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DEVELOPMENT OF CUSTOMER RELATIONSHIP MANAGEMENT SYSTEM TO IMPROVE SERVICE QUALITY IN PT MANULIFE LIFE INSURANCE INDONESIA

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Abstract: Customer Relationship Management System (CRMS) Development in order to improve service quality in PT. AJ. Manulife Indonesia is done by comprehending the performance model of the company and the factors that are affecting the company performance improvement and the quality of the decision to be taken by top management. System Dynamic is a method that can be used to stimulate complex systems. System Dynamics approach is expected to build a model of corporate performance that can be used to evaluate the quality of service to customers so that they can make decisions quickly and accurately. This study proves that the model is built with standard models used as changing targets and it can simulate a target quality of service to customers by delivering current and future achievement. Achievement in the future is influenced by the value of achievement of SLA, Response Time, and Defect, where the greater value of control, the greater value of the correction rate so that the GAP will be smaller. Correction rate which is determined in this study was 10%, 20%, and 30% of GAP (CB)

Keywords: CRMS; service quality; system dynamics

INTRODUCTION

Business strong competition makes each company put their focus on strategy building in order to be able to survive and compete [1]. Each company has a boost that produces high quality and high competitive good or service that can be accepted in local or even international. The growing of life insurance industry in Indonesia from 2012 has increased rapidly the revenue of life insurance industry in II quarter (Q2) in 2012. It reaches Rp. 60,5 trillion or grows 18.5% compared to same period in 2011 which is Rp. 51 trillion [1].

PT. Manulife life insurance Indonesia is a company that conducts business in life insurance such as health insurance, life insurance, employee benefit, as well as through mutual fund service and asset management from its affiliated company. This stands since 1887 in Toronto, Canada, then develops in America, Japan, Philippine, Beijing, Hong Kong, Indonesia. PT. Manulife life insurance is headquartered in Jakarta, it operates through marketing office network in 24 cities that are spread in Indonesia with more than 172 marketing division supported by more than 9.000 employees and professional agents and it has about 1.6 million active policies.

Ref. [2] states that excellent company must show concern to the future, human resources development, quality, advantage, achievement and focus on customer and all stakeholders. From Ref. [2], it needs to be emphasized that focus on customer is a challenge that is faced by PT. Manulife life insurance Indonesia, how company can fulfill each need of customer as well as give right solution. That activity is one of indications in achieving business excellence and it is stated in "ESI a New Method for Excellence Measurement" research done by Ref. [3].

To improve service on customers and operational activity of sales people (agent) in 2012, PT. Manulife life insurance Indonesia implements customer relationship management system (CRMS) under the name of Agency Link. Each customer data from new insurance purchasing (policy) will be noted in that system then it will be imported to head office system. From that system, each online application from new policy will be sent to head office operational system to be processed and given decision (agreed, need completeness of information or pending, rejected), the goal is to automate underwriter job. The expectation from online application management is 85% from all new entry applications. Agency Link system supports needed information to customers, like information about development of entry policy, policy value, policy status, and other information that is needed by customers. It is conveyed through agent, as well as note issue from customer, then in each month, management does evaluation on that information.

From the researcher's observation, the usage of Agency Link in the period of July 2012 until June 2013 on average of online application is as big as 64% from all new entry applications. Here is the list:

Table 1: Application of new entry policy in PT. Manulife Indonesia

Month	Online	Paper	% Online	Interest (85%)	Gap
Jul-12	2.988	2.738	52%	4.867	1.879
Aug-12	3.008	2.606	54%	4.772	-1.764
Sep-12	2.984	2.556	54%	4.709	-1.725
Oct-12	4.334	3.187	58%	6.393	-2.059
Nov-12	3.698	2.714	58%	5.450	-1.752
Dec-12	4.490	3.016	60%	6.380	-1.890
Jan-13	2.241	1.537	59%	3.211	-970
Feb-13	3.152	1.434	69%	3.898	-746
Mar-13	3.369	1.350	71%	4.011	-642
Apr-13	4.195	1.384	75%	4.742	-547
May-13	4.329	1.177	79%	4.680	-351
Jun-13	4.096	923	82%	4.266	-170

From that condition, the expectation of the usage of Agency Link isn't achieved. Evaluation that is done by management on all information of business activities and complaints certainly is used to make decision and improve service quality to customers. Each generated decision really affects the company performance, therefore observation is conducted on the Agency Link usage as CRMS in company by agents and build a company performance model that can develop information system for sales and simulate service flow to customer. With that simulation result, it is expected that top management can take right decision, so company performance will continue to increase until company achieves and keeps business excellence.

Problem formulation

Each company has its own method in improving company performance. In this research simulation, a model will be made and the result is expected to be able to be used to solve problems. As for problems that will be analyzed are as following:

1. How can company performance model with CRMS be used to take strategic decision to improve service quality?
2. How can the usage of CRMS affect quality of company service?

METHOD

Framework of this research can be drawn like this:

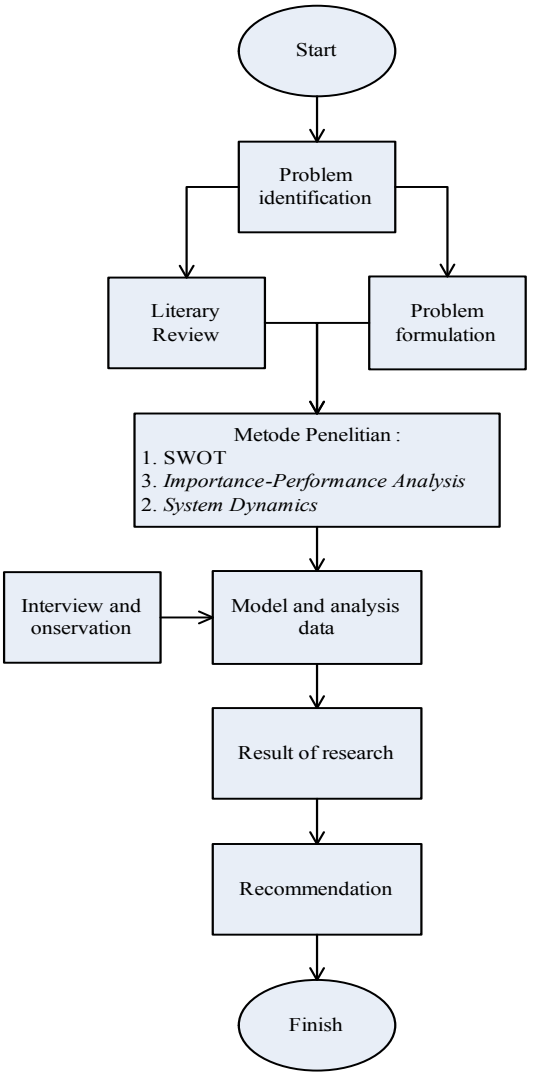

Fig 1: Framework

Method that is used in this research uses three analysis tools. SWOT is used to obtain company strategic factor by analyzing internal and external condition. Importance-Performance Analysis (IPA) is used to map relation of performance interest from strategic factor obtained from SWOT, then each attribute that is offered would recognize gap between performance and interest level from that attributes. System dynamics is developed from system thinking. System dynamics method is chosen to build model that will be used based on gap as the background, because problem about company performance is dynamic and contains variables that are affected each other.

As aids in building simulating idea or formulating model as approach that thinks quantitative system, this research is facilitated with usage of computer application (SPSS Statistics version 17, Powersim Constructor version 9, Expert Choice version 9).

Standard model that is chosen in building a model in this research is a standard model of changing target since this model is a model that simulates a condition in which there is differences between targeted performance and performance that has been achieved. Quantitative approach is also used to analyze data that is collected at a time using time series, that is meant to know trend from a condition and to know cause and effect in simulation. That approach is used to explain what has happened in the field where the obtained data is made as scientific writing in building a model.

Data collecting method

Data collecting in this research uses two types of data, which are:

1. Primary data by using technique:
   a. Observation, data collecting related to company sales operational activity in certain period
   b. Interview, data collecting technique in survey method using oral questions to respondent or research subject.
2. Secondary data is study documentation that is obtained from internet, book, journal, previous research and other documents from company that are related with research need.

Company performance variable

Weighting internal and external factor from SWOT for each field based on how big the effect of those factors on company strategy, with weighting criteria likes this:

Table 2: assessment of SWOT strategic weight

Internal strategic method	A	B	…….	Total	Weight
A					
B					
…….					
Total					
External strategic method	**A**	**B**	…….	**Total**	**Weight**
A					
B					
…….					
Total					

Source: Ref. [4]

With goal to continue to improve company performance to achieve and keep business excellence, variable that is used is dimension of service quality related to agent's sales operational activity with Agency Link. Therefore, in building company performance model, it can be seen like this:

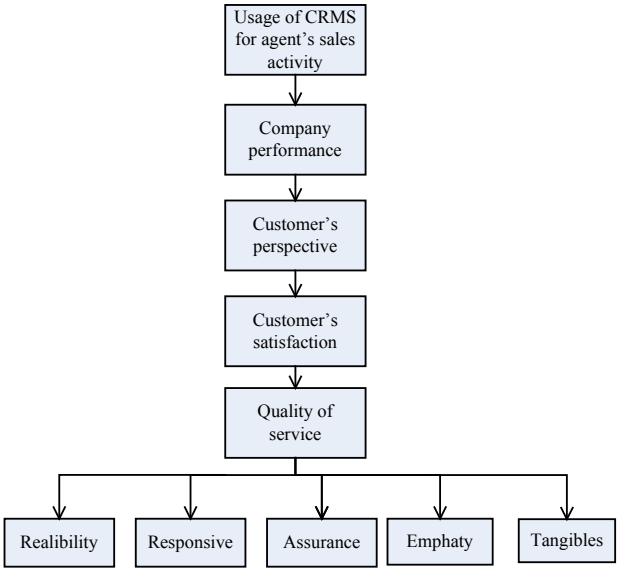

Fig 2: company performance variable

Customer Relationship Management system of company

CRMS that is used by company with the name of Agency Link, the work process flow is as following:

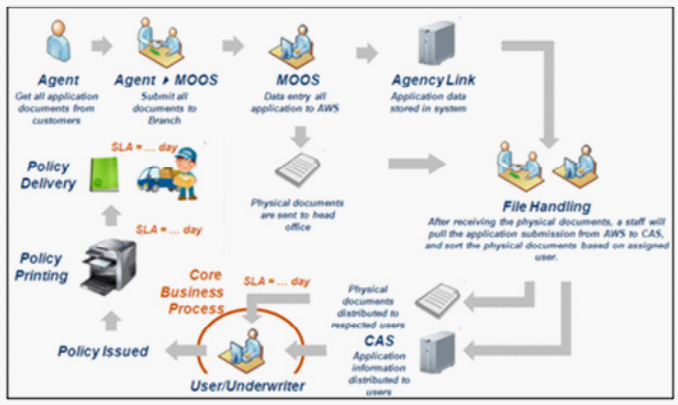

Fig 3: process flow of CRMS of company

Entry application from agent will be submitted to MOOS (branch), then branch administrator will input data in AWS, next that data will be sent and enter headquarter system (CAS) and it is received to be processed by underwriter. Data that enters in CAs will be counted by SLA for underwriter as calculation of performance process of submission new insurance policy application to customer [4–13].

Casual Loop Diagram of company performance

Here is the casual loop diagram of company performance:

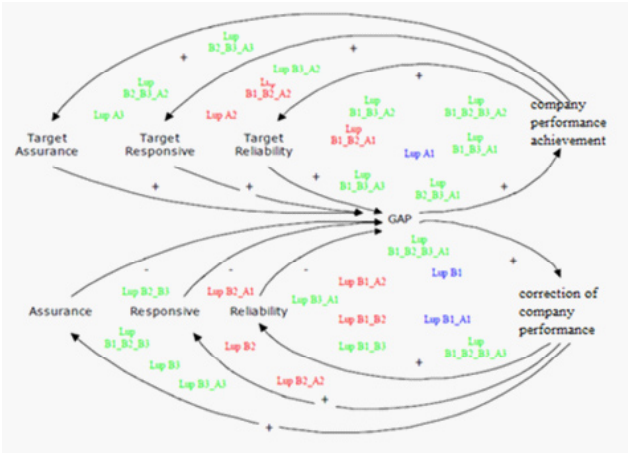

Fig 4: casual loop diagram of company performance

Listed loops in casual loop diagram (CLD) is relation between one variable with other variables, where positive sign means improving or strengthening and negative sign is decreasing or weakening. In deciding each circuit. It must be based on relation of cause and effect between variable where head of arrow expresses cause and tip of arrow expresses effect, either cause or effect element has to refer to a real condition or real world [14–21].

Stock Flow Diagram of company performance

After building CLD, next step is to build stock flow diagram (SFD) from the development of company performance model, as following:

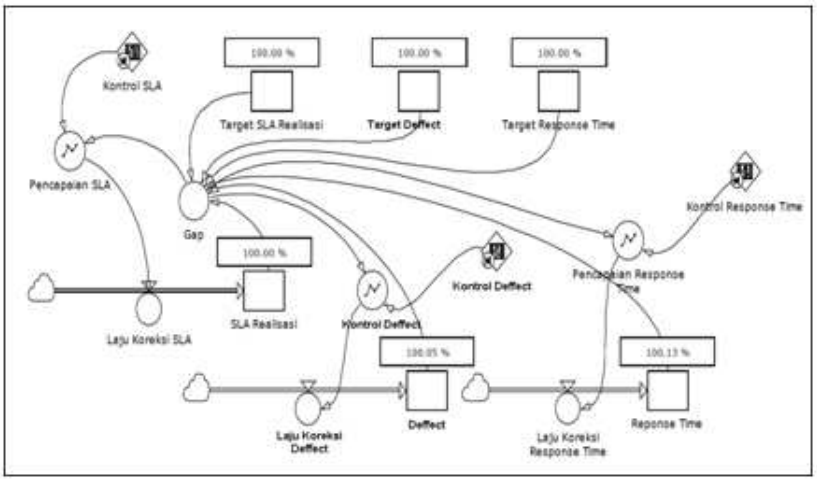

Fig 5: Stock flow diagram of company performance

The explanation of structure of stock flow diagram model that is used is as following:

Table 3: Variable and function of SFD company

No.	Variable	Variable function	Description
1	Control of response time	Constanta	The amount that affects achievement of response time
2	Achievement of response time	Auxiliary	The amount that affects correction of achievement of response time
3	Response time	Stock	Achievement level of response of time per month
4	Target of response time	Stock	Determined target by company for response time
5	Correction rate of response time	Flow	The amount of correction rate of achievement of response time
6	Control of reopened	Constanta	The amount that affects achievement of reopened
7	Achievement of reopened	Auxiliary	The amount that affects correction rate of achievement of reopened
8	Reopened	Stock	Achievement level of reopened per month
9	Target of reopened	Stock	Determined target by company for reopened
10	Correction rate of reopened	Flow	The amount of correction rate of achievement of response time
11	Control of SLA	Constanta	The amount that affects achievement of SLA
12	Achievement of SLA	Auxiliary	The amount that affects correction rate of achievement of SLA
13	Realization of SLA	Stock	Achievement level of SLA per month
14	Realization target of SLA	Stock	Determined target by company for SLA
15	Correction rate of SLA	Flow	The amount of correction rate of achievement of SLA
16	GAP	Auxiliary	Difference of target and achievement

Table 4: SWOT matrix of company

IFAS / EFAS	Strengths	Weakness
	1) Management support on technology, infrastructure and network for development of company information system. 2) Company has complete product that suits customers' need and product sales continues to increase. 3) Wide sales network includes domestic and abroad. Company image is already strong in premium market share.	1) Life insurance product is beneficial product for long term (>15 years). In UAT time, it is hard to get that long term condition because must be with batchjob that needs long time in accordance with wanted date, so to ensure beneficial calculation can't be fulfilled. 2) Sales system hasn't been optimal because company sales application isn't fully to be able to support sales activity, so agents more choose manual process.
Opportunities	**SO strategy**	**WO strategy**
1) Increasing in effectiveness of sales information system will decrease manual process and head to paperless for sales activity. 2) Usage of system accelerates sales process and agents are easy to get accurate data about insurance information 3) Need of life insurance product in Indonesia people is continuing to increase along with Indonesia people consciousness of insurance function.	1) Develop information system that can increase company profit. 2) Sales activity of agents is supported by accurate and precise information system. 3) Excellence of company information system can increase company image in premium market share in Indonesia.	1) Build information system that supports various company products. 2) Make information system fully support agent's sales activity. 3) Evaluation of information system performance for sales activity in accordance with user's need and support future goal.
Threats	**ST strategy**	**WT strategy**
1) More competitor with various new innovation, so more various product offer to people. 2) Standard requirement of insurance submission agreement in competitor is lighter with higher insured value compared to PT. AJ Manulife Indonesia 3) Various company product with different character of benefit, rule and condition	1) Doing innovation and deepening need of people and clients becomes one of the basics of creating new product. 2) Management support on information system, is fitted with what becomes client and agent's hope. Creating different innovation according to company feature 3) Increase in sales with automation process support.	1) Developing and innovating on company product that in accordance with target need of company market share. 2) Review about standard requirement and process of new insurance submission, but still accordance with company value. 3) Review about development procedure of company application, either in IT department or related operational section

From that table, it is done weight calculation in each SWOT variable, next the result of that calculation is made into company SWOT quarter:

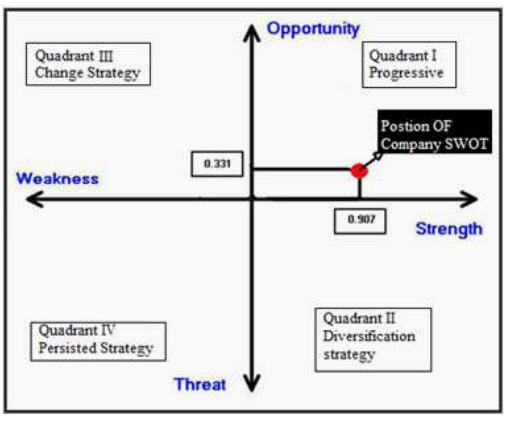

Fig 6: company SWOT strategic quadrant [22]

Explanation from SWOT strategic quadrant, position of PT. Manulife life insurance Indonesia is in I quadrant, which means company can apply SO (Strength – Opportunity) strategy. Position of X wick is positive value, means for Y wick is also positive value, means Opportunities that is held by company is bigger that threats. Here are actions that can be done by company from SO strategy:

1. Agents' sales activities are supported by effective and efficient information system, and supports paperless. Paperless means several sales processes that use paper can be changed to electronic. Since headquarter operational has used system, if sales activity is done electronically then it doesn't need to submit data to system. System also can do checking procedure based on more accurate regulation or rule compared to human ability.

2. Building and developing information system to create advantages on business along with support from management. Information system in company becomes additional trust value of outsiders (investor, shareholder, customers, people). Increasing trust from outsider will affect company image.
3. Improving sales target with fast and accurate sales activity process from company information system. The support of process that is fitted with the goal of making system and fulfilling business need. It means operational activity can run well. In line with operational activity, management can continue to develop company strategy simultaneously by using the information system in company. If there is a hindrance in information system, then operational activity will be delayed. For example, if in information system for sales activity occurs a mistake in submitting new policy or process due to inaccurate system, then that new policy needs more time to be processed, and the client might cancel the purchase of insurance product.

As conclusion from SWOT analysis, PT. Manulife life insurance Indonesia needs to do progressive action to reach bigger opportunity by utilizing power that is held by company.

Achievement of company performance

Function of quadrant analysis is to show relation between assessment of interest level and satisfaction level of agents and employees on company support, especially IT department that affects service quality to customers. Here is the result of Cartesian quadrant from empathy and tangible variable:

Table 5: Empathy and tangible variable in Cartesian quadrant

No	Variable	Indicator	Cartesian Quadrant
1	Empathy	Sensitivity of IT department to accept complaint or denunciation on information need related to Agency Link.	Quadrant I
2		Obtaining help in step of using Agency Link	Quadrant I
3		Being allowed to ask guidebook or explanation about Agency Link.	Quadrant IV
4		IT call center responses quickly if occurs problem or obstacle.	Quadrant IV
5	Tangible	System that can help operational work and give needed information system without time limit.	Quadrant I
6		System can give precise service in accordance with that is hoped by user.	Quadrant II
7		Interface of information system of Agency Link from consistency aspect is done in order of action, order, and term that is used in menu, and help display.	Quadrant II
8		Provide shortcut button	Quadrant IV
9		System is designed to give indication that the way that is done has been right or process that is done has finished or succeeded and fro next user can do next action.	Quadrant I

Achievement of company performance is successfully achieved in certain period time. This achievement will be made as reference to company to take decision to achieve of company performance. Data is made as basic management analysis in assessment on company performance. In this research, used data is data of July 2012 till June 2013 period.

Factors that affect service quality

SLA (Reliability)

If it is observed from month to month, graphic of SLA achievement in July 2012 till June 2013 period tend to increase simultaneously with increase of online application. Measurement of online application level can draw usage level of Agency Link [23].

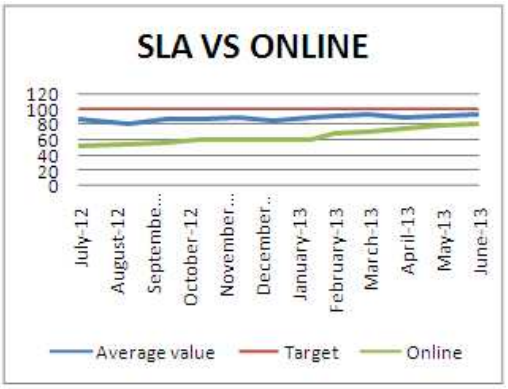

Fig 7: graphic of average achievement of SLA with online application

Response Time (Responsive)

From average of response time achievement can fulfill target 100%, here is the graphic of response time achievement compared to online entry application percentage.

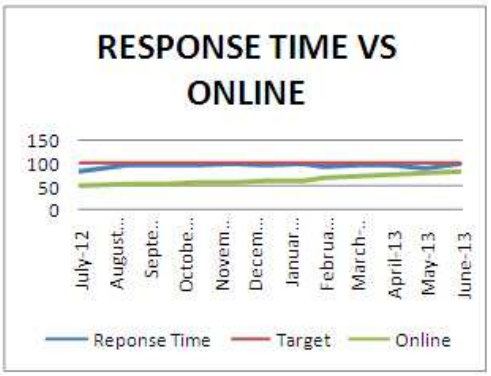

Fig 8: graphic of average achievement of Response Time with online application

Defect (Assurance)

Factor that affects the occurrence of defect issue is the indicator of difficulty level of faced problem. This difficulty level is relative, usually for new employee, this allows the occurrence of defect, but old employee also has the possibility. Defect less than 7 times is still allowed, means that less than 7 times target is still achieved out of that then target can't be achieved anymore.

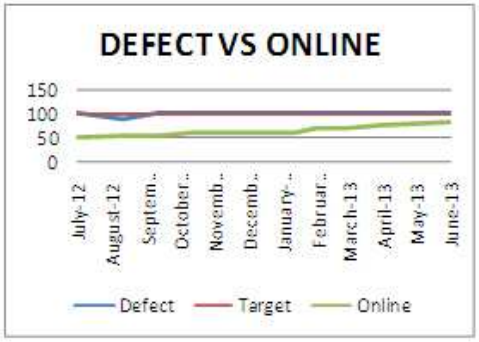

Fig 9: Graphic of average achievement of assurance with online application

CONCLUSION

Conclusions of research by doing several scenarios in developing CRMS in order to take strategic decision and improve service quality are:

1. Company gives support in sales activity by providing CRMS as company power. From company SWOT analysis in quadrant I, it shows that company is strong and has opportunity. From company power, it becomes opportunity for company to increase sales and achieve business excellence. To achieve that opportunity, measurement is done through service quality. Main priority from agent and employee on Agency Link is being able to help operational work, give information service without time limit, and give precise information according to what is expected by customer. From setting of correction rate of service quality, it is 10% from GAP and it will be achieved in 2018, when it is increased to 20%, then it can be achieved in 2015, and when it is increased to 30%, it can be achieved in 2014. The bigger rate of service quality value in GAP proves the faster target will be achieved, and it means the more increase on service quality to customers. The increase in service quality will affect company performance and service quality then it will give an opportunity to achieve business excellence.
2. Usage of CRMS that isn't achieved in accordance with target from management affects the increase in service quality. The unachieved increase in service quality is caused by unachieved SLA. In period of July 2012 to June 2013, achievement of maximum SLA is 92.10%, and minimum SLA is 80.80%, GAP between target and achievement is 7.9 %. The main cause of unachieved target of SLA is because there isn't any control to achieve the target.

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