

## **The Adaptability of Company's Strategy in Managing Its Life Cycle Stages**

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### **ABSTRACT**

The aim of this study is to evaluate how companies adapt their strategy based on changing circumstance by measuring the frequencies of its life cycle phases. This study used sales growth as its variable. Quarterly data was collected from IPO date that happened before the year 2000. A total of 84 manufacturing firms from the 2015 Indonesia Capital Market Directory were sampled. Birth, growth, maturity, maturity survival and maturity revival phases of the companies were studied and it was found only 6% from the total were categorised as adaptable companies which tried to ensure steady sales. Few of them never experienced any changing phases. After the growth phase, their sales showed steady growth, even indicating increasing pattern.

*Keywords:* Adaptable company, firm life cycle phases, manufacturing firms, sales growth, strategy

### **INTRODUCTION**

Firms should use appropriate strategies for its growth and according to condition of the firm. One of several conditions that need to be considered is the phase where the firm is. Management strategies of a firm in its birth phase must be differentiated with the management strategies of a firm in the growth

phase. Management strategies of a firm in its growth phase must be differentiated with the management strategies of a firm in the maturity phase. This is because strategies that have been proven to be effective in the past can become inappropriate in a new stage of development (Greiner, 1998).

Companies strive to establish the right strategy with goals such as managing the company's sales. Companies that have appropriate strategies will show stable growth in sales especially after the growth phase. It shows that the company has adjusted its strategy continuously. Consequently, the frequency of changing from stable to unstable sales growth and

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vice versa after growth phase is relatively low. Thus, these firms have good adaptable strategy. Companies with fluctuating sales growth reflect their inability to control their market. Therefore, the frequency of changing from stable to unstable sales growth and vice versa especially after growth phase is relatively high. These happen to companies that do not have adaptable strategy. Interestingly, little has been learned how firm life cycle and corporate strategy are related.

The analysis of the adaptability of managing company's strategy through firm life cycle stages has never been examine for manufacturing firms listed in Bursa Efek Indonesia. Therefore, the purpose of this study is to evaluate a firm's flexibility in managing its strategy through its changing life cycle stages.

## LITERATURE REVIEW

A firm life cycle phase in general has four stages, namely: birth or introductory, growth, maturity, and decline phases (Pashley & Philippatos, 1990). Some writers use only three phases (Anthony & Ramesh, 1992), but some others add one phase like shake-out phase or revival phase, making it five phases (Miller & Friesen, 1984).

Each writer has different numbers of variables in their methodology. It can be one variable like sales growth (Yan & Zhao, 2010) or two variables: firm age and sales growth (Miller & Friesen, 1984), or even three variables, such as operating cash flow, investing cash flow, and financing cash flow (Dickinson, 2005).

The firm life cycle will predict what the managerial practices are to determine its life span, thus allowing to anticipate the necessary changes in firm development and its external environment in order to react appropriately (Quinn & Cameron, 1983 as cited by Stepanyan, 2012). A firm's structure and its policies can be explained using firm life cycle theory (DeAngelo, DeAngelo, & Stulz, 2006). Thus, there is an association between firm life cycles and competitive strategy (Lester, Parnell, & Carraher, 2003). However, only few studies have investigated the company's strategy in relation to its life cycle stages.

## MATERIALS AND METHODS

The population of this study is all 155 firms listed in by Indonesian Capital Market Directory (ICMD) 2015 (Manufacturing Sector). The manufacturing sector is divided into 20 sub sectors as shown in Table 1. The study looked at three sectors, in which all companies in those sectors had complete data, namely adhesive sector consisting of four companies, fabricated metal sector consisting of two companies, and photographic equipment sector consisting of three companies. Unfortunately, two sectors where all companies included did not have complete data, namely, chemical and allied products and machinery sector. Hence, a total of 18 subsectors were examined and which consisted of 84 companies (Table 1).

Following Yan's methodology, this study used sales as its variable. Sales data was obtained from Quarterly Financial Report and Annual Financial Report of

Table 1  
*Population and sample*

No.	Sector	Number of Companies Population - Sample
1	Food and Beverages	19 – 9
2	Tobacco Manufacturers	4 – 1
3	Textile Mill Products	10 – 5
4	Apparel and Other Textile Products	8 – 5
5	Lumber and Wood Products	3 – 2
6	Paper and Allied Products	7 – 3
7	Chemical and Allied Products	10 – 0
8	Adhesive	4 – 4
9	Plastic and Glass Products	15 – 6
10	Cement	4 – 3
11	Metal and Allied Products	18 – 10
12	Fabricated Metal	2 – 2
13	Stone, Clay, Glass and Concrete Products	5 – 4
14	Cables	6 – 5
15	Electronic and Office Equipment	4 – 2
16	Automotive and Allied Products	18 – 12
17	Photographic Equipment	3 – 3
18	Pharmaceuticals	10 – 6
19	Consumer Goods	4 – 2
20	Machinery	1 – 0
Total		155 – 84

Source: Indonesia Capital Market Directory 2015

the firms. The quarterly sales data is from firm's IPO date until December 2015. IPO date and sales can be found at [www.idx.ci.id](http://www.idx.ci.id). Only firms that have already been in the market for at least 15 years, meaning that they have IPO date earlier than the year 2001, and have complete data, were used. For companies whose data are incomplete for a maximum of five, smoothing technique will be applied by calculating the data using the proportion of two quarter data. Thus, this study involved 84 firms.

Unlike Yan's methodology, the basic pattern of firm life cycle here consists of birth, growth, maturity, maturity survival and maturity revival phase. The last three phases can happen repeatedly and interchangeably. The definition of each phase is given as follows: 1) Maturity phase happens when sales growth is in stable condition at the middle or high level; 2) Maturity survival phase occurs when sales growth is in stable condition but at the low level; 3) Furthermore, maturity revival phase happens when sales growth is volatile.

The adjustment methodology consists of 4 steps. Step 1 to step 3 follows Yan's methodology. Yet it needs an adjustment in step 1. For having industry adjusted sales growth rate, the firm's sales growth may reduce industry average sales growth rate instead of industry median sales growth rate. Furthermore, there is no industry average sales growth rate data. Thus, this data comes from the average sales growth of each company. The complete steps of the adjustment methodology are: 1) Step 1: calculate quarterly industry adjusted sales growth rate. It equals sales growth minus industry average sales growth rate; 2) Step 2: calculate industry adjusted moving-average sales growth. It is four-quarter moving averages of industry adjusted sales growth for each quarter by taking the average of the previous three quarterly industry adjusted sales growth rate and current quarterly industry adjusted sales growth rates; 3) Step 3: rank industry adjusted moving-average sales growth for each firm and get 33 percentiles and 67 percentiles (P33 and P67 for short); 4) Step 4: decide life cycle stages.

Initially, the firm life cycle is classified into two stages: birth and growth. To identify the birth phase, it uses IPO date (Yan & Zhou, 2010). Birth phase lasts between two and four months. The duration of growth depends on when the first at least a sequent 6 quarter periods in which industry adjusted moving-average sales growth all are greater than P33 but less than P67 (maturity phase at medium sales growth, M) – or all are greater than P67 (maturity phase at high sales growth level, M) – or all are less than

P33 (maturity survival phase, MS) – or all are fluctuating among less than P33, greater than P33 but less than P67, or greater than P67 (maturity revival phase, MR) – is found. If it exists, then a firm enters maturity phase / maturity survival phase / maturity revival phase at the starting quarter of this period. Maturity phase/maturity survival phase/maturity revival phase are phases that can happen repeatedly and interchangeably (Irawan & Dewi, 2016).

## RESULTS AND DISCUSSION

Analysis for each subsector can be seen in Table 2 that shows how many times the phases occurred after the growth phase. This study proposes the grouping of companies into two types, namely low phase-changing company and high phase-changing company. Having one to three phases after the growth phase, a company is classified as low-phase changing company. When having four or more phases, a company is classified as high-phase changing company. Maturity phase (M) and maturity survival phase (MS) are two phases that describe sales growth in stable conditions. When these two phases occur sequentially, they are counted only once and are signed by \* in Table 2. Frequency in Table 2 shows how many times the sales growth underwent phase changes from stable/unstable to unstable /stable. The higher the frequency, the more often the company experience changes from stable to unstable conditions and vice versa. List of all companies sampled here are given in appendix 1.

Table 2  
*The frequency of each company*

Food and Beverages	Frequency (times)
ADES G 9, MR9, M10, MR18, MS11, MR29	5
INDF G10, M9, MR17, MS7-M13-MS8*, MR21	4
MYOR G10, M8, MR23, M8, MR17, M6, MR30	6
MLBI G 9, MR61, M7-MS10*	2
PSDN G 9, MR26, M12, MR24, MS10-M3*	4
SKLT G 9, MR7, M8, MR24, M7, MR27, MS5	6
STTP G11, M7, MR15, MS7, MR27, M9	5
TBLA G11, MR14, M7, MR28	3
ULTJ G10, M20-MS11-M6*, MR16, MS6-M7-MS10*	3
Sales growth of MLBI started from an unstable condition for a long period and then changed into stable for the rest of the period. Sales growth of TBLA underwent changes from an unstable into a stable and back to an unstable condition, while ULTJ experienced changes from a stable into an unstable and back again to a stable condition.	
Tobacco Manufacturers	Frequency (times)
GGRM G23, MR70	1
Sales growth of GGRM were always in an unstable condition.	
Textile Mill Products	Frequency (times)
ARGO G 11, MR58, MS8, MR22	3
ERTX G 13, M20, MR36, MS9, MR24	4
HDTX G 11, M9, MR8, M6, MR39, MS15, MR13	6
RDTX G 13, MR15, M6, MR11, MS9, MR49	5
SSTM G 6, MR41, M11, MR5	3
Sales growth of ARGO and SSTM changed three times. It started from fluctuated, then became a stable condition, but finally returned to an unstable condition.	
Apparel and Other Textile Products	Frequency (times)
MYTX G 8, M8-MS8-M13*, MR17, M12, MR37	4
ESTI G19, M7, MR8, MS9, MR13, M9, MR9, MS8, MR10	8
PBRX G13, MS9-M10*, MR13, M8, MR15, MS8-M15*, MR6	6
BIMA G 8, M10, MR8, MS11, MR48	4
RICY G 9, M7, MR55	2
Sales growth of RICY started from a stable condition for less than two years but then got into a fluctuated condition for the rest of the time.	
Lumber and Wood Products	Frequency (times)
SULI G 7, M17, MR49, MS1-M8*	3
TIRT G 9, MR7, M9, MR40	3
SULI and TIRT, both are classified as low-phase changing companies. SULI underwent a stable condition at the first and at the end of the period while TIRT experienced the opposite.	

Table 2 (continue)

Paper and Allied Products	Frequency (times)
FASW G10, M8, MR67	2
INKP G 7, MR14, M17, MR40, MS6, MR14	5
TKIM G18, MR6, M17, MR58	3
Sales growth of FASW started from a stable condition for only two years and then fluctuated for the rest of the period.	
Adhesive	Frequency (times)
DPNS G 7, M7, MR10, M9-MS7*, MR50	4
EKAD G 8, MR35, MS8, MR20, M8, MR12, M6, MR4	7
INCI G17, M7, MR11, MS6, MR18, M6, MR23, M6, MR7	8
KKGI G10, M19-MS29-M7*, MR8, M24	3
After growth, KKG I saw three changing phases, but its unstable condition was only 10 %.	
Plastics and Glass Products	Frequency(times)
AKPI G10, MS22-M60*	1
AMFG G 6, MR46, M6, MR17, MS5	4
APLI G 7, MR6, MR7-MS7-M7*, MR6, M7, MR15	5
BRNA G 8, MR41, MS7, MR23, MS6, MR6, M8-MS5*	6
IGAR G11, MR15, M9, MR50, M6-MS3*	4
LMPI G6, MR78	1
AKPI and LMPI have only one phase after their growth period. The sales growth of LMPI were always unstable. At the same time, sales growth of AKPI were extremely controllable. It started with a stable pattern at low level and then experienced stability at the middle level and finally were stable at a high level. So, for more than 20 years sales growth of this company were never in an unstable condition. Hence, sales growth of AKPI showed an excellent pattern.	
Cement	Frequency (times)
SMCB G 7, M7, MR16, MS6, MR8, M6, MR26, M6, MR22	8
INTP G 8, MR65	1
SMGR G11, M9, MR4, M7, MR28, MS6, MR26, MS6	7
INTP has only one pattern where the sales growth was always fluctuating	
Metal and Allied Products	Frequency (times)
ALMI G13, MR62	1
BTON G 8, M7, MR4, M8, MR30	4
CTBN G10, MR26, MS8, MR32, MS6, MR20	5
INAI G 9, MR18, MS8, MR42, M6	4
JKSW G 5, M6, MR39, MS8, MR15	4
JPRS G 9, MR25, M10, MR53, M8	4
LMSH G13, MR27, M6, MR13, MS7, MR14, M7, MR5, MS9	8
LION G12, MR78	1
PICO G 8, MR68	1
TBMS G10, MS7, MR64, MS7	3
TIRA G 7, MR81	1
Sales growth of ALMI, LION, PICO, and TIRA were always in an unstable condition.	

Table 2 (continue)

Fabricated Metal Products	Frequency (times)
KICI G14, M10-M6-MS11(*), MR15, M6, MR26	4
KDSI G12, M6, MR60	2
KICI has never experienced a stable sales growth, but in a declining pattern. KDSI has only two phases from stable to unstable.	
Stone, Clay, Glass and Concrete Products	Frequency (times)
ARNA G13, M5, MR33, MS6	3
IKAI G 9, M6, MR54, MS4	3
MLIA G 9, M6, MR11, MS7, MR31, M6, MR11	6
TOTO G 8, M8, MR19, M7, MR37, M7, MR14	6
ARNA and IKAI have exactly the same pattern. MLIA and TOTO have the same pattern as well.	
Cables	Frequency (times)
JECC G11, MS 6, MR 67	2
KBLM G 8, MR8, MS6, MR23, M7, MR39	5
KBLT G 8, MR14, MS8, MR17, M7, MR39	5
IKBI G10, M9, MR22, MS9, MR49	4
VOKS G10, M12, MS6, MR20, MS6, MR18, MS6, M12, MS10	8
Sales growth of JECC started in a stable but then got in an unstable condition. KBLM and KBLT have the same pattern of life cycle phase.	
Electronic and Office Equipment	Frequency (times)
ASGR G 6, M8, MR23, MS8, MR8, MS6, MR29, M17	7
MTDL G 5, M6, MR22, M8, MR6, MS9, MR23, M16-MS7*	7
Both have the same pattern of the firm life cycle phase.	
Automotive and Allied Products	Frequency (times)
ASII G13, M8, MR16, M6, MR12, M6, MR19, M9,MR13,	8
AUTO G12, MS8, MR27, M9, MR8, MS6	5
GJTI G17, M19, MR27, M11, MR16, MS16	5
BRAM G11, MR48, MS7, MR17, MS6, MR11	5
INDS G10, M8, MR15, M10, MR23, M7, MR23, MS6	7
INTA G10, M12, MR10, MS6, MR51	4
LPIN G11, MR23, M8-MS11*,MR49	3
NIPS G12, MS6, MR79	2
PRAS G 7, MR22, M8-M6*,MR5,M7,MR12,MS6,MR8,MS11,MR9	9
SMSM G11, MR12, MS7, MR41, M6	4
TURI G16, M7, MR35, M8-M8-MS8*	3
UNTR G14, MR35, MS8, MR14, M6, MR14, MS14	6
After fluctuating for short period, TURI experienced declining phases in which sales growth were stable first at high level and then at middle level and finally at low level.	

Table 2 (continue)

Photographic Equipment	Frequency (times)
INTD G6, M6, MR34, MS7, MR33, M6, MR13	6
MRDN G7, MR19, M8-MS8*, MR8, M10-M7-M7*	4
KONI G11, MR12, M6, MR38, MS10, MR20	5
Finally, MRDG succeeded in stabilising its sales growth	
Pharmaceuticals	Frequency (times)
DVLA G 6, M13-M12-MS6*, MR47	2
INAF G 8, MR21, M8, MR21	3
KLBF G 8, MR9, MS8-M16*, MR40, M9-MS7*	4
KAEF G12, MR14, M7, MR8, M9-MS7*	4
SCPI G12, MR81, M9	2
TSPC G 8, MS22-M28-M28*	1
DVLA has a stable condition but has declining pattern before fluctuating condition. While SCPI began at fluctuating condition, it tried to be at a stable condition. The TSPC pattern showed an increase in growth pattern. It was stable at low level, but then at middle level and finally at high sales growth level. So, it was always at a stable condition. Sales growth of TSPC showed an excellent pattern.	
Consumer Goods	Frequency (times)
TCID G13, M9, MR66	2
MRAT G15, M9, MR8, M7, MR16, MS8, MR5, MS6, MR8	8
TCID's sales growth were stable at the beginning but then were unstable for the rest period of time	

Source: Processed data

This study found only 6% of the firms had adaptable strategy to stabilise their sales growth after growth phase. Among adaptable companies, three different patterns were obvious. All of them were in low-phase changing group. The first group consisted of companies that never faced phase changes. After growth phase, their sales growth was always in a stable condition and showed an increasing pattern from stable in low level into middle level and finally stable at a high level such as AKPI from plastics and glass products and TSPC from the pharmaceutical sector. The second group shows that company's sales growth after growth phase was unstable. However, it soon returned to a stable condition, such as

MLBI from food and beverages sectors. The third group consisted of companies that had a frequency value of 3. It means their sales growth changed three times, from a stable condition to an unstable condition for a short period of time and eventually returned to a stable condition. An unstable condition affected only 10% of KKG I from adhesive sector and occurred less than 30% for ULTJ from food and beverages sector.

A total of 94% of companies were inadaptable. These companies had limited ability to control the market. Among those companies, several patterns of sales growth were noted in low-changing phase group and in high-changing phase group, starting from companies with sales growth that were



always fluctuating. Hence, they experienced only one phase after growing period, such as like GGRM, LMPI, INTP, SMCB, ALMI, LION, PICO, and TIRA. The second were companies whose sales growth were at first stable, but soon fluctuated, such as RICY, FASW, KDSI, JECC, NIPS, and DVLA. The other patterns showed sales growth was not in a stable condition for a long time, so the change in each phase occurred repeatedly.

## CONCLUSION

The slight changes in company's life cycle indicate that the company has the right strategy for certain period. The adaptability of managing strategy is reflected by firm success in stabilising its sales growth from time to time. Furthermore, the inspiring condition is having stable sales growth and a pattern that shows growth. First, sales growth is stable at low level, then in the middle level and finally at the high level. This is an excellent sales growth pattern that is shown by only few adaptable companies. Excellent sales growth can be achieved by focusing strategies on the customers' satisfaction and trust that will lead to their loyalty (Hidayat, Saifullah, & Ishak, 2016).

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