

ASSESSING INTRAPRENEURIAL ASPECT IN ORGANIZATION USING EOS AND ELQ METHOD

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Abstract

PT XYZ is a company which works in industry of oil and gas. With a lot of competition in the industry, the company needs to improve their performance especially in their main business line, Oil and Drilling Services Operation and also improve their Human Resources. One way to increase their performance is to know and improve the intrapreneurship in the company.

This research is using quantitative approach. The first step conducted in this research was to look for the problem from the object being researched by the author. The data collections consist of primary data from questionnaire. There'll be two questionnaire distributed. First one is Entrepreneurial Orientation Survey (EOS) to assess the current entrepreneurial condition in the company which distributed to the entire division of the company. The second one is Entrepreneurial Leadership Questionnaire (ELQ) which will asses the leader of the divisions with four types of intrapreneur leaders, Miners, Explorers, Accelerators and Integrators. ELQ was distributed in two key divisions, Division of Drilling and Oilfield Service as the company's core business and Human Resources Division to manage the company's employees.

On the basis of the results of this research, it can be concluded that the company has a good entrepreneurial aspects. Employees also able to accept entrepreneurial environment within the company. The company is also perform above average in the market, able to compesate the employees, empower the employees and doing innovation in par with the competitors.. The leader in the PT XYZ's Human Resource Division is Accelerator type while the leader in Division of Drilling and Oilfield Service is Miner type.

Keywords: Intrapreneur, oil and gas sectors, entrepreneurial orientation, Entrepreneurial Orientation Survey, Entrepreneurial Leadership Questionnaire.

Introduction

In order to be a successful nation, there's a dire need for a nation to have at least 1% as entrepreneur from total population. By having entrepreneurs, there'll be work opportunity which will absorb work forces (Parker, 2004: 10-12). In 2014, it is recorded by Badan Pusat Statistik (BPS), Indonesia has 44,20 million people as entrepreneurs. However, the term of entrepreneurs isn't limited to just for business owners. It is also possible for an entrepreneurs as employee of a company.

There are characteristics which identified as entrepreneur's characteristics. They are: Risk Taking, innovatives and able to work

together (Cox, 1995:4-9). People who eventhough doesn't have their own company but shows thos characteristics can be considered as entrepreneur

However, there is a term of intrapreneurship described by Kuratko as entrepreneurs who work not in his/her owned company. Same as entrepreneurs, they also show the Risk taking, innovatives, and work together as a team as their characteristics.

There are some notable intrapreneurs in the world which not only brings benefits to the company but also to the community. One of the example is Tanri Abeng, the ex-chairman of Bakrie Brothers group which showed the

innovative and able to take bakrie groups IPO in 1989. Another famous example is Bob Iger, CEO of Walt Disney. He's also noticed as one of the best intrapreneurs in the world by taking Walt Disney Company as the lead in entertainment industry (Widya and Sulistio, 2015).

However, just like there's a lot of type of entrepreneur, there's also different type of intrapreneurs. Some type of intrapreneur may more suitable in different division of the company. Intrapreneur in marketing division for example, may differ than the type of intrapreneur that works in human resources division. Marketing division will tend to have more risk taking and innovation than human resources division in order to marketing division can get more market. Human resource division will have ability to work together better than marketing division because human resource division needs to interact with other people more than marketing.

The existence of intrapreneur really depends the support of the companies. The company itself needs to support the existence of intrapreneur. This is referred as Entrepreneurial Orientation. Some of the company support more of intrapreneur acts so it has more intrapreneurs than the others (Zahra, 1991: 282-285). There are few several way to measure the current condition of the company's support for intrapreneurships.

PTXYZ is one of the company that runs in oil and gas industry. It started as state owned-oil owned in order to support government's oil refinery company, PT Pertamina. In 1999, PT XYZ expand its business line in order to be more competitive and developing demands and opportunities. Currently, the company is an integrated oil and gas services company providing the upstream and downstream oil and gas services in Indonesia.

However, having so many line of business gives the company lots of competitors. There are at least 274 company which runs in exploration of oil and gas in Indonesia. There are 47 companies which also work and provide drillings service (Kementrian Energi dan

Sumber Daya Mineral, 2013: 1-2). In order to stay relevant and compete in the market, it needs to keep improving. By improving intrapreneurship within the company, it is expected that the company improve itself. One of the aspect that needs to be focused by the company is to improve in operation site especially in drilling and oilfield service as it's main service. By knowing what type of intrapreneur leader needed in drilling and oilfield service division, the company can improve their performance on the production and compete with the competitors.

Another aspect that is vital is human resources. The company had financial problem in 2010 because of mismanagement that happen in the company. Not only that, the performance of the company at that time was poor due to lack of competencies of the employees (Gunawan, 2014:11-27). Therefore, having a great human resources division is needed in order not to let those things happened again. In addition, human resources division needs to be able to integrate divisions within the company and assign employees in suitable positions. The performance of human resources division depends on the performance of the leader division. Knowing what type of intrapreneur needed in human resources division will benefit PT XYZ greatly.

1. Intrapreneurship

Intrapreneurship terms is first coined by Pinchot in 1978. He said that company in order to grow need entrepreneurial thinking within the company. It make company able to create value through innovation and able to seize opportunity without regard to human or capital resources (Pinchot, 1987).

According to Knight, there are two important characteristics to determine the intrapreneur. First is innovativeness, innovativeness is defined as "the pursuit of creative or novel solutions to challenges confronting the firm, including the development or enhancement of products and services, as well as new administrative

techniques and technologies for performing organizational functions” (Knight, 1997). Second is proactiveness which regarded as aggressiveness toward competitors and focusing on aggressive execution in order to achieve company goals.

Thornberry later on expanded the view of intrapreneurship by expanding it to four types of intrapreneurship:

- a. Corporate venturing: how a business doing start up by doing innovation through new product development.
- b. Intrapreneuring: instill the behavior of entrepreneurship in the company’s employees and creating environment within it.
- c. Organizational Transformation: the transformation and remodel the company. Thornberry limits the transformation in innovation process as it’s allow to coup new opportunity for the company.
- d. Industry rule-bending deals: Thornberry describes as “changing the rules of competitive engagement” (Thornberry, 2001) as another way of transformation. This intrapreneurships is very ground breaking and breakthrough to the company thus able to change the industry standard.

2. Thornberry’s 7F

According to Thornberry, there are 7 different orientation of entrepreneurial within a company. These orientations determine how the company works in term of how well it relate to intrapreneurship. These 7 criteria by Thornberry is called 7F. Eventhough there are seven criteria, Thornberry said that it isn’t limited only to these seven criterias. Company may add things that they think it’s important for them (Thornberry, 2001).

The Thornberry’s 7F are following:

- a. Fast
Fast determine how good the company reacts to new opportunity. Company who able to react very fast

will have advatange to the industry and usually able to stay lead by grabbing new opportunity first.

- b. Flexible
Flexible company able to change the strategy to coup with the competition. Flexible company will change the strategy quickly if the current strategy isn’t working well thus making the company very resilient in the market.
- c. Focused
This criteria determine how focused company to achieve the goals. The company must plan and create structure to achieve the goals. By having plan and structure which doesn’t divert from the strategy will make the company focused.
- d. Friendly
Company should be able to maintain friendliness internal and externally. In internal, company should be able to bring harmony between the individuals in the compant and among divisions. In external, company should shows its friendliness to customers whether its while selling, promoting, or managing complain.
- e. Frugal
Frugal is criteria how wise the funding of the company to achieve the goals. Having frugal is important especially if the company is in crisis.
- f. Far-reaching
Far-reaching is criteria to show whether the company is accessible or not in the market. More accessible company to the customer will make the company easier to access the market and promoting.
- g. Futuristic
Futuristic characteristic determined how company prepares in the future. It can be from preparing future products, how to widen the broader market.

3. Assessing Intrapreneurships

This research need to have way to measure and assess intrapreneurship. As the intrapreneurship is broad and not limited to certain and fixed categories, there's different methods used. There are already several methods that has been developed and ready to be used. These methods has different approach and dimensions about entrepreneurship.

In this study, there's 4 methods that will be discussed in this study. Those methods are:

- e. Entrepreneurial orientation by Miller and Friesen 1982
- f. ENTRESALE created by Khandwalla and developed by Cavin and Slein
- g. Entrepreneurial Orientation Survey (EOS) by Neil Thornberry
- h. Entrepreneurial Leadership Questionnaire (ELQ) by Neil Thornberry.

4. Entrepreneurial Orientation

Miller and Friesen (1982) created instrument to assess entrepreneurship orientation in a business. This instrument created in 1982 . There are 5 categories of question with 7-point scale Likert. The dimensions are:

- a. Innovativeness
- b. Risk Taking
- c. Proactiveness
- d. Competitive Aggressiveness
- e. Autonomy

If the scores in a category is high, it shows that the intrapreneurship in the company is high and vice versa if the scores is low, the intrapreneurship in the company is low.

5. Entrepreneurial Orientation Survey

Entrepreneurial Orientation Survey (EOS) created by Thornberry in order to assess entrepreneurial orientation within a company. EOS used to determine what the strength and weakness of entrepreneurial orientation within company according to Thornberry's 7F (Thornberry, 2006).

There are 9 categories asked in EOS:

- a. Strategic Planning
The ability of the company to create vision, missions, values of the company and make it known thorough the organization.
- b. Cross-functionality
How fluid the organisation of the divisions in the company to work and solving problem together without bordering themselves.
- c. Company reactions to support new ideas
How well the company receive, support and implement new ideas within the company from employees.
- d. Market Intelligence:
How well company know about the market, competitors and its position in the market and also how well the plan to gain the market share and stay in the market competition.
- e. Risk aversion
This category ask about how well company minimize the risk for the company. It's also ask about how the company's reaction to mistakes and planning investation.
- f. Speed
How fast the company reacts to a situation and seize opportunities in the market. It's also ask about how fast company can solve the problems that happen in the company and reacts to complaints.
- g. Flexibility
This category mainly ask about the way division of the company works. The more fluid the company works and the more cross divisional abilities that the employees have, the more better the company in this category.
- h. Focus
Focus category asks about how efficient the company works. Better focus in an organization means that organization can achieve their goals,

missions, and vision faster.

i. Future

Future category asks about how well the company thinks and acts for the future. It's also ask how the view of the company towards research and development to stay in the market and seize the opportunities for new products. This category also asks how well the company reacts to innovations.

In addition to that 9 categories of question. There's additional three categories that need to be answered by the respondent. First is Personal Orientation which ask about personal level of orientation. Second one is asking about the current condition of the company in employees's perspectives. The last one is about the employees's knowledge of entrepreneurship in the company.

Personal Orientation shows how well an individual reacts to entrepreneurial environment in the company. The higher score in this category means the employees support and like entrepreneurial environment. The lower score may refer that employees dislike the entrepreneurial environment in the company and may hinder the progress.

The condition of the company asks in general how well the company support the employees in the company. This category asks about how well the company in the market, handle the human resources, innovation, and salary. The lower the score in this category means that the company perform better than the competitors. The better company perform will effect the employees's morale which may promote entrepreneurial environment within the company.

The last one will ask about the employees's knowledge about entrepreneurship. The lack of entrepreneurial knowledge among the company may hinder the progress of entrepreneurial environment within the company. If the employees's have understand about entrepreneurial, it'll be easier for the company to promote entrepreneurship in the

company.

5. Entrepreneurial Leadership Questionnaire

To identify which type of intrapreneurs a leader is, Thornberry developed tools called Entrepreneurial Leadership Questionnaire which need to be answered by the direct subordinate of the said leader. Different division may need different type of intrapreneur in it and thus identify and put the correct person is essential (Thornberry , 2006).

There are 50 statements in this questionnaire. Respondents need to respond it two times for each question. The first is to measure how important that statement to their direct line of works. Second respond is to measure how frequent the statement is done by the direct supervisor. Later on, the questionnaire will show what type of leader the supervisor is and what the actual leader need on that division in order to improve the organization. The questionnaire will consist of 5 categories, 4 is about what type of the intrapreneur leader needed or currently in charge and the other one is General Entrepreneurial Leadership which asks about the entrepreneur behaviour in general. The questions of the categories spread in the questionnaire in order to avoid bias (Thornberry , 2006).

In this research, the assessment tools use EOS and ELQ. The reason to use EOS and ELQ is because both are the most updated and comprehensive methods to assess intrapreneurship leaders in term of orientation and type of entrepreneurship.

Research Methodology

This study uses primary data which collected from questionnaire distribution. The data collected will be primary data. There are two questionnaire that are distributed. First questionnaire is Entrepreneurial Orientation Survey (EOS) which will measure the company intrapreneurships. EOS questionnaire will be spread within the organization using simple random sampling technique with the samples

used in this research is 115 employees from all departments.

The second questionnaire is Entrepreneurial Leadership Questionnaire will be spread to two specific department. First department is Human Resources and the second one is Exploration services department.

Both of the questionnaire will use Likert Scale system from 1 to 5 with 1 showing the least likely and 5 will represent the respondent as most likely. Number 3 will represent neutrality of the statements or the questions.

There's also question and answer to the supervisor in order to collect the data in order to answer some questions regarding the object's history, current condition and profile. The question will be asked via email.

1. Data Analysis

There will be four things that will be analyzed in data analysis. The first one is the company profile. This will include the data that the researcher gathered from interview with the company. This data is needed in order to know the condition of the company. There'll be mainly three things that will be included in this section:

- a. The summary of company's history
- b. The structure organization and the number of employees.
- c. Shareholder structures.
- d. The services/products the company offers

The second section will include the result from Entrepreneurial Orientation Survey (EOS). This will show and explain the data of the current condition of entrepreneurial orientation within the company. The third section will be about Entrepreneurial Leadership Questionnaire (ELQ) which will contain the result and the analysis of Human Resources Division and Division of Drilling and Oilfield Service. The fourth one is comparing the result of ELQ's Human Resources Division and Division of Drilling and Oilfield Services.

2. Entrepreneurial Orientation Survey

The data collected with EOS questionnaire will be summarized. The Questionnaire will have 10 main categories and additional 3 categories which will ask about the respondent view of entrepreneurship. Later on, the data will be shown on radar graph. It'll represent graphically how entrepreneurial position of the company and shows the area that can be work on.

The data will be analyzed whether the current entrepreneurial orientation of the company is enough or not for the company. The factors that will be considered are: industry of the company, level of entrepreneurship of the employees, the size of the company.

3. Entrepreneurial Leadership Questionnaire

The data collected with EOS questionnaire will be summarized. The Questionnaire will divide the type of the leader is. It'll divide the type of leaders as 4 types and later will determine how the type of leader currently needed. There will be side-to-side comparison of the type of the current leader shows and the position needs according to the employees.

Eventhough the data will divide the leader into 4 categories, the category isn't mutually exhaustive which means that a leader can has more than one type. Later, the data will be compared with the type of the leaders that needed which is also asked in the questionnaire.

The result of the questionnaire later on will classified depending on how high the achieved number is. The higher number achieved, the more relevant and needed certain area is. For General Entrepreneurial Leadership and explorer behaviour, the range score will be 34- 45 for high, 23-33 for medium and 9-22 for low. For miner behaviour, the range score will be 26-35 for high, 18-25 for medium and 7-24 for low. For accelerator behaviour, the score needed for high is 42-55 while for medium is 31-41 and for low score is 11-30. The high score for integrator behaviour is 53-

70 while for medium is 36-52 and low is 14-35.

4. Research Result

The questionnaire was distributed in PT XYZ. There are 115 questionnaires distributed to the divisions of PT XYZ. The questionnaire

was distributed using random sampling. From 115 questionnaire given, there's 90 questionnaire which returned and valid. The participation rate from the questionnaire is 78.26%. This means the questionnaire participation is high and the questionnaire can be used.

Table 1 - EOS Respondent Survey Percentage

	Quantity	Percentage
Questionnaire returned and valid	90	78,26%
Questionnaire which isn't valid	25	21,74%
Total Questionnaire distributed	115	100%

With this return percentage of the questionnaire, this questionnaire has a very good participation and can be used as valid

data. From the questionnaire, the scores was averaged depending on the categories. The results of the EOS of PT XYZ is as follow:

Table 2 - PT XYZ's EOS Results

	Average Score
1 General	3.6
2 Strategic Planning	3.7
3 Cross-functionality	3.3
4 Support new ideas	3.5
5 Market Intelligence	3.5
6 Risk aversion	3.3
7 Speed	3.3
8 Flexibility	3
9 Focus	3.4
10 Future	3

The highest category is Strategic Planning with score of 3.7. The second highest score is in General category with 3.6 as the average score. while the lowest is in two categories, Flexibility and Future with score of 3. This result means that PT XYZ has

done a good job with planning and creating it's vision, missions and strategies. PT XYZ is also able to socialize the company's strategies to its employess. With this result, PT XYZ will able to compete and stay relevant in the competition.

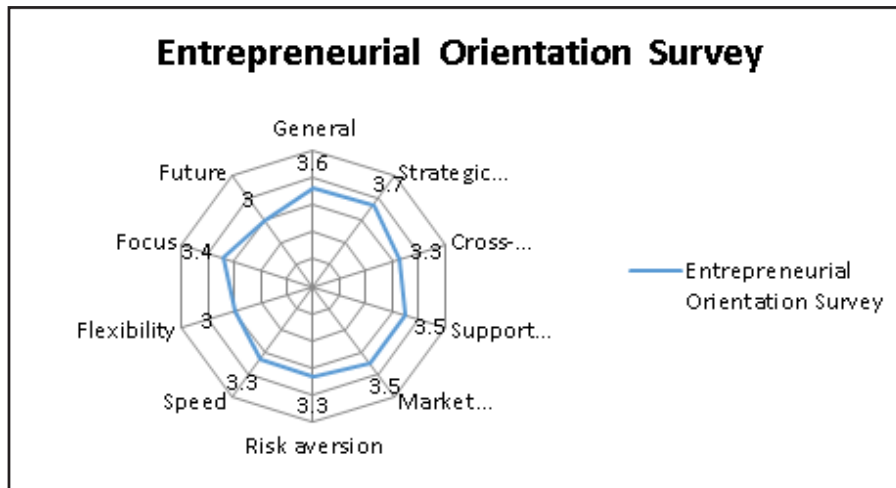


Figure 1 - PT XYZ's EOS Chart

PT XYZ's score in Flexibility is the lowest along with Future. With average score of 3 in flexibility, means the company tends to follow formal procedures within the company. In addition, it is pretty formal regarding titles and levels in the organization. This is expected considered the company is a government's company as government's company is strict with procedures and titles.

Meanwhile, Future category with score of 3 means that PT XYZ doesn't really thinks about future of the company. PT XYZ tends not to innovate and invest in research and development. However, this can be justified as oil and gas industry is an industry which innovation tends to slow as the projects of drilling is usually over 30 years.

In general, with scores of 3.6, PT XYZ has knowledge of entrepreneurship within the company. PT XYZ already has taken step to grow the entrepreneurial knowledge within company. This is also reflected with other categories.

5. Personal Orientation

The individual orientation is a part of EOS questionnaire to ask about the individual perception of whether the respondent has high entrepreneur level or not. Higher number tend to have higher level of entrepreneurial spirit. From the questionnaire, PT XYZ has average number of 2,9. This means that PT XYZ's employees has neutral feeling towards the entrepreneurial environment. The employees don't like nor dislike the entrepreneurial environment and change in the environment will not change their morale. This also means that if the company want to improve the entrepreneurial spirit in the company, the company won't have much resistance from the employees.

6. Condition of the Company

There are 4 questions in EOS which asked about the condition of the company. The questions are answered by the employees in regards compared to the competitors. The detailed result is as follow, the lower the number, shows better score:

Table 3 - PT XYZ's Condition in Employees's Perspective

No	Category	Average Scores
1	Overall Market Performance compared to the competitors	2,0
2	Empowerment of the People	2,6
3	Company in term of innovation	2,7
4	Salary and compensation	2,2

As it shows, The overall performance of PT XYZ compared to the competitors is considered above average. It means that the company performs better than most of the competitors in the market according to the employees. However, position of the company perform above average from other companis may be the result from PT XYZ position as goverment’s company. This can make the company have exlusive deals with Indonesia’s goverment resulting in advatange toward the competition.

The company doesn’t promote innovation more than the competitors according to the company as the scores is the lowest. The low score however may happen because it works in oil and gas industry which in term of innovation the industry’s innovation is quite slow compared to others industries. The company offers the salary and compensation within the company equals with the competitors. Which mean, they will not have issues regarding losing human resources to the competitors due to salary issues. The high salary and compensations in the company

may be the result of their performance in the market which is considered above average by the employees.

Thecompanyconsideredbytheemployees capable of empowering the employees in the company. While it’s still considered equal to the competitors, the empowerment of the employees can give impact to the company’s overall performance in the market. From the result, it can be considered that the performance of the company is better from the competitors. This means, their employees capable of doing works and may result in high spirit among employees. This may result to the company’s can implement entrepreneurial spirit within the company

The first set of ELQ questionnaire was distributed in Human Resources Department in PT XYZ There are 50 questionnaires distributed to the Human Resources department. From 50 questionnaire, the returned and valid questionnaire is 46 questionnaires. So, the participation rate for ELQ questionnaire in Human Resources Department is 92%.

Table 4 - ELQ of PT XYZ’s Human Resources Division’s Respondent Percentage

	Quantity	Percentage
Questionnaire returned and valid	46	92%
Questionnaire which isn’t valid	4	8%
Total Questionnaire distributed	50	100%

Table 5 - Result of Human Resources Division’s ELQ

	Category	Average	Gap	Classification
General Entrepreneurial Leadership	Importance	3.19	0.41	Medium
	Frequency	2.78		Medium
Explorer Behaviour	Importance	3.43	0.43	Medium
	Frequency	3.00		Medium
Miner Behaviour	Importance	3.52	0.38	Medium
	Frequency	3.14		Medium
Accelerator Behaviour	Importance	3.57	0.44	Medium
	Frequency	3.13		Medium
Integrator Behaviour	Importance	3.45	0.55	Medium
	Frequency	2.9		Medium

Researcher thinks that with this percentage of questionnaire returned from the Human Resources Division the result of questionnaire can be considered satisfactory and the data can be used.

The result of the Questionnaire distributed in the Human Resources Division are in Table 5. The most needed type of intrapreneur needed in Human Resources Department is Accelerator with average score of 3.57. The second highest is Miner behaviour that needed in Human resources department. The general reception of entrepreneurial leader is not quite needed in Human resources Department. With average score of 3.19, the General Entrepreneurial Leadership in Human Resources Department is least needed. The second lowest has high gap with Explorer behaviour with 3.43 as average score.

In comparison, the highest in frequency showed by the leader of Human Resources Department is Miner behaviour with 3.14 in average. However, the Accelerator type is

in second with gap in 0.01 point with 3.13. The least type of intrapreneur shown in the Human Resources Department is the general Entrepreneurial leadership with score only of 2.78. The second least type of intrapreneur shown by the leader of Human Resources department is Integrator Behaviour with score average only 2.9.

There's significant gap in few of behaviour shown and needed in human resources department. The most needed type of entrepreneurial leader in Human Resources is Accelerator behaviour. Though, there's gap of 0.44 points in current accelerator behaviour shown by the Human Resources department's leader.

However, the highest gap is shown integrator behaviour. The integrator behaviour importance score average is 3.45 and the shown behaviour is only 2.9. There's 0.55 gap which need to be addressed as the current Human Resource Department need integrator behaviour.

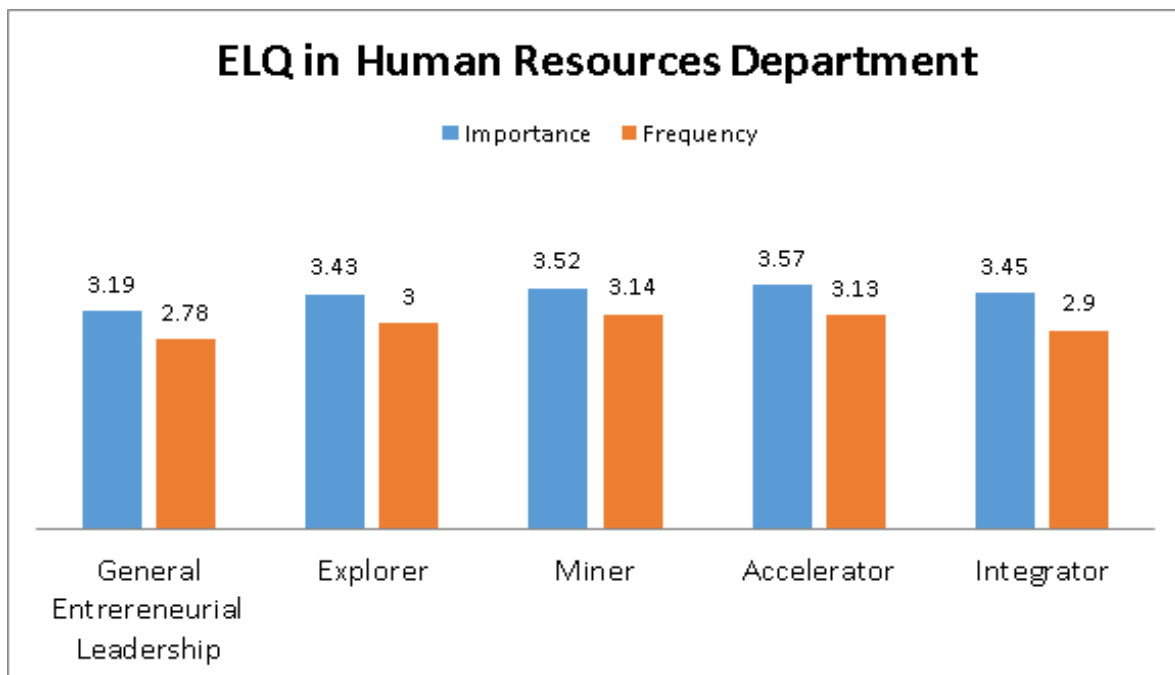


Figure 2- PT XYZ's Human resources ELQ Diagram

With this result, we can assume the characteristics of intrapreneur leader needed in Human Resources Department. The major characteristics of intrapreneur leader needed in this division is Accelerator type. Ideally,

the leader of Human Resources department need these characteristics:

- a. Able to coach the employees
- b. Integrate the divisions in the company

- c. Promoting and fostering climate of innovation
- d. Willing and capable to outmaneuvering the organization's cumbersome rules

For instances, there was case which the company fired 200 employees from 2011 to 2013. The firing was due to corruption in the organization. The major shareholder's, PT Pertamina, objected about it due to the government's company culture which tend not to fire people. However, PT XYZ did the fire anyway in order to fix the condition of the company.

Conclusion and Recommendation

After analyze the result of EOS, PT XYZ current entrepreneurial orientation has lead them to take step to grow the entrepreneurial knowledge within company. Their highest score in entrepreneurial orientation is strategic planning while the lowest scores are flexibility and future. Entrepreneurial spirit's within the company is also decent in perception of the employees. The company also considered to perform above average in employees's perception. These will make them able to compete in the market and make employees work focused to achieve company goals

From ELQ questionnaire distributed to PT XYZ's Human Resources Division needs is Accelerator type. While for the

division of Drilling and Oilfield Services in PT XYZ, the needed leader according to the survey is, Miner type. Both division's type of intrapreneurship leader are suitable with their jobs and responsibilities.

In both division, the current leaders is fit with the condition needed by the company. There are small gaps between the needed score and the actual score. However, as the gaps is small between them, it can be disregarded. In the end, there's no need to change both leaders of Human Resources Division and Division of Drilling and Oilfield Service.

Researcher believe that PT XYZ is in the right track to promote the intrapreneurship within the company and create a strong company to compete in the market. However, researcher thinks that there's some improvement that can be made in order for PT XYZ to be better. These are the recommendation from researcher to PT XYZ:

- a. Creating methods and workflows which able to increase the cross-divisional works in PT XYZ in order to increase the Flexibility
- b. Gives training in intrapreneurship in term of implementation in order for employees to perform better.
- c. Creating the ELQ's map for each division leaders so PT XYZ can know the type of intrapreneur leaders needed and to know whether the current leader is suitable or not.

References

- Cox, C. J. (1995). The foundations of success: the development and characteristics of British entrepreneurs and intrapreneurs. *Leadership & Organization Development Journal* Vol. 16 No. 7. p. 4 – 9.
- Herry Gunawan, F. (2014). *"PT XYZ" Turnaround*. Jakarta: PT Kreasi Mitramedia Utama.
- Kementrian Energi dan Sumber Daya Mineral, D. J. (2013). *Perusahaan Jasa Pemboran*. Dipetik February 11, 2015, dari Kementrian Energi dan Sumber Daya Mineral Direktorat Jenderal Minyak dan Gas Bumi: <http://www.migas.esdm.go.id/data-kemigasana/170/Perusahaan-Jasa-Pemboran>
- Khandwalla, P. (1977). *The Design of Organization*. New York: Harcourt Brace Jovanovich, Inc.
- Knight, G. (1997). Cross-cultural reliability and validity of a scale to measure firm

- entrepreneurial. *Journal of Business Venturing*. Vol.12 No. 3. p. 213–225.
- Kuratko, D. (2010). Corporate Entrepreneurship: An Introduction and Research Review. *International Handbook Series on Entrepreneurship*, Volume 5, Part 2. p. 129-163.
- Miller, D and P.H. Friesen. (1982). Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum. *Strategic Management Journal* 3 no 1, 1-25.
- Widya, N and Wahyu Sulistio. (2015). *Professional Entrepreneur*. PT Dharmapena Citra Media.
- Parker, S. C. (2004). *Economics of Self-employment and Entrepreneurship*. Cambridge University Press.
- Pinchot, G. (1987). Innovation Through Intrapreneuring. *Research Management*, Vol.30 No.2. p. 14-19
- Thornberry, N. (2001). Corporate Entrepreneurship: Antidote or Oxymoron? *European Management Journal* Vol. 19, No. 5. p. 526–533.
- Thornberry, N. (2006). *Lead Like an Entrepreneur*. McGraw-Hill.
- Zahra, S. (1991). Predictors and financial outcomes of corporate entrepreneurship: an. *Journal of Business Venturing*, Vol. 6 No. 4, p. 259-285
- Colvin, J. and Slevin, D.P. (1991), —A conceptual model of entrepreneurship as firm behaviorl, *Entrepreneurship Theory and Practice*, Vol. 15. p. 7–24