execution Quality
Technology	Lack of tracking tool	Tracking Tools Ouality

#### Methodology

In order to validate those possible root causes, questionnaire surveys have been conducted to Leaders and Participants separately. Different set of question are distributed to 112 "Khatulistiwa" Leaders and 320 "Khatulistiwa" Participants through company survey system. The study is conducted through questionnaire without changing the natural environment of the organization (minimally interference study). Response rate is 38 % for leaders and 54% for participant. Questionnaire survey is used as primary data. "Khatulistiwa" Program Tracking database and literature study are used as secondary data.

The survey questions were derived by email responses from email respondents who provided their opinions on possible root causes and relevant survey questions. The questions are then sorted and grouped into several categories based on each possible root cause variables. The question-

naires were then validated by "Khatulistiwa" Process Advisor who reviewed and provided feedback on the questions, their applicability and the correlation with each parts/variables.

Leaders' Questionnaire Set consists of 54 questions, which are divided into seven parts: general information, awareness & support, training program, training planning and scheduling, training execution and availability, tracking and tools, suggestions for improvements. Participants' Questionnaire Set consists of 35 questions, which are divided into six parts: general information, awareness & support, training program, training execution and availability, tracking and tools, suggestions for improvements.

The collected data is analyzed by descriptive statistic to find the tendency of each variable. Every survey question may have different step for analysis based on its type as follow: Multiple choice question with 4 scale answers: Extremely aware (4), Aware (3), Not Aware (2), Extremely Not Aware (1) and Extremely agree (4), Agree (3), Not Agree (2), Extremely Not Agree (1). Four scales is chosen to avoid neutral response. Data analysis for this type of question is to count the frequency of occurrence for every answer. The frequency of each answer is then multiplied by respective scores and summarized as total score for each question which will be converted to percentage by dividing it by maximum score of the question. Total scores (%) of several questions from same variables/factors are then averaged to find the average score (%).

To interpret the score, assessment criteria is required. Assessment criteria consist of 4 criteria each with range of score which are ranging from minimum to maximum possible score as shown in

Table **3**. These assessment criteria refer to the same criteria used by Ningrum (2012).

No	Percentage	Assessment Criteria
1	25% - 43.75%	Very Poor
2	> 43.75% - 62.5%	Poor
3	>62.5% - 81.25%	Good
4	>81.25% - 100%	Excellent

Table 3. Assessment Criteria Based on Percentage

- 1. Multiple choice question with yes/no answer. Data analysis for this type of question is to count the frequency of occurrence for every answer. The result is shown in pie chart.
- 2. Multiple choice questions with several choices depend on the question. Data analysis for this type of question is to count the frequency of occurrence for every answer. The result is shown in pie chart.
- Multiple choice question with frequency choices: never, 1x, 2x, >2x. This is to measure the frequency of occurrence of any event. Data analysis for this type of question is to count the frequency of occurrence for every answer. The result is shown in bar chart.
- 4. Open ended question for improvement suggestion for e-Hoist tracking tools, Technical training program and overall "Khatulistiwa" program. Data analysis for this type of question is to count the frequency of occurrence for similar answers. The result is shown in table.

Survey analysis results were then validated by Focus Group Discussion (FGD) involving "Khatulistiwa" Process Advisor and HR Training Specialist.

## Results

1. Leaders' Awareness

The distribution of respondents feedback related with Leaders Awareness is 94% of the leaders are either aware or extremely aware of the training requirement that must be completed by their team members in order to graduate from "Khatulistiwa" program. Majority of them also either aware or extremely aware of the training requirement for graduation. Majority of them also either Aware or Extremely Aware that they are targeted to attend, in average, 17 days technical training in year and that their training progress are monitored in IBU Scorecard. The average score for this variable is 72.09%. Based on assessment criteria shown in

Table **3**, this score is considered as Good.

**Error! Reference source not found.** shows the respondent response on "Khatulistiwa" program socialization and its effectiveness. Most of the respondents have ever received the socialization. Most of them received the socialization through newsletter/email and the rest from workshop or other method. More than half of the respondents find that the socialization process is effective. However, based on respondents' responses, half of the respondents which receive the socialization through newsletter/email think that that method is not effective enough. This is quite different compared to workshop which all of the respondent gave positive feedback on the effectiveness of the method. Based on survey, 100% of the leaders said that they are willingly support their members join "Khatulistiwa" program. From all of the leader respondents, 91% of them stated that their reason to support is to develop their members' capability and 4% of them stated that it is to comply with company regulation. The rest 5% answer other reason and when further asked to specify, they answer that their reason to support their members joining "Khatulistiwa" program are both to develop their members capability as well as comply with company regulation

## 2. Participants' Awareness

The distribution of respondents feedback related with Participant Awareness it can be seen that more than 80% of "Khatulistiwa" Participants are either Aware or Extremely Aware of the training requirement for graduation. They are aware that soft skills training and compliance training are not counted as Technical Training. Majority of them also either Aware or Extremely Aware that they are targeted to attend, in average, 17 days technical training in year and that their training progress are monitored in IBU Scorecard. Even more than 90% of them are either Aware or Extremely Aware that fail in attending technical training can possibly delay their graduation. The average score for this variable is 74.02%. Based on assessment criteria shown in Table **3**, this score is considered as Good.

Related with the possibilities that participants put the training in lower priority than their personal leave, based on survey response, 87% of participants are willing to reschedule their personal leave if necessary, to attend "Khatulistiwa" technical training. Majority of the respondents also thinks that it is important to immediately graduate from the "Khatulistiwa"

program. Only 10% of them who thinks it is not really important, and 1% who prefer in "Khatulistiwa" program as long as possible.

## 3. Training Program Quality

The distribution of respondents feedback related with Training Program Quality it can be seen that majority of the respondent feel excited to attend the Technical Training. The majority of respondents also found the training materials are relevant and applicable to their current job as well as their future career. The average score for this variable is 81.83%. Based on assessment criteria shown in

Table **3**, this means that participants rate the "Khatulistiwa" Training Program has excellent quality.

The training quality based on Leaders' point of view, it can be seen that all of the leader agree that "Khatulistiwa" training significantly improved their members' technical knowledge and capability. Most of the leaders also agree that technical training gave significant positive impact to their organization and that training curriculums is suitable to support the requirement in their organization. However, there are only 56% of the leaders either agree or extremely agree that their "Khatulistiwa" member has better capability compared to Non "Khatulistiwa" members in the same position. There are also 21% of the leaders think that the curriculum are not suitable to support their organization/team. Overall, the average score for this variable is 73.02%. Based on assessment criteria shown in Table **3**, this means that leader rate the "Khatulistiwa" Training Program has Good quality.

Related with the training day's requirement in "Khatulistiwa" program, 86% of Leaders respondents think that the requirement is just enough, while 14% of them think it is too many and none of them thinks it is too few.

#### 4. Planning Process Quality

From survey it was found that majority (58%) of the leaders thought that they didn't received sufficient information about "Khatulistiwa" Training schedule either from their members or HR department.

Based on survey, most Leaders are currently received 2 weeks – 1month advance time between training approval is requested and the training date itself. This is the ample time they have to decide whether they can release their member to training or not by a considering their team workload and available resource. As can be seen, most Leaders found this sufficient. However, when asked on how much time is sufficient for approving training, most of the Leaders also prefer to have ampler time (> 1 month in advance) to decide whether their members can attend the training or not.

Majority of the leaders (51%) didn't consider budget availability in approving their members to attend training. However, 40% of them are sometimes put budget in consideration and half of them thought that they did not have enough information related with their members training plan during budgeting cycle. About 9% of the leaders put it as part of the consid-

eration and 75% of them did not have enough information in advance during budgeting cycle

## 5. Execution Quality

For Participant Respondents, the Execution Quality is concluded by their responses for following question: "In the last one year, how many times you could not attend the training because following reasons?". For Leader Respondents, the Execution Quality is concluded by their responses for following question: "In the last one year, how many times your "Khatulistiwa" member could not attend the training because following reasons?".

As can be analyzed, both Participants and Leaders have same result for the most frequent reason of not able to attend the training. The most frequent reason is because the planned training is not available/cancelled. From the participants' perspective, the  $2^{nd}$  most frequent reason is because the training is conducted outside of their work location, and the 3rd most frequent reason is because not enough resource to cover during training. From the leaders' perspective, the  $2^{nd}$  and  $3^{rd}$  most frequent reason is because the training is conflicted with other more important Company Business trip and with other compliance training.

Regarding the alternative training, 100% of the leaders are willing to release their member to attend alternative trainings if the planned ones are cancelled/not available. However, based on the survey, 53% of leaders thought that either they didn't receive information when the planned training is not available/cancelled or the information came too late for them to find the alternative trainings. In alignment with that, majority of the partici-

pants (69%) also have similar perception on the timeliness of information regarding cancelled planned trainings.

## 6. Tracking Tools Quality

Based on survey result, most of the Participants and Leaders are continuously track their/their members' "Khatulistiwa" Program progress, including Technical Training requirement. Based on analysis, more than 90% of Leaders continuously track their members' progress and more than 70% of Participants are tracking their progress.

XYZ IBU Indonesia just launched new "Khatulistiwa" Program Tracking Tools called e-HOIST. Majority of the Leaders find the e-HOIST tool is sufficient to help them tracking their members' progress and majority of the participants has the same perception as well.

However, from the open ended question related with the e-HOIST tools improvement suggestion, some participants noted that the data accuracy of e-HOIST tracking tool needs to be improved. Some of the data are not up to date and different with participants' own tracking.

## 7. Improvement Suggestion

Survey respondents were also asked on their input and opinion on what improvement should be made to "Khatulistiwa" training programs. The question is open ended question so the respondents can freely express their opinion and suggestion. From the top five of suggested improvements requested by respondents, all of them consists of planning and execution category. From planning category, the most requested improvement is the list of fixed available training schedule for whole year, followed by proper

distribution of training execution. From execution category, the most requested improvement is implemenation of training plan and cancellation notification.

## Discussion

Survey result validation is done in Focus Group Discussion (FGD). The FGD was attended by 3 HR personnel who have knowledge and experience regarding with "Khatulistiwa" program, Learning and Development and Training Planning and Implementation inside the company. Based on FGD result, there are two factors that are validated to be the root cause of the problem which are:

- 1. Planning Process Quality: This root cause is shown by the response from leaders that majority of them didn't receive sufficient information regarding technical training plan/schedule. This is also shown on the improvement suggestion given by participants and leaders. The top 2 of the improvement suggested are related with planning category which is to improve yearly training plan and schedule information and training distribution along the year.
- 2. Execution Quality: This root cause is shown by the frequency of participants could not attend the training because the training class was not available/cancelled. In the improvement suggestion section, this is also listed as the 3rd most frequent problem to be improved.

Based on FGD result it is agreed that from all possible root causes, planning and execution are the validated ones. Improvement and solution will be focused on these two factors. Several solutions were also developed during FGD to solve the problems by considering KM metrics developed by Garfield (2007), which are Participation, Capture, and Reuse.

Below are the problems which are linked to the root causes and its business solutions:

- 1. Training plan and schedules were not well communicated in the beginning of the year.
  - a. Provide email notification consists of yearly training schedule at the beginning of the year and repeated regularly throughout the year as reminder.
  - Publish and regularly update all training information including plan, schedule, actual status, and training description/overview in e-Hoist and company training system (TRIMS).
- 2. Planned trainings were cancelled or not available.
  - a. Conduct more "Guided Experience (GE)" program as part of technical training. GE is a program in which the participants are given site visit to particular working unit and learn from worker and operator there. This method is good because it has less dependency on overseas trainer/instructor and can be conducted with available resource in IBU Indonesia.

This solution also encourages all related employees (such as plant worker and operator) to participate in sharing their knowledge and capture new knowledge.

a. Using video technology method to conduct training class especially if the instructor is from overseas. The training

session can also be recorded and stored in e-HOIST or other web-based repository for future reference.

- b. Utilize available Subject Matter Expert inside IBU as training instructor. From KM perspective, this method can encourage participation of knowledge sharing. Since the SME came from same business unit, thus the knowledge which is shared will be more applicable and implementable in trainee daily work. This encourages the reuse ability of the information received during training in participants' daily work.
- 3. Information regarding training cancellation was not received timely, so it's difficult to find the alternative.
  - a. TRIMS result to be published so the participants can plan early for alternative if their chosen training will not be held that year.
  - b. Conduct TRIMS process in 2 cycles: preliminary submission and resubmitting training plan if the class would not be held.
- 4. Available Elective Training schedules were not easily accessible/shared; meanwhile these trainings can potentially be replacement of the cancelled ones.
  - a. Publish the TRIMS result so everyone can be aware of the implementation of their respective trainings plan that year.
  - Provide a web-based repository system to store knowledge brief about training class syllabus, and testimony from employee who had taking that particular training class.

- Develop list of applicable elective training for IBU especially for "Khatulistiwa" elective and prioritize these classes to be held.
- 5. Training schedules were not properly distributed along the year.
  - Start preparing training execution early –incl. booking accommodation, training venue, and other critical logistic.
  - Develop online collaboration tools for HR and Facility Management (FM) team to support easier coordination in training logistics (accommodation, venue, F&B, etc).
- 6. Trainer qualities for elective trainings need to be improved.
  - a. Improve procedure and process in selecting trainer provider/instructor and ensure they have equal quality with trainer from oversea resource.
  - b. Utilize available Subject Matter Expert inside IBU as training instructor.

The team developed analysis criteria for deciding which solution will be implemented first. The criteria are developed by considering the timing it can be implemented, additional cost and resources required and other consideration (approval, process, etc). The description of each criterion is shown in Table .

Category	Description
Very simple	Can be implemented within 3 months, not require additional cost and re- sources, minimum approval process required, can be handled by HR in- ternal team.

 Table 4. Selection Criteria for Analyzing Business Solutions

Category	Description	
Simple	Can be implemented within 12 months, may need some additional re	
	source and cost but not significant, minimum to medium level manage-	
	ment approval required, can be handled by HR internal team.	
Medium	Can be implemented within 1-2 year, may need some additional resource and cost but not significant, need further consideration, medium to high level management approval required, need cross functional team in- volvement.	
Complex	Need more than 2 years for implementation, need significant resources and cost, need further consideration, high level management approval required, need cross functional team involvement.	

Each solution which has been developed then is analyzed by using the criteria. Team decided to prioritize the execution of "Very simple" and "Simple" solutions. Analysis result can be seen in Table 4.

## Conclusion

As mentioned previously, there are two objectives of this study, which are to investigate the root-causes of low training performance in "Khatulistiwa" program, and develop improvement plan to resolve that condition. By using KM Framework (People-Process-Technology) as project framework, this project is able to answer those two objectives as follow:

- 1. Root causes for low training performance in "Khatulistiwa" program are training planning process quality, and training execution quality.
- 2. Some solutions have been developed to solve those root causes and the improvement plans were taken from the solutions that fell on "very simple" and "simple" categories of implementation. Detail implementation plan of the improvements will be described below.

The solutions which will be prioritized for implementation are the solutions in "Very simple" and "Simple" Category. Table 5 shows the summary of implementation plan including timeline and resources requirement for each action plan.

Root Cause #	Solution Alternatives	KM Metrics Affected	Analysis Result
1	Send email notification in beginning of the year for training schedule for the whole year.	Participation	Very sim- ple
1;4	Training plan/schedule to be published in e- Hoist/TRIMS and regularly updated.	Participation	Very sim- ple
2	Add more Guided Experience (field visit) as part of technical training for "Khatulistiwa" and share the result/knowledge gained in e-HOIST.	Participation, Capture, Re- use	Simple
2	Using video technology to conduct the training (video conference, IVCC or Jabber) and store the recorded session in web-based repository.	Participation, Capture	Medium
3;4	Publish TRIMS result (which training will be held, how many participants) so the participants could plan early to find alternative.	Participation	Very sim- ple
4	Provide web-based repository for storing and sharing knowledge brief of available training class to help select suitable training.	Capture	Medium
3; 4	Conduct TRIMS process in 2 cycles.	Participation	Medium
4	List applicable elective training for IBU – espe- cially for "Khatulistiwa" elective and prioritize these classes to be held.	Participation, Capture	Medium
5	Start preparing training execution early –incl. booking accommodation, training venue, and oth- er critical logistic. For example: Training at Year- Y to be prepared in Q4 of previous year (Y-1).	Participation	Very sim- ple
5	Develop online collaboration tools for HR and FM to support coordination of training logistics.	Participation	Medium
6	Improve procedure and process in selecting train- er provider/instructor and ensure they have equal quality with trainer from overseas resource.	Participation, Capture, Re- use	Simple
2;6	Utilize IBU SMEs as local resource trainer.	Participation, Capture, Re- use	Complex

# Table 5. Analysis Result for Developed Alternatives

There are some suggestions from this study result for development of future study:

- There is opportunity to assess the implementation of overall "Khatulistiwa" Program. Based on "Khatulistiwa" Process Advisor, there are still rooms for improvement for mentoring and job assignment aspect of this program. Future study can help address any gap in those fields.
- Audit process needs to be conducted for assessing the effectiveness of overall "Khatulistiwa" program and its effect to company benefit, especially in IBU Indonesia. Such study has not been conducted since this program was launched in 2005.
- Benchmarking method can be done with other XYZ business unit to see the best practices in executing "Khatulistiwa" program, especially for technical training programs. Assessment can be conducted to find the possibility of implementing the same practices in XYZ IBU Indonesia.

Follow up survey may be needed after improvement plan has been implemented to assess HR's customers ("Khatulistiwa" leaders and participants) opinion on the improvement and to see effectiveness of this improvement program.

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