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INTERACTIONS OF DECISION MECHANISMS IN AN ENTREPRENEURIAL FIRM'S JOURNEY TO BECOME A MAJOR PLAYER IN ITS INDUSTRY

Master's Thesis
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1 INTRODUCTION

1.1 Background

This study is to understand the journey of an entrepreneurial firm that had steep growth in an overall growing market and industry. Although this study bases on one firm only in a particular industry and in Vietnam, the data and findings are thoroughly studied and thus the result is expected to be more universal. First of all, the thesis is a contribution to decision-making process theories, particularly focusing in the interaction between effectual and causal processes. Moreover, as this study provides a real life example with generalized findings, practitioners might find it useful. It is especially beneficial for entrepreneurs and managers who are in similar situations that have ambitions to grow, employ typical entrepreneurial approaches, and evolve through establishment of managerial decision-making processes to learn from this specific case study. As the case study in this thesis has a very special business model, the findings provide some learning from this unique successful business model.

To understand the journey of an entrepreneurial firm, the process approach is considered to be a better approach as compared to the variance approach in answering process research question. The variance and process approaches are used to answer different types of research questions. Whereas, variance approach is better in answering ‘what’ research questions concerning the explanations of an outcome, process approach is more suitable to answer ‘how’ research questions relating to the change and development over time of entities. However, great deals of researchers apply variance approach for answering ‘how’ research questions or using variance method for conducting the process approach. Moreover, the variance and process approaches are established on profoundly different ontological and epistemological assumptions. As such, to understand organizational development and change theoretically and practically future research should search for the contexts, content, and process of change through time. This can be done by tracking down a temporal sequence of events to understand the starting (input) conditions and ending (outcome) results. In another word, the future researchers should apply process approach using process method. (Pettigrew 1990; Van de Ven & Engleman 2004)

Both variance and process approaches focus on different features of organizational development and change. The methodologies of variance approach center on characteristics of a phenomenon that can be defined by variables, which include independent and dependent variables. Independent variables cause the variations in dependent variables. As such, to measure dependent variables, continuous efficient causality is considered as the basis for examining the variations in dependent variables. The advantage of this ap-

proach is the creation of context-free generalizations, which is the foundation for future prediction. However, variance approach is not suitable for studying social processes due to its restricted assumption. (Mohr 1982; Pettigrew 1990) In contrast, process approach with the focus on identifying the preceding sequence of events is utilized to explain the occurrence of an outcome. A process approach needs to go beyond a surface description, to penetrate the logic behind observed temporal progressions. This explanation should identify the generative mechanisms that cause observed events to happen in the real world, and the particular circumstances or contingencies when these causal mechanisms operate. (Harre & Madden 1975; Tsoukas 1989)

Basing on the process approach, Van de Ven and Poole (1995) generate a category of change distinguishing four basic change mechanisms or “motors”. In their category, these motors are placed along two dimensions that are mode of change and unit of change. The mode of change displays the prescribed or constructed changes, capturing both the planned and evolving nature of change. The unit of change displays the change in single entity or multiple entities. The four motors of change being life-cycle, teleology, dialectic, and evolutionary are positioned within these two dimensions. They further debate that combinations of these motors can explain complex organizational development and change process.

Furthermore, according to Van de Ven & Poole (1995), to understand organizational change, scholars has been applying a wide range of explanatory variables and diverse theoretical perspectives for assessing process of change. However, the combinations of different theoretical perspectives have to some extent achieved its purpose in explaining process of change, but at the same time have not constructed a common framework to effectively explain process of change. Thus, the integration of different theoretical perspectives resulting to a common framework must preserve the uniqueness of different theories of organizational development and change, and advance theory building.

Even though there are many possible combinations of different motors to explain complex organizational development and change, this study will concentrate on using both evolutionary motor and teleological motor to explain different developments of the researched case study. The reason is that as this study will use ethography research method, the selected change process theories will be a good choice to explain the different developments of the case study. This will be discussed in details in the later parts.

After explaining the different developments of the research case study, this study looks forward to tracking down the links between change motors and decision-making processes of change. These links will contribute to the interactions between effectual and causal decision-making processes. The discussions of causation and effectuation processes will be based on the matrix developed by Wiltbank et al. (2006). According to Mintzberg and Waters (1985), firms can follow planning school of trying harder to predict and position more accurately. The planning approach is positioned on the position-

ing column of the matrix, and has an important characteristic of positioning the firm in a rapidly changing environment and of dealing with the existing uncertainty. Moreover, the original idea of causation process is that to the extent we can predict future; we can control it (Wiltbank et al., 2006). Therefore, the logic of causal decision-making process resembles the logic of planning school.

As stated by Wiltbank et al. (2006, 990). “Transformative approach focuses on co-creating goals with others in a mutually persuasive process where action often precedes clear goals and predicted outcomes. Actors using this type of strategy transform extant means into new futures” The transformative approach is positioned on the construction column of the matrix. Moreover, the original idea of effectuation process is that what can be predicted, can be controlled (Wiltbank et al. 2006). In another word, effectuation process focuses more on controlling instead of planning the market. As such, the logic of effectual decision-making process resembles the logic of transformative approach.

Chandler et al. (2011), who conduct quantitative study for these two decision-making processes, criticize that this matrix does not include the sub-dimensions of the two decision-making processes such as experimentation, affordable loss, flexibility, and pre-commitments. They further mention in their research that causal decision-making process has only the dimension of pre-commitments, while effectual decision-making process has the dimension of pre-commitments but for a different reason, and sub-dimensions experimentation, affordable loss, and flexibility.

As stated by Chandler et al. (2011, 376) “The path to new venture creation may follow a well-defined causation approach in which those who identify opportunities, bring together resources efficiently, and work according to a plan may achieve competitive advantage; however the path to new venture creation may also be a process of experimentation, affordable loss, and flexibility that results in entrepreneurial success. It will be up to future research to determine the circumstances under which each approach is more appropriate for a particular individual or an opportunity”. As a result, this study will conduct a research on the different circumstances that affect the decision-making processes of firms. A case study will be used to explore into the interactions between these different ways of making decisions. This case study also acts as an important context for exploring the applicability of both processes.

The main research question and its sub-research questions of this study thus are:

How are the interactions between effectual and causal decision mechanisms in IDP’s journey to success?

- How did IDP from small beginnings become one of major player in its industry?
- How are processes of effectuation and causation interacting?

1.2 The Purpose of the Study

This study aims to contribute to our understanding of interactions between two important decision-making processes by an in-depth exploration of the different dimensions of both processes, the circumstances under which each process is more appropriate, and also the circumstances under which interactions of both processes are appropriate for a particular individual or an opportunity.

The result of this study will contribute to the present gap in academic research about the interactions between effectuation and causation processes by constructing a modified theoretical framework explaining the interactions between these decision-making processes. A rapidly developing dairy industry of Vietnam and locally unique producing model of a researched company will offer the suitable conditions to explore into the interactions of effectual and causal decision-making processes. Moreover, not only current entrepreneurs in this field can benefit from these findings, but also the current literature can also significantly profit from these insights. Based on the findings of this research, other researchers in diverse entrepreneurial fields, other than the dairy industry can continue to research in the future the practical applications of the interactions of effectual and causal decision-making processes.

Moreover, the in-depth ethnographic case study within the dairy industry will provide valuable insights and findings to research the interactions between these decision-making processes. It helps to identify the outcomes of critical events, and to answer our research questions. An in-depth ethnographic case study is the best option to study the ins and outs of interactions between these decision-making processes. With the help of in-depth ethnographic case study, we can use the findings and insights from case study to understand the developments of both decision-making processes, specifically for interactions of both decision-making processes.

Each decision-making process alone has been analyzed and tested by various scholars, but not much research has been done on the interactions of both processes. As a result, this study with a single in-depth ethnographic case study will contribute to this academic gap, to determine the circumstances under which the interactions of both decision-making processes are appropriate for particular individuals or opportunities. I will thus investigate the interactions of both decision-making processes through an International Dairy Production Company (IDP), which has unique producing model and operates in rapidly developing dairy industry of Vietnam.

1.3 The structure of the study

After the introduction chapter, chapter two is about the literature review. In this chapter, the selected theories under variance and process theories, different change process theories, and effectual and causal decision-making processes will be analyzed and synthesized. Then, the analysis and synthesis will be used to construct the preliminary theoretical framework that will be used as lenses through which to look at change process in the case study.

Chapter three is about research methodology that is qualitative with a focus on ethnographic method, which will be used to collect empirical data. Chapter four results are dedicated to the analysis of the empirical findings in regard to the preliminary theoretical framework. Chapter five is about discussion and conclusions on the answers to the research questions, including the scientific importance of the study with the construction of modified theoretical framework on the interactions between effectual and causal decision-making processes, entrepreneurial and managerial importance of the study, and limitations and suggestions for future research. In the end, summary on the whole research process will be provided to give reader the full picture of this study.

2 LITERATURE REVIEW

2.1 Variance Approach and Process Approach

In this section, the academic discussion surrounding variance and process approaches is given. More detailed analysis on variance and process approaches will be provided in the research methodology section. According to Mohr (1982), variance theory and process theory are two profoundly distinctive approaches to scientific explanation in the social science; however, the excessive reliance on the variance theory approach leads to many problems with current organizational research. Both variance and process approaches highlight different characteristics of organizational development and change. While the variance approach applies mathematical formula to make sense of the constant variation in organizational development and change, the process approach focuses on the role of human agency in explaining development and change.

Moreover, even though process approach does not contribute to context-free generalizations, its results can still be generalized. The necessary conditions of process approach, when combined in a specific way to tell the story of how and at whatever time the outcome occurs, can lead to a reasonable causal explanation. Outcomes can be partly predictable by what has been learnt about the process. The end result of process approach is to achieve the patterned regularities over time, which can be verified in other situations. This helps to attain generalized conclusion. Hence, process approach gives researchers opportunities to shift from description to explanation of outcome, which cannot be done by variance approach. (Van de Ven & Engleman 2004)

As this study aims to research about the different developments of a company, the process approach is more applicable to analyze about the historical development and change of the researched company. The process approach enables the researcher to answer the first sub-research question of how did IDP from small beginnings become one of major player in its industry.

2.2 Change Theories

Explaining the process and sequences of events in organizational change is complex. To understand organizational change, scholars have been applying a wide range of explanatory variables and diverse theoretical perspectives for assessing process of change. The combination of different perspectives has to some extent achieved its purpose in explaining process of change, but at the same time has not constructed a common framework to effectively explain process of change. Moreover, the integration of different

perspectives resulting to a common framework must preserve the uniqueness of different theories of organizational change, and also advance theory building. (Van de Ven & Poole, 1995)

2.2.1 *The four motors of change*

Building on the results of their literature study in the arena of organizational development and change studies, Van de Ven and Poole (1995) have developed four basic types of process theories, which are life cycle, teleological, dialectical, and evolutionary theories. These four process theories have basically diverse event sequences and generative mechanisms or motors to explain organizational change. Table one describes the four motors of change, and table two illustrates the conditions for operations of four motors.

Table 1 Motors of change (Van de Ven & Poole 1995, 520-521)

Motors	Descriptions
Life-cycle	A life-cycle model depicts the process of change in an entity as progressing through a necessary sequence of stages. An institutional, natural, or logical program prescribes the specific contents of these stages.
Teleology	A teleological model views development as a cycle of goal formulation, implementation, evaluation, and modification of goals based on what was learned by the entity. This sequence emerges through the purposeful social construction among individuals within the entity.
Dialectic	In dialectical models of development, conflicts emerge between entities espousing opposing thesis and antithesis that collide to produce a synthesis, which in time becomes the thesis for the next cycle of a dialectical progression. Confrontation and conflict between opposing entities generate this dialectical cycle.
Evolutionary	An evolutionary model of development consists of a repetitive sequence of variation, selection, and retention events among entities in a designated population. Competition for scarce environmental resources between entities inhabiting a population generates this evolutionary cycle.

Table 2 Conditions for operations of change theories (Van de Ven & Poole 1995, 525)

<p>For a Life-Cycle Motor</p> <p>A singular, discrete entity exists that undergoes change, yet maintains its identity throughout the process.</p> <p>The entity passes through stages distinguishable in form or function.</p> <p>A program, routine, rule, or code exists in nature, social institutions, or logic that determines the stages of development and governs progression through the stages.</p>
<p>For a Teleological Motor</p> <p>An individual or group exists that acts as a singular, discrete entity, which engages in reflexively monitored action to socially construct and cognitively share a common end state or goal.</p> <p>The entity may envision its end state of development before or after actions it may take, and the goal may be set explicitly or implicitly. However, the process of social construction or sense making, decision making, and goal setting must be identifiable.</p> <p>A set of requirements and constraints exists to attain the goal, and the activities and developmental transitions undertaken by the entity contribute to meeting these requirements and constraints.</p>
<p>For a Dialectical Motor</p> <p>At least two entities exist (each with its own discrete identity) that oppose or contradict one another.</p> <p>The opposing entities must confront each other and engage in a conflict or struggle through some physical or social venue, in which the opposition plays itself out.</p> <p>The outcome of the conflict must consist either of a new entity that is different from the previous two, or (in degenerate cases) the defeat of one entity by the other, or a stalemate among the entities.</p>

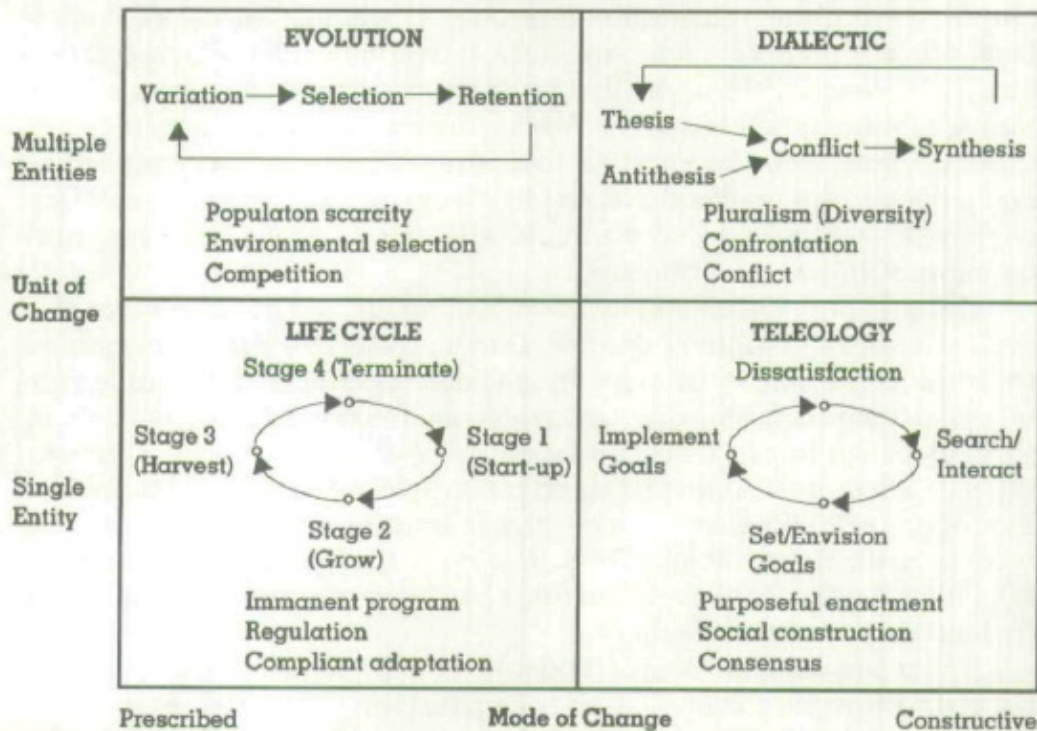
For an Evolutionary Motor

A population of entities exists in a commensalistic relationship (i.e., in a physical or social venue with limited resources each entity needs for its survival). Identifiable mechanisms exist for variation, selection, and retention of entities in the population.

Macropopulation characteristics set the parameters for microlevel variation, selection, and retention mechanisms.

Moreover, Van de Ven and Poole (1995) created a typology of change differentiating four basic change mechanisms or ‘motors’. The motors are positioned along two dimensions that are mode of change and unit of change. The mode of change shows the way change is perceived as either prescribed or constructed, capturing both the planned and evolving nature of change. The unit of change shows whether the change relates to single or multiple entities. The four motors of change are positioned within these two dimensions. Figure one shows the typology of the four ideal type process theories of organizational development and change.

Figure 1
Process Theories of Organizational Development and Change^a



^a Arrows on lines represent likely sequences among events, not causation between events.

Figure 1 Process Theories (Van de Ven & Poole 1995, 520)

2.2.2 *The composites of the four motors of change*

Van de Ven and Poole (1995) state that analyzing the organizational context of development and change is always a complicated research process, which requires researchers to combine different organizational change theories. This is due to the infinite extension of the organizational context of development and change and the simultaneous influences internally and externally of various unit and actors. For that reason, they suggest the combinations of their motors to explain complex organizational change process to minimize the risk of oversimplification when using a single motor to explain the multi-layered and complex change process and the risk of a selective attention to one aspect of the change process at the expense of others.

Moreover, when combining different motors of change to explain complex organizational development and change process, Van de Ven and Poole (1995) strongly recommend researchers to pay careful attention to the inherent incompleteness of any single motor. According to them, the components' values of each motor are determined externally to the model. This could be exemplified in the evolutionary model, which assumed that variations emerge unsystematically; however, the process giving rises to variation remains undefined. The source of dissatisfaction in the teleological model, the origin of the antithesis in the dialectical model, and the process causing start-up and termination in the life-cycle model are also unknown, which could be other examples of the inherent incompleteness of any single motor.

The followings are examples of how to combine different motors to account for the incompleteness of each motor in explaining complex organizational development and change process. The selection process in the evolutionary model is suitable to explain termination in the life cycle; the implementation step in the teleological cycle can activate the start-up event in the life-cycle and the antithesis in the dialectic. The synthesis in the dialectic can be used as the source of variation in the evolutionary cycle. To sum up, there are actually many other possible combinations, and events from other models can be utilized to account for the incompleteness of any single model of change. (Van de Ven & Poole 1995). Figure two shows these possible combinations:

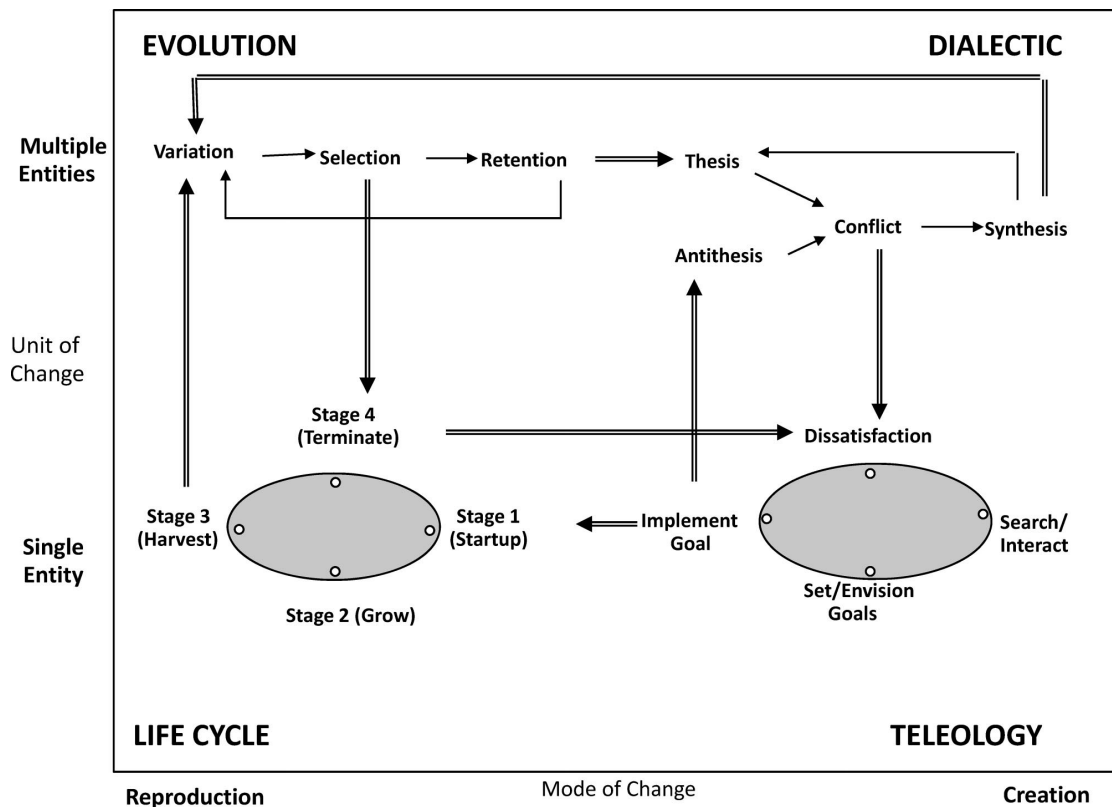


Figure 2 Temporal Relations among Change Models (Van de Ven & Sun 2011, 68)

In addition, this study will concentrate on combination of teleological and evolutionary motors to explain the different developments that the researched company went through. Life-cycle and dialectic motors are not chosen as teleological and evolutionary motors are a better choice in explaining the data collected under the ethnography research method. This will be discussed in details in the results part.

As exemplified by Tushman and Romanelli's (1985) punctuated equilibrium model of organizational change, time is used by the researchers to combine evolutionary and teleological motors in a theory of organizational change. Top managers deliberately apply teleological process to explain the creative process of occasional organizational reorientations, while they apply prescribed evolutionary processes to explain long periods of organizational convergence with its environment. However, since both motors of change are mutually exclusive, it seems to be rare to find both motors of change to operate at the same time in a given organization. For that reason, time acts as the vehicle for combining opposing change motors in Tushman and Romanelli's punctuated equilibrium model of organizational change. The model definitely does not identify in much detail the interactions between the two motors. It is also uncertain what triggers the transition from the convergence to the transformational period and vice versa. (Van de Ven and Poole, 1995)

2.3 Causation and Effectuation Decision-Making Processes

From the discussion above, process approach in which teleological motor and evolutionary motor are centered is used to answer our first sub-research question. To answer second sub-research question, this study will focus on discussing different decision-making processes, namely effectual and causal decision-making processes. The discussion of these decision-making processes will be based on figure three that is the matrix developed by Wiltbank et al. (2006).

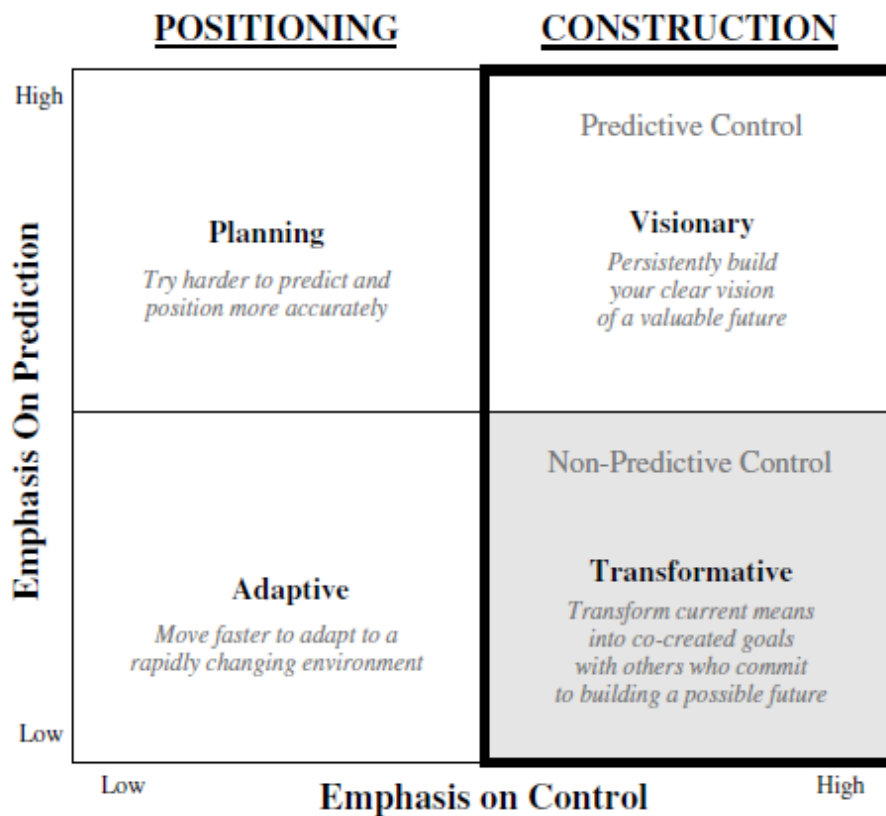


Figure 3 Framework of Prediction and Control (Wiltbank et al. 2006, 983)

In figure three, the planning quadrant of the matrix places low emphasis on control and high emphasis on prediction. The causal decision-making process assumes that the market cannot be controlled, and competitive advantage can only be achieved by predicting the market. (Sarasvathy 2001; Wiltbank et al. 2006) As such, the causal decision-making process resembles the planning quadrant of the matrix. Moreover, the transformative quadrant of the matrix places high emphasis on control and low emphasis on prediction. The effectual decision-making process assumes that the market can be controlled and created, so there is no need for prediction. (Sarasvathy 2001; Wiltbank et al. 2006) Therefore the effectuation decision-making process resembles the transformative quadrant of the matrix.

2.3.1 *Causal Decision-Making Process*

The planning approach, developed by Porter (1980), Ansoff (1979, 1991), Fredrickson and Mitchell (1984), is considered as the first decision-making process in the history of strategic management. According to these researchers, firms should plan and predict in advance to prepare for future uncertainties, and those firms that have good planning skills will win over their competitors in the market.

Other studies further confirm the effectiveness of the planning approach on the decision making process of firms, such as Miller and Friesen (1983), Pearce et al. (1987), Miller and Cardinal (1994), Priem et al. (1995), Dean and Sharfman (1996), Goll and Rasheed (1997), and Brews and Hunt (1999). These researchers strongly recommend firms to invest in building planning skills to predict better with the aim to position competitively in the uncertain future market. Hence, planning efficiently will be part of firms' decision-making strategies (Ansoff 1991; Szulanski & Amin 2001; Hough & White 2003).

Wiltbank et al. (2006, 985) later conclude on the role of planning: "Champions of these notions make two key arguments for the enhanced role of rational planning with renewed vigor under uncertainty. First, short cuts, such as intuition, heuristics, and other avenues for handling the challenge, suffer from numerous personal and group biases. Systematic planning processes help to overcome the gaps and inconsistencies that can result from these biases."

The causation process that has its root in planning approach takes a certain effect for granted and calculates backwards what is needed in order to reach a predetermined goal. "Causation processes take a particular effect as given and focus on selecting between means to create that effect". (Sarasvathy 2001, 245)

Moreover, according to Sarasvathy (2001, 249), the causal decision-making process involves:

- A given goal to be achieved or a decision to be made (usually well structured and specific),
- A set of alternative means or causes (that can be generated through the decision process)
- Constraints on possible means (usually imposed by the environment), and
- Criteria for selecting between the means (usually maximization of expected return in terms of the predetermined goal).

By applying causal decision-making process, the entrepreneur with a predetermined goal tends to build a specific type of firm in a particular industry. It means that the original idea or set of causes does imply one single strategic universe for the firm or effect. For that reason, the causation decision-making process enables the entrepreneur to create one specific effect based on the starting generalized predetermined goal. However,

having predetermined goal in mind the entrepreneurs invest heavily in collecting resources to achieve that pre-set goal and if planning and prediction turn out to be incorrect, then the entrepreneurs will make a great loss.

2.3.2 *Effectual Decision-Making Process*

After discussing about the planning quadrant that represents the core idea of causal decision-making process, we now discuss about the transformative quadrant that emphasizes the effectual decision-making process. According to Wiltbank et al. (2006, 990) *“Transformative approaches focus on co-creating goals with others in a mutually persuasive process where action often precedes clear goals and predicted outcomes. Actors using this type of strategy transform extant means into new futures”*. As such, the original idea of effectuation process is that what can be predicted, can be controlled. Effectuation process focuses more on controlling instead of planning the market.

The transformative approach with high emphasis on control and low emphasis on prediction representing the core idea of effectuation process is not so popular compared to the previously mentioned approach. Nevertheless, several scholars have contributed to the development of this approach; for example: Simon (1996) discusses the importance of theories of non-predictive design in sciences of the artificial, March (1978, 1982) debates the usefulness of a technology of foolishness having both non-predictive and non-visionary factors. Sarasvathy (2001) bases on the previous researches to argue how expert entrepreneurs use effectual decision-making process without planning and predicting to create new markets and new environments. Sarasvathy, Dew, and Wiltbank are key contributors to the development of the effectual decision-making process. Their contributions are exemplified in their following studies: Sarasvathy (2001a, b), Dew (2001, 2009), Sarasvathy and Dew (2005), Wiltbank et al. (2006), and Chandler et al. (2011).

Wiltbank et al. (2006) describe how firms can decide what to do next and present an interactive model of effectuation. Figure four shows an interactive model of effectuation:

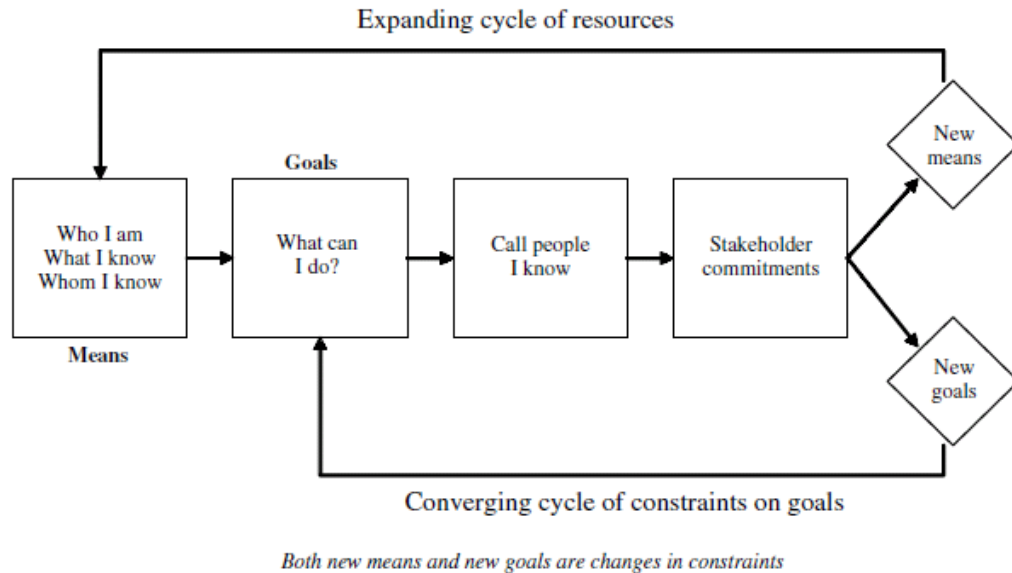


Figure 4 A Transformative Approach: the effectual process – dynamic and interactive (Wiltbank et al. 2006, 992)

In figure four, the effectual decision-making process starts with the means possessed by entrepreneurs such as who they are (their identity), what they know (their knowledge), and whom they know (their networks). After answering all these initial questions, entrepreneurs know exactly their means, and they will imagine about the possible goals they can achieve. The underlying logic of effectual process is thus more on what they can do by controlling, rather than on what they can predict. (Wiltbank et al. 2006)

In the next step of the effectual process, the entrepreneurs will decide on what goals can be achieved with those means. They start calling potential stakeholders such as friends, family, or random people whom they meet in their daily lives and asking them for actual commitments. The set goals at this stage are still unclear; however the different viewpoints of stakeholders leading to the negotiating and persuading process on the alternative goals and the willingness of stakeholders to commit to the construction process are important in shaping and achieving the set goals. Therefore, stakeholders who bring with them resources and participate in the construction process will want to have opportunities to reshape the goals of the project and to influence what the future will ultimately result. (Wiltbank et al. 2006)

After the process of negotiation and persuasion, two cycles in the simultaneous construction of new firms and new markets are set up; those are an expanding cycle of resources with more means available and a converging cycle of constraints on goals of the developing stakeholder network. “These constraints help solidify structures of the new market as well as clarify and reorder preferences of stakeholders in the market”. At certain point in the effectual process, there are no more new goals added to the effectual

process since the stakeholder acquisition process has completed; the entrepreneurs start reexamining the balance of prediction and control as the structures of the market begin to take visible shape. (Wiltbank et al. 2006, 992)

Moreover, the stakeholders base on five key principles of effectual decision-making process to decide on how to make effectual commitments (Sarasvathy 2001; Wiltbank et al. 2006; Dew et al. 2009; Chandler et al. 2011):

- Means-driven (rather than goal-oriented) action

In the effectuation process, the original set of means of an entrepreneur including his identity, his knowledge, and his networks is possibly to be changed from every stakeholder's interactions. From the initial process of considering about his means to imagining about the possible courses of actions, stakeholders use means-driven action to interact with other stakeholders' means. This interaction results to new combinations of means that contribute to the process of creating new market.

- Affordable loss (rather than expected return) as evaluation criterion

Engaging in the effectuation process, stakeholders often cannot calculate the expected return of their resource investments. They also have no clue of how to predict the rate of return since new markets and artifacts are not yet existed. Therefore, they have to depend on their subjective justification to decide on their affordable loss level. This is totally within their control.

- Leveraging (rather than avoiding) contingencies

Contingencies always present both unexpected opportunities and unanticipated problems. Stakeholders in the effectual process often don't hedge against contingencies, but instead they try to exploit contingencies. To them, contingencies are the perfect tool to test the suitability of their current means in achieving their goals, and the good opportunity to create new value through their current means. As such, stakeholders in the effectuation process are open for surprises.

- Controlling an unpredictable future rather than predicting an uncertain one

While causal decision-making process centers on the predictable features of an uncertain future, effectual decision-making process concentrates on the controllable features of an unpredictable future. The logic of causation process is: *"To the extent that we can predict the future, we can control it"* and the logic of effectuation process is: *"To the extent that we can control the future, we do not need to predict it"*. (Sarasvathy, 2001, 252) Entrepreneurs who follow effectual decision-making process believe that the future can be made, instead of found or predicted.

- Pre-commitments: the use of partnerships (rather than competitive analysis)

By considering the use of partnerships instead of competitive analysis, the stakeholders in the effectual process benefit more because other stakeholders bring with them their own mean and even the competitive advantages of their organizations. Rather than competing with other stakeholders, the stakeholders already in the effectual process

decide on partnership strategy to gain more means even before their own means are fully determined.

In deed, effectual decision-making process enables the entrepreneur to build various types of firms in entirely different industries. The entrepreneurs applying effectual decision making process do not set the predetermined goals in the beginning, but instead utilize a specific set of means to create various possible effects. Moreover, effectual decision-making process offers two major advantages to entrepreneurs. It offers entrepreneurs more alternatives to strategize more effectively, and it makes strategizing cheaper by excluding the costs of predicting the future and reducing the costs of failure.

2.3.3 *Contrasting Causation and Effectuation Process Theories*

According to Sarasvathy (2001, 245), *“both causation and effectuation are integral parts of human reasoning that can occur simultaneously, overlapping and intertwining over different contexts of decisions and actions”*. Both causal and effectual decision-making processes have the same generalized end goal or aspiration. *“An effect is the operationalization of an abstract human aspiration”*. The entrepreneurs’ set of choices, selecting between means to create a particular effect or selecting between various possible effects by using a specific set of means, differentiate between causal and effectual decision-making processes. *“Causation models consist of many-to-one mappings; effectuation models involve one-to-many mappings.”*

From the above discussions of causation and effectuation decision-making process theories, table three provides the categories of differentiation between causal and effectual decision-making processes.

Table 3 Contrasting Causation and Effectuation (Sarasvathy 2001, 251)

Categories of Differentiation	Causation Processes	Effectuation Processes
Given	Effect is given	Only some means or tools are given
Decision-making selection criteria	Help choose between means to achieve the given effect Selection criteria based on expected return Effect dependent: Choice of means is driven by characteristics of the effect the decision maker wants to create and his or her knowledge of possible means	Help choose between possible effects that can be created with given means Selection criteria based on affordable loss or acceptable risk Actor dependent: Given specific means, choice of effect is driven by characteristics of the actor and his or her ability to discover and use contingencies
Competencies employed	Excellent at exploiting knowledge	Excellent at exploiting contingencies
Context of relevance	More ubiquitous in nature More useful in static, linear, and independent environments	More ubiquitous in human action Explicit assumption of dynamic, nonlinear, and ecological environments
Nature of unknowns	Focus on the predictable aspects of an uncertain future	Focus on the controllable aspects of an unpredictable future
Underlying logic	To the extent we can predict future, we can control it	To the extent we can control future, we do not need to predict it
Outcomes	Market share in existent markets through competitive strategies	New markets created through alliances and other cooperative strategies

Moreover, based on the work of Sarasvathy (2001), Chandler et al. (2011, 377) have summarized the four key principles differentiating causation and effectuation processes: (1) a focus on short-term experiments to identify business opportunities in an unpredictable future (effectuation) versus prediction of an uncertain future by defining the final objective up front (causation), (2) a focus on projects where the loss in a worst-case scenario is affordable (effectuation) versus maximization of expected returns (causation), (3) an emphasis on pre-commitments and strategic alliances to control an unpre-

dictable future (effectuation) versus business planning and competitive analyses to predict an uncertain future (causation), and (4) exploitation of environmental contingencies by remaining flexible (effectuation) versus exploitation of pre-existing capabilities and resources (causation).

2.4 Preliminary Theoretical Framework

Figure five shows the preliminary theoretical framework that is a deduction, integration, and interpretation of theories. This framework illustrates how process theories are inter-related. First, the preliminary framework starts with describing the concept of process approach.

Second, the framework shows the connections between process approach with evolutionary change process and teleology change process. These change motors have basically diverse event sequences and generative mechanisms to explain organizational change (Van de Ven & Poole 1995). Evolutionary change process consists of a repetitive sequence of variation, selection, and retention events among entities in a designated population, and it is used to explain long periods of organizational convergence with its environment (Van de Ven & Poole 1995). Moreover, teleology change process consists of a cycle of goal formulation, implementation, evaluation, and modification of goals, and it is used to explain the creative process of occasional organizational reorientations (Van de Ven & Poole 1995).

Third, there is a link between effectual decision-making process and evolutionary change process because both start with means. On the other hand, teleology change process is linked with causal decision-making process in which both theories start with predetermined goals. In addition, the life cycle approach explaining the process of change through sequences of stages and dialectic approach viewing conflicts between opposing entities as a way to explain strategic change are not linked with causation and effectuation processes. Final, the links between effectual decision-making process and evolutionary change process, between causal decision-making process and teleology change process will contribute to the interactions between effectual and causal decision-making processes.

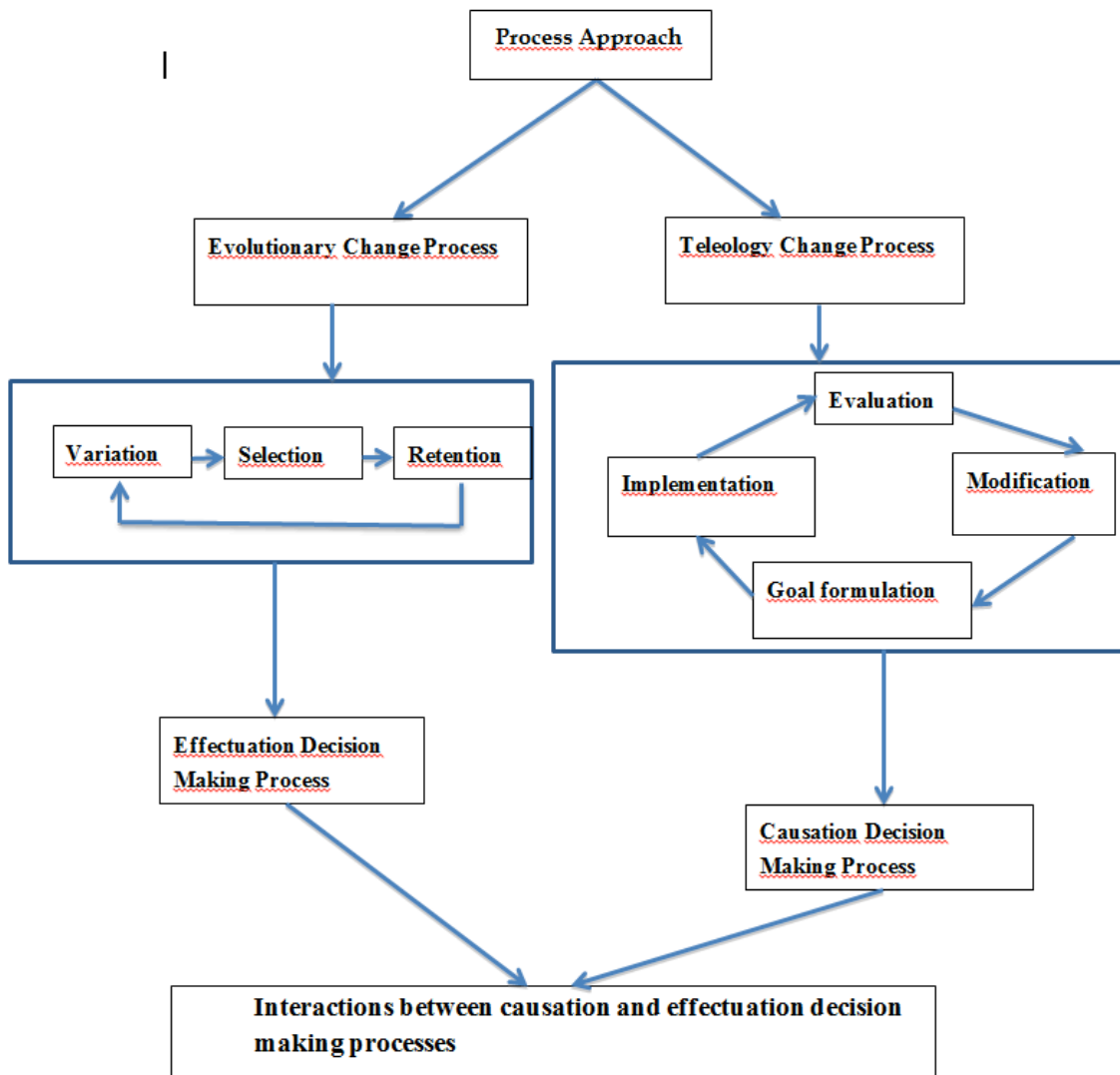


Figure 5 Preliminary Theoretical Framework

3 RESEARCH METHODOLOGY

3.1 Research Design

As the aim of this study is to develop the framework that provides new insights to the gaps of interactions between effectual and causal decision-making processes, the research design is created in the way that enables the researcher to conduct empirical research and to answer research questions (Yin 2003). The research design is conducted as follows: firstly, the existing literature on the researched topic is reviewed and synthesized, which contributes to the creation of the preliminary framework, a form of deductive process; secondly, information and data about our case study is collected, which is then analyzed against the preliminary framework; thirdly, applying preliminary framework to analyze empirical data is likely to enable the researcher to modify preliminary framework; fourthly, from the alteration or extension of existing literature new novel insights can be gained, a form of inductive process; finally, from the combination of both deductive and inductive research methods, the theoretical findings and their practical applicability are achieved.

To understand the change processes that explain the different developments of the case study, the qualitative approach (or process approach) with the exploratory nature is used in this study instead of the quantitative approach (or variance approach), which tests assumptions and hypothesis by applying statistical models (Saunders et al. 2007).

Several scholars have devoted their researches on differences between two diverse approaches to social science. Mohr (1982) initially differentiates variance and process theories in the explanation of organizational behavior. Abell (1987) distinguishes variance and process theories when constructing formalism for the representation of social action. Abbott (1984, 1990) further contrasts stochastic against narrative explanations in sociology. Polkinghorne (1988) investigates the distinction between narrative explanation and traditional social science. Van de Ven et al. (1999) defines the succession of events contributing to the creation of Qnetics. Poole et al. (2000) evaluates variance and process theories. Moreover, Aldrich (2001), Van de Ven and Engleman (2004), and Van de Ven and Poole (2005) contrast variance theory against process theory on their respective different methodologies and assumptions.

Poole et al. (2000, 29) further debate the popular use of variance approach by stating that “While the variance approach offers good explanations of continuous change driven by deterministic causation, this is a very limited way to conceptualize change and development. It overlooks many critical and interesting aspects of change processes. However, because most organizational scholars have been taught a version of social science that depends on variance methods, and because methods for narrative research

are not well developed, researchers tend to conceptualize process problems in variance terms.”

Moreover, the variance approach considers entities preserving unitary identities through time as basic units of analysis. It also assumes that any significant change in the entity is reflected by a fixed set of variable attributes. To measure the variable attributes leading to the explanations of outcome, explanations have to be based on necessary and sufficient causality. All efficient causes are treated as generative mechanism to explain why organizational changes occur. The generality of explanations hinge on their ability to apply consistently across a broad range of contexts. Moreover, independent variables continuously and uniformly affect dependent variables along the process, but in certain context that the causal relationships between independent and dependent variables does not work, additional independent variables will be created to attend to the unsolved variance in dependent variables. (Mohr 1982; Abbott 1990)

Another key assumption underlying the variance approach is that the sequential sequence in which independent variables impact on the dependent variable is inconsequential to the outcome. It means that when time frame for the influence of independent variable on dependent variable is used, the time order of different independent variables included in the model will not affect the level of the outcome. More importantly, explanations should focus on immediate causation, and attributes have one and only one causal meaning over the course of time. The reason is that the variance model gives the same status or meaning throughout the process to each variable since it operates uninterruptedly and consistently overtime. (Poole et al. 2000)

In contrast, process approach with the focus on identifying the preceding sequence of events is utilized to explain the occurrence of an outcome. A process approach needs to go beyond a surface description, to penetrate the logic behind observed temporal progressions. This explanation should identify the generative mechanisms that cause observed events to happen in the real world, and the particular circumstances or contingencies when these causal mechanisms operate. (Harre & Madden 1975; Tsoukas 1989)

Process approach considers progressing central subjects as unit of analysis, which makes events to happen and to which events occur. Process approach considers the ordering and context of previous events as important to explain the present developmental state. Central subjects around which the narrative is merged can be individual entities such as people, group, organizations, and material artifacts. Events are the natural units of the social process and are influenced by central subjects. Due to the natural complexities of organizational change and development process, the process approach tends to focus more on events as compared to variables, and events are used as unit of analysis to simplify the social process and to explain more on organizational development and change. (Abbott 1988, 1990)

To explain the outcome of organizational development and change, critical events, the order in which events occur, and the durations of events are located. These are not sufficient enough to contribute to outcome, but the total set of forces affecting the developing subject in the particular order and necessary and sufficient to explain the process that leads to outcome should be combined with critical events to provide the whole picture of how a specific outcome has occurred. (Mohr 1982) Moreover, in the process approach the generality of narrative explanations is not decided upon its uniformity and consistency but from its versatility. As such, narrative explanations can embrace a broad domain of developmental pattern without modification of its important character. (Van de Ven and Engleman 2004) Table four summarizes the different assumptions underlying variance and process theories.

Table 4 Summary of the different assumptions underlying variance and process theories (Poole et al. 2000, 36)

Variance Approach	Process Approach
Fixed entities with varying attributes	Entities participate in events and may change over time
Explanations based on necessary and sufficient causality Explanations based on efficient causality	Explanations based on necessary causality Explanations based on final, formal, and efficient causality
Generality depends on uniformity across contexts Time ordering among independent variables is immaterial Emphasis on immediate causation	Generality depends on versatility across cases Time ordering of independent events is critical Explanations are layered and incorporate both immediate and distal causation
Attributes have a single meaning over time	Entities, attributes, and events may change in meaning over time

In table four, while the variance approach proves its popularity in acting as the fundamental approach of social science, building and segmenting the object of study into researchable pieces, and exploring effectively the research questions on comparisons among entities or relationship among variables, the process approach with unrestrictive assumptions proves its popularity in studying organizational change and development and for studying process research questions (Van de Ven & Engleman 2004). In addi-

tion, both variance and process theories apply different methodologies and base on different assumptions. As a result, more researches should be devoted on analyzing the unequivocal differences between these two forms of theoretical explanations. (Aldrich 2001; Van de Ven & Engleman 2004; Van de Ven & Poole 2005)

Another difference between these two approaches is that the variance and process approaches are used to answer different types of research questions. Variance approach is better in answering ‘what’ research questions concerning the explanations of the outcome; whereas, process approach is more suitable to answer ‘how’ research questions relating to the change and development over time of entities. However, great deals of researchers apply variance approach for answering ‘how’ research questions. To understand organizational development and change theoretically and practically future research should search for the contexts, content, and process of change through time; this could be done by tracking down a temporal sequence of events to understand the starting (input) conditions and ending (outcome) results. As variance method being established on profoundly different ontological and epistemological assumptions, future researchers should not apply variance method for process approach. (Van de Ven & Engleman 2004; Pettigrew 1990)

As process approach is more suitable in explaining the outcome of our researched topic, this study will use process approach to answer our research questions and to develop the framework that could provide new insights to the gaps of interactions between causation and effectuation decision-making processes.

To understand the process of change of the case study, case study methodology is used here. Case study, an empirical inquiry, enables the retaining of the universal and significant characteristics of real life events (Yin 1989). For that reason, case study is considered to be a more suitable methodology for this study as compared to other research methodologies such as survey, experiment, and archival analysis (Yin 2003). Additionally, case study is helpful in answering ‘how – research questions’ (Yin 2003). In this study, two main research questions are how-research questions; thus, case study methodology is to be used in this study.

According to Yin (1989) and Eriksson & Kovalainen (2008), single case study is acceptable if the case tests well-formulated theory. Single case study is also justifiable if the case contains unique event or is revelatory by nature. Single case study enables researcher to focus more on the in-depth interpretation of the case (Stake 1995). Although, case study under qualitative approach has been criticized for its weakness in its generalizability (Yin 1989), and is seen subordinate to hypothesis testing method under quantitative approach (Welch et al 2011), case study is useful in creating the theoretical propositions that can be used for extensive quantitative testing (Welch et al 2011). As a result, case study methodology is appropriate for this study.

To better understand case study, ethnographic methodology is used in this study. This methodology uses different sources of data and information. The strength of this method rests on the participation of the researcher in the company for an extended period of time. The researcher interviews, observes, makes notes and collects all available data and information to understand the context and insights of the case study. (Atkinson et al. 2007) While quantitative researchers gather objective data by observing from distance through such as survey, qualitative researchers take their subjective interpretation of results for granted. For that reason, ethnographic method is often argued as an inappropriate research method because the interpretation of results by researcher is seen to be too subjective. (Atkinson & Hammersly 1994) However, ethnographic research method emphasizes on exploring the nature of specific social phenomenon (Angrosino 2007) and it enables researcher to study complex organizational development and change process and to conduct intensive research that is of direct practical relevance (Harvey & Myers 1995). As a result, this study will use ethnographic research method to study the organizational development and change process of the case study.

3.2 Context Description and Selection of the Case

In this section, case descriptions and context including introduction about the Chairman and CEO of IDP, introduction about Vietnam dairy industry, and introduction about IDP is described to give the reader some understanding about this case study. In addition, the introduction about the Chairman and CEO of IDP is given because he is considered as a unit of analysis, which causes events to happen and to which events occur. Lastly, the choice of the researcher on this case study is also clarified.

3.2.1 Introduction about the Chairman and CEO of IDP

Mr. Nguyen Tuan Khai was a very talented and adventurous person. He had over 40 years of experience in the food processing and dairy industries. Prior to 2000, he was Deputy General Director of the Bureau of Salt, Agriculture, Forestry and Aquaculture products, Ministry of Agriculture and Rural Development, Vietnam. From 2000 to 2004, he was in the Board of Management and was the Production Director of Hanoi Milk Joint Stock Company. In 2004, after leaving Hanoi Milk Company, he could join in any big corporation in the food industry, yet he used all the fortune he had from real estate investment to establish his own dairy company. That was how International Dairy Production Joint Stock Company (IDP) was born. It used to be a small dairy company at first yet later on made history in the dairy industry of Vietnam. IDP had changed Viet-

namese consumers' habit of using liquid milk, and pushed the whole dairy industry to turn to fresh milk instead of reconstituted milk.

One of the most prominent characteristics of Mr. Nguyen was that he had excellent communication skills. I heard many presentations and talks he made during my time at IDP and they were all very impressive. The interview I conducted with him was also very informative with logical, systematic and clever answers. Moreover, he had a very good network, enabling him to overcome initial difficulties. He also succeeded in inviting Mr. Tran Bao Minh, one of the most powerful people in Sale and Marketing area of Vietnam, to work for IDP in 2012. Most importantly, being the founder of the company, all of IDP's goals, visions, and core values were Mr. Nguyen's ideas. Those were so convincing that with time, IDP attracted more and more talented people and became one giant dairy company in the industry in 2014.

In daily working life, Mr. Nguyen was not a talkative, but very caring person. He admitted that he did not remember all the names of his staffs. There were more than 500 people anyway. However, he remembered ones that needed extra attention and help such as disable staffs or staffs with difficult life situation. He also had a genuine passion in working for the community. He said he loved it the most to visit the farmers, poor children and to participate in donation campaigns as a hobby in his free time. (CEO & Chairman Nguyen Tuan Khai 28.01.2014.)

Mr. Nguyen and later Mr. Tran were the decision makers who brought IDP from a very small company to a successful business model in the present. They were consistent with their goals and values, and chose not to trade them in for short-term financial benefits. They envisioned the dairy industry in a long-term future, and knew their sacrifices for short-term financial problem would pay off in a long run. However, they were solely neither environment activists nor humane advocates. They were still businessmen who wanted to gain profits, but they also supported general public's interest. Along with the interview with Mr Nguyen, I talked with managers and staffs about their CEO. In general, they thought he was a very determined, intelligent and work-oriented person. He was friendly to all but still they did not take him as "a friend", because he had an energy of a very powerful person that they hesitated to get too close to. (Production Manager Nguyen Tuan Minh 02.01.2014 and Staff Bui Thai 05.01.2014) Moreover, according to Bao Nguyen (2013), Mr. Nguyen was a businessman with very good future oriented visions and a heart of gold.

3.2.2 Introduction about the Vietnam Dairy Industry

Vietnam dairy market consumption had high potential for growth due to current low milk consumption levels. Vietnamese milk consumption per capita significantly in-

creased from 1.3 litres in 1990 to 20.4 litres in 2012. Although the compound annual growth rate (CAGR) of consumption for this period was 13.3%, Vietnam was still one of the lowest milk consumers per capita regionally and globally, far behind Thailand, Malaysia, Japan, India and Australia. This reflected of a very low milk consumption base. Moreover, with projected high GDP growth rates, increasing disposable income per capita, the development of Vietnam's retail sector and changing consumer preferences, Vietnam's milk consumption growth was expected to remain strong at a 21% per annum to 2015. (Economist Intelligence Unit 2013)

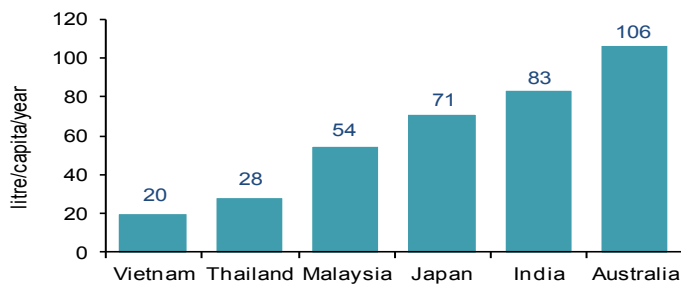


Figure 6 Milk consumption per capita in selected countries 2012 (Economist Intelligence Unit 2013)

The size of the Vietnamese dairy market was increased significantly from USD1.6 billion to USD2.4 billion, representing 50% growth during the period from 2010 to 2012, and was forecast to be worth USD4.2 billion in 2015, representing a CAGR of 21% for the 5 year period. The sharp increase in market size was primarily due to the rising income levels and the increasing awareness among consumers of health benefits from milk and related products, the development of Vietnam's retail sector and changing consumer habits to drinking more milk and consuming dairy related products. (IDP Marketing Department 2013)

The dairy market in Vietnam comprised of four main sub-sectors: liquid milk, yogurt, powdered milk and condensed milk, of which liquid milk and yogurt were the two fastest growing sub-sectors. Demand was shifting away from lower value condensed milk and powder milk products, to higher value liquid milk and yogurt products. The powder milk market sector was dominated by imported products, which accounted for 72% of total powder milk demand; 60% of total powder milk demand was supplied by foreign producers such as Dutch Lady, Abbott, Nestle and Mead Johnson. (IDP Marketing Department 2013)

Vietnamese consumer market for dairy products was still in its infancy, leaving further significant product development and growth opportunities beyond UHT milk and yogurt in areas such as soy milk, drinking yogurt (fruits, supplements, low sugar), UHT (low fat, supplements) and formulae milk for foreign and local players. For that reason, both foreign and local players would invest and compete fiercely in developing milk sources and building strong branding. (IDP Marketing Department 2013)

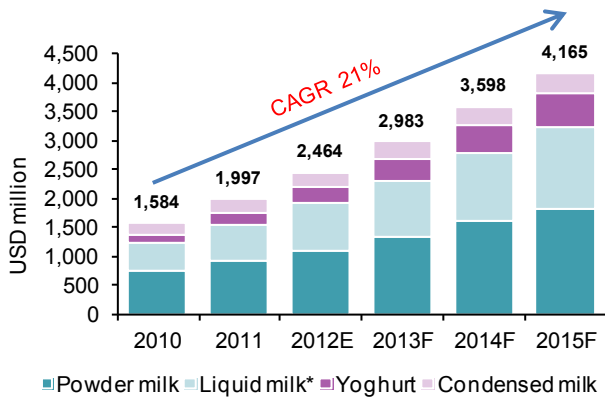


Figure 7 Vietnam dairy market size and growth 2010 – 2015 (IDP Marketing Department 2013)

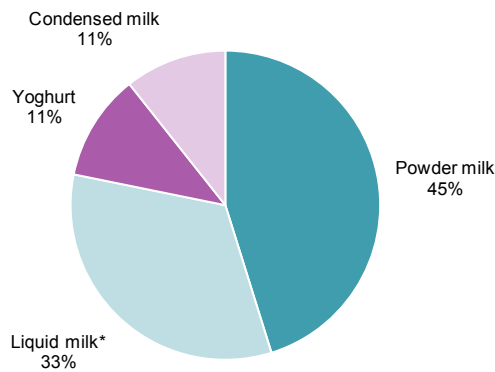


Figure 8 Vietnam dairy market segmentation 2012 (IDP Marketing Department 2013)

Vietnam's dairy market was primarily supplied by imports. Domestic fresh milk production only met 30% of total demand. Vietnam's imports of dairy products grew at a CAGR of 12.7% during the 5 year period from 2007 to 2012, reaching USD837 million in 2012. Vietnam primarily imported from New Zealand (31% of total), Netherlands (16%), USA (16%), Germany (8%) and France (7%). (Vietnam MOIT 2012)

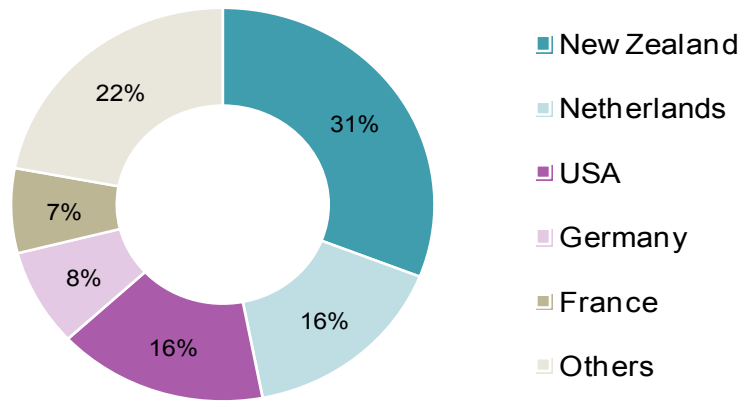


Figure 9 Estimated total dairy needs imported by country 2012 (Vietnam MOIT 2012)

To boost the production capacity of local dairy industry, the local government had introduced a number of supportive policies in recent years, including strategic policies, investment incentives schemes, and interest support to enlarge the domestic dairy cattle herd, improve local milk production, and reduce imports. The local government set objectives for local fresh milk production to meet 35% of the total domestic demand in 2015 and 40% in 2025. (USDA 2011)

Due to the high proportion of imported material inputs, dairy product pricing in Vietnam was heavily dependent on international milk powder prices and foreign exchange rates. Local fresh milk purchase prices had also risen consistently from 2003 to 2012 at a CAGR of 12%. (USDA 2011) Retail milk price in Vietnam was amongst the highest regionally and globally, and rose roughly at 5% per annum in real terms. Although the Vietnamese Government had established certain price stabilization measures, local manufacturers and consumers should expect the recent historical price trend to continue in the medium term due to continued rising global milk demand and local supply shortages. (Vietnam MOIT 2012)

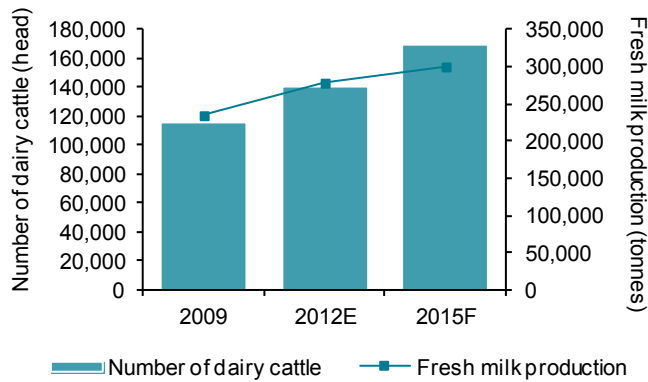


Figure 10 Vietnam dairy herd and fresh milk production (USDA 2011 & Vietnam MOIT 2012)

Regarding milk sourcing market dynamic, from inception, IDP was the only dairy producer in Vietnam that sources virtually all of its fresh milk needs from household farms in Vietnam. Through its dairy herd development programme, IDP developed long-term relationships with local farmers, purchasing 100% of each farm’s fresh milk production. Vinamilk was, a giant dairy corporation, on the other hand, varied the amount sourced between imported milk powder and fresh milk from household farmers, depending on pricing. They also had their own farm. Another big dairy company, Dutch Lady, mostly used reconstituted milk and advertised it as “fresh milk”. (IDP Marketing Department 2013)

Before the inception of IDP in 2004, Vinamilk, the biggest dairy producer in Vietnam dairy industry, captured the whole liquid milk market. However, Vinamilk, just like Dutch Lady, always claimed their liquid milk, which was made from milk powder, to be fresh milk. Local consumers with limited knowledge about dairy products believed that liquid milk was made from 100% fresh milk. IDP was the very first company in Vietnam that provided real fresh milk, but it was not until 2012 that they became well known for this.

3.2.3 Introduction about the International Dairy Company (IDP)

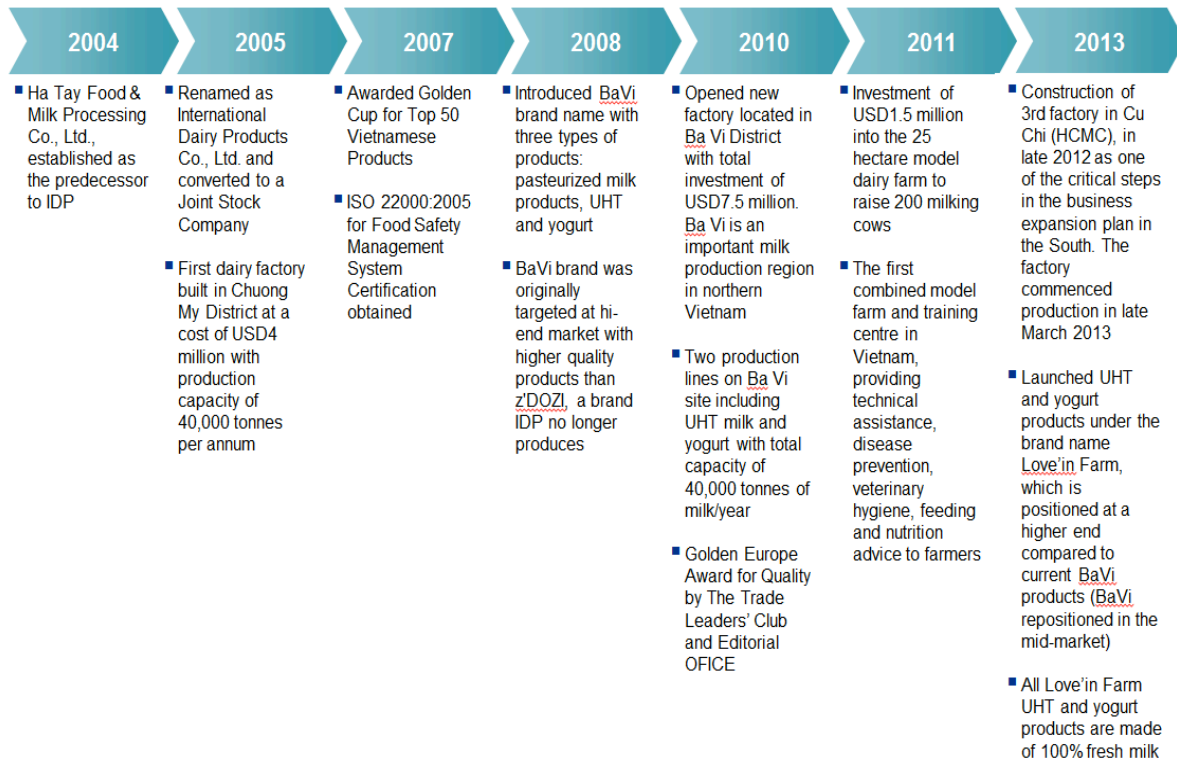
IDP was established in 2004 in Hanoi and was a leading Vietnamese dairy products manufacturing company in 2014. The founding family held 78% of the Company’s equity, with the remaining 22% of equity held by a number of individuals. The management team of IDP had significant experience in the dairy and food industries in Vietnam. IDP produced a range of high quality UHT milk, yogurt and pasteurized milk products from 100% fresh milk brands. IDP’s strategy focused on two key dairy prod-

ucts with the highest growth potential in Vietnam, which were UHT milk and yogurt marketed under two brand names BaVi and Love'in Farm. (Project Diary Information Memorandum 2013)



Picture 1 IDP's two key products (IDP Marketing Department 2013)

BaVi brand with established range of UHT milk and yogurt products had existing strong recognition and market share in northern and central Vietnam. Love'in Farm brand, a national premium brand of UHT milk and yogurt products also made from 100% fresh milk sourced from local farms nationwide was launched in 2013. This new range of Love'in Farm UHT milk and yogurt products served the plan of IDP to gain significant market share in southern market, and was targeted to become a leading national milk and yogurt brand in Vietnam. (IDP Marketing Department 2013)



Picture 2 Key Milestones and Achievements of IDP (IDP Marketing Department 2013)

IDP started up as a small company with 60 staffs and worked with 200 farmers in 2004, capturing 2% of total UHT milk and yogurt market. In 2012, before introducing Love'in Farm UHT milk and yogurt products and becoming one of the leading dairy companies, IDP already had more than 250 staffs and worked with 1000 farmers in northern Vietnam. After Love'in Farm UHT milk and yogurt products were introduced in 2013, IDP quickly increased its market share of UHT milk and yogurt markets, from 8% to 12% within only 3 summer months. In 2014, IDP successfully increased its market share to 15% of total UHT milk and yogurt markets and had around 500 staffs and worked with 2000 farmers in northern and central Viet Nam for fresh milk supplies. (IDP Marketing Department 2013)

IDP started with a special market. Their UHT milk and yogurt products were made from 100% fresh milk instead of milk powder. However, in the first 9 years, their market was very small and mostly was in Hanoi city. It was not until 2013, with the introduction of Love'in Farm product line that they reached to the whole Northern market and began to enter Southern Vietnam. Although the number of Love'in Farm products sold was impressive, the success was historical. With an incredible media campaign led by Mr. Tran Bao Minh, they changed the whole dairy industry. From then, Vietnamese buyers could finally enjoy real fresh milk. (IDP Marketing Department 2013)

It was important to note that, in my first visit to IDP, I felt immediately a very friendly environment, and people were very committed to their job. People were open and supportive to me. I had seen CEO had lunch with staffs at lowest position in the cafeteria. A lot of farmers usually visited the company and were treated like official staffs. There was a communication system so that anyone could directly send his or her concerns to the Chairman and CEO. Important decisions were made with an open discussion in the whole company. The Board of Management listened to everyone's opinions and made final decisions.

All staffs received training every three to six months. Chairman and CEO Nguyen said he wanted to make sure people had chance to learn more to develop their skills and potentials. (Chairman & CEO Nguyen Tuan Khai 28.01.2014) IDP also actively participated in community activities and already had many campaigns to donate, raise awareness and support people with HIV, Autism and Brain Tumor. Ever since established, IDP had been donating a reasonable amount of money to Farming Technical Research Centre of Vietnam. They had 20 scholarships per year for students with financial difficulty in Agriculture University of Vietnam. These students were also helped with finding a job after graduating. (IDP Official Homepage 2013)

Furthermore, IDP's dairy training farm was the one and only in Vietnam that organized free training courses for farmers, aiming to equip them with most up-to-date technologies and farming techniques. Up to 2014, there were more than 1500 farmers participated in those courses. IDP also took in farmers that were working for other dairy companies. (Technical Manager Phan Sy Minh 02.01.2014) In 2014, IDP signed a contract to sponsor for 30 elementary schools in the poor mountain areas of Vietnam. In 5 years, they would built new schools and provide fresh milk for the children. (Sales and Marketing Manager Tran Thai Bao 01.01.2014)

Despite the fact that they were not money-driven, IDP had very good financial results. UHT milk and yogurt were key revenue drivers, representing 30% and 70% of sales in 2013 respectively. Sales of yogurt in 2013 increased by 20% compared to 2012 from USD13 million to USD16 million, consistent with the successful introduction of Love'in Farm product line. Net profit increased from USD1,9 million in 2012 to USD4,2 million in 2013. (IDP Marketing Department 2013)

The most important thing about IDP was the business model that consisted of working with local farmers, training the farmers, raising public awareness and promoting general public's benefits. They partly were a social organization yet they were still an extraordinary dairy company. They were not a big corporation; they focused on their own goals, and had drawn public attention to their special goals and core value. IDP said they received more and more job applications every year. Their core value was shared and their business model was believed by many economic experts to be sustainable and future oriented.

As stated by Chairman and CEO Nguyen Tuan Khai,

“We are now hoping to have foreign investment in order to expand productions, create more jobs for farmers in Northern Vietnam and have more dairy products that are suitable for Vietnamese diet. One of our important goals, to change from reconstituted milk to fresh milk, was accomplished. Until 10/ 2014, all dairy corporates in Vietnam has already begun using 100% fresh milk for all their products. Dairy farmers in other parts of Vietnam now have jobs. Vietnamese consumers now have fresh milk with good quality. The future plans will be developing an organic product line and using biotechnology. All the processes from cultivation to consumption would be shifted to utilizing energy saving technology, and environmental friendly materials and packaging” (Chairman & CEO Nguyen Tuan Khai 28.01.2014)

In this study, I choose to study this specific company because it has unique business model of cooperating with local farmers and core value of “*balancing the benefits of farmers, customers and company*” (Chairman & CEO Nguyen Tuan Khai 10.01.2014.) Another reason for choosing this company as a case study is that even though its goal is not money-driven, it still produces a very good financial result. As such, I am curious about how they could do it and could their business model be applied to other companies in the same industry and from diverse industries.

3.3 Data collection

3.3.1 Ethnographic data collection

As previously discussed, the strength of ethnographic research method rests on the participation of the researcher in the company for an extended period of time to make observation, interview and take notes as well as collect all available data in order to understand the context and insights of the case study. However, to participate in the daily operation of the researched case, the researcher needs to have personal contact and network with the people in the management board. (Atkinson et al. 2007)

In my research, I was allowed to spend time at IDP to observe and collect data for 4 months, starting from November 2013 to February 2014. During that time, I spent 3 days each week at IDP, with three to four hours for each visit. I was allowed to visit different departments, talked to all staffs, and took notes on my observations. I also had access to IDP’s operational and financial data to have a better understanding about business and operation processes of IDP. In November, I began collecting and studying collected documents including information memorandum, company brochure, meeting minutes and internal reports. In December, I started to have unofficial conversations

with managers of different departments, and their staffs. I often had lunch or coffee breaks with them in the cafeteria. At that time, I had more trust and could discuss freely about the different viewpoints on working environments, management process, and their feelings about IDP. In January and February, I had appointments to conduct semi-structured interviews with key management team of IDP including Chairman and CEO Nguyen Tuan Khai, Sales & Marketing Manager Tran Thai Bao, and Production Manager Nguyen Tuan Minh. They told me about their viewpoints on critical events in IDP's historical development. They also explained about the process of change that made one small start-up company to become one in five major players in Vietnamese dairy, as well as IDP's future plans. In the end of February, I was invited to visit IDP's dairy farm in Ba Vi village, in where there was a training center that offered free training courses to farmers, providing them with modern farming techniques. In that visit, I had opportunities to conduct unstructured interview with farmers who are business partners of IDP. They told me about their experiences and their feelings about IDP. Moreover, I also was invited to several internal meetings in IDP. During these four months, I took notes on all small events and observations while continuously analyzed the data I had.

By the end of the four months, with collected data and observations from different people working for IDP, I could understand better about IDP case study with the final aim to develop the framework that provides new insights to the gaps of interactions between effectual and causal decision-making processes.

3.3.2 Interviews

In this study, interview is the second method used to collect empirical data. Interview is widely accepted method for qualitative research. Interview can be conducted face to face between the interviewer and the interviewee, enabling the interviewer to capture the context and insights of the researched phenomenon. There are three different interview types, which are structured interview for quantitative purpose, semi-structured interviews and unstructured interview for qualitative purpose. (Eriksson & Kovalainen 2008) Moreover, as mentioned in the previous sections, qualitative research is more suitable than quantitative research in answering process research questions. For that reason, semi-structured interview and unstructured interview are chosen to collect empirical data. Semi-structured interview is a suitable approach for developing framework and finding explorative insight (Saunders et al. 2007). In semi-structured interview, the interviewer often prepares in advance the interview theme before the interview, and interview questions are also modified along the interview process. Unstructured interview is a useful approach to track down the generative mechanism causing observed

events to happen (Saunders et al. 2007). In unstructured interview, the interviewer often prepares the interview just like informal conversations with predetermined response categories (Fisher 2010). Interview themes are also prepared in advance, but the questionnaires are in flexible manner so that the interviewer can change the order of the questions (Eriksson & Kovalainen 2008).

Several interviews were conducted after I had made some relevant observations. There were three important formal one to one in depth semi-structured interviews conducted with the management board of IDP, consisting of Chairman and CEO Nguyen Tuan Khai, Sales & Marketing Manager Tran Thai Bao, and Production Manager Nguyen Tuan Minh to discuss about business and operation processes, historical development process of change in IDP. Each interview lasted for one hour, and all relevant conversations were documented on the spot and put in narratives later on at home. Those interviews enhanced the data quality and reduced the bias in the collected data because I could focus on one interviewee and have in-depth discussions on certain questions and modify the mistakes immediately (Saunders et al. 2007). Moreover, there was one unstructured interview conducted with farmers partnering with IDP to gain external viewpoints on the developments of IDP. Along the process, I frequently had conversations with managers of different departments and their staffs in lunchtime, cafeteria or after work. With reference from the CEO and Chairman, I was accepted in the company as a researcher; thus in all conversations, people were very willing, comfortable, relaxed and cooperative.

3.3.3 Observations

Observational research is an important activity of ethnographic fieldwork (Atkinson et al. 2007). Observational research places the researcher in the researched context, enabling the researcher to collect empirical data by observing the context. As such, the researcher is able to collect realistic data as compared to static method such as survey (Willis, 2007).

There are two types of observational research, which are structured observation and unstructured observation. This study uses unstructured observation, in which the researcher observes the researched phenomena without identifying the details beforehand. The unstructured observation contains disguised or undisguised observations. (Malhotra & Birks 2006)As mentioned in the ethnographic data collection part, I was accepted to visit and conduct research at IDP, based on my personal contact with the Chairman and CEO Nguyen Tuan Khai. For that reason, there was a certain level of trust between Mr. Nguyen and me. As such I decided to use undisguised observation in which the identity

of the researcher was disclosed. By revelation of my identity, I could minimize the ethical problems related to this type of research.

During the period of four months, I continuously visited IDP's headquarter in Hanoi to observe daily operations and business process of IDP. These included regular decision-making processes of managers of different departments, such as product pricing decision, advertising expense decision. I also observed strategic decision-making process of key management team members. Besides, I participated in the regular meetings between departments and meetings between IDP's owner and its strategic partners. Moreover, I paid attention to small events in everyday life at IDP, interactions between people, their attitudes and the company's working environment in general. All of my observations were carefully noted and later on analyzed on a weekly basis.

3.3.4 Secondary data collection

Secondary data collection is another method used for confirming collected data from interviews and observations as well as creating useful questions for the interviews (Angrosino, 2007). When using secondary data, the researcher has to pay special attention to the original purpose for producing that data in order to assess the data value. Secondary data consist of formal and informal reports, webpages, interview records, minutes of meetings and memos. (Eriksson & Kovalainen 2008) Moreover, secondary data is used as part of data triangulation to evaluate and double check with the data collected by other methods such as interviews and observations.

In this study, several secondary data sources were used, such as project dairy information memorandum, company website, meeting minutes, business and operation plans, global dairy report, Vietnam dairy industry report. The usage of different documents helped me to create more appropriate interview questions. These questions were created after I had reviewed the secondary document. As a result, my interview questions were direct to the researched issues and useful for collecting direct responses from participants.

3.4 Data Analysis

According to Eriksson & Kovalainen (2008), the researcher should not separate the data collection and data analysis stages since both complement each other in the overall research process. Data analysis stage includes classifying, organizing, and investigating empirical data (Yin 1989). In this study, after defining the research design and data col-

lection methods, I finally decided on how the gathered data will be organized, classified, and examined in order to provide answers to research questions.

The process approach with the focus on narrative analysis method was chosen to analyze the case study. By focusing on the narratives told by people working for IDP and partnering with IDP, the researcher could track down the generative mechanism causing observed events to happen as to understand the researched phenomenon. According to Abbott (1988, 1990), the process approach considers progressing central subjects as unit of analysis, which makes events to happen and to which events occur. Central subjects around which the narrative is merged can be individual entities such as people, group, organizations, and material artifacts; whereas events are the natural units of the social process and are influenced by central subjects.

Moreover, process approach also bases on the necessary causality for explanation of development and change. Critical events being the critical determinants of process approach and causing a specific outcome are located. The order in which event occurs and the durations of events help explain the final outcome. However, these are not sufficient enough to contribute to outcome, but the total set of forces affecting the developing subject in the particular order and necessary and sufficient to explain the process that leads to outcome can provide the whole picture of how a specific outcome has occurred. (Mohr 1982)

Narrative analysis methods consider central subjects as means to collect data from. The data are the stories told by the central subjects to explain the observed events. Stories have clear beginning and end. As the case study was described in the narrative way, narratives help explain complex historical organizational development and change. One of the strength of narrative analysis is to use humans as natural storytellers. For that reason, in-depth interviews on the few respondents were used to acquire rich and extensive narrative data. (Bloor & Wood 2006)

Categorization, based on the main research questions and sub-questions, was used to classify events, actions, and to clarify the research purpose in the empirical part. The researcher applied the thematic analysis method to organize and interpret the empirical data. By using thematic analysis method, the researcher was able to identify themes from pool of ideas or experiences that make no sense if not observed together. The researcher then analyzed how all these ideas and experiences come together in order to create the full picture of the respondents' combined experiences. (Leininger 1985) The thematic analysis method enabled the researcher in this study to organize and interpret the collected data from the daily observations on operations and business process of IDP, interviews with management board of IDP, and discussions with managers of different departments and their staffs, and discussions with farmers working and partnering with IDP and from the experiences and feelings of the researcher himself.

Moreover, since the empirical data was categorized along the common themes, the themes of narratives were in the higher order compared to the chronological story lines. The contexts of the stories as well as meanings and structures were carefully described and recorded in this study in order to provide the clear picture for the reader. In the story telling process, the voice of the researcher and respondents were separated in a way that enabled the readers to distinguish between the researcher's own experiences and feelings and the respondents' experiences. This process helps to construct the full picture for the outcomes of the researched phenomenon. (Eriksson & Kovalainen 2008)

The first sub-research question was answered based on the narratives of the historical development and change of the case study. Critical events and the generative mechanisms, which caused the events to happen, were tracked down. The teleology change process and evolutionary change process could explain the change events and their generative mechanisms, answering the first sub-research question. The answer to the second sub-research question was based on the narratives relating to the events influenced by decision-making processes of Chairman and CEO of IDP. After analyzing the empirical data to answer research questions, the preliminary theoretical framework deduced from the literature review part were compared with the findings and analysis in order to develop the modified framework providing new insights to the gaps of interactions between effectual and causal decision-making processes

3.5 Evaluation of the research

The evaluation of the research will be based on the classic criteria in assessing the research work in social sciences, which are validity, reliability, and generalizability. However, the generalizability concept, which is an important concept for evaluating the quantitative research, cannot be used to evaluate the qualitative research in this study. The reason is that the aim of qualitative research is to explore, describe, and explain the researched phenomenon without any intention of generalization, while the aim of quantitative research is to generalize the findings. Objectivity concept was used instead of generalizability concept for the qualitative research as it ensures the objectivity of the collected data. (Eriksson & Kovalainen 2008) For that reason, the evaluation of the research in this study will be based on the following three criteria: validity, reliability, and objectivity.

Firstly, validity ensures that the conclusions drawn in research provide a correct description of and explanation for the researched phenomenon. The validity of qualitative research depends on the consistency of observations with a general pattern rather than with a random chance. (Eriksson & Kovalainen 2008) Qualitative research does not stress on the necessity of generalization, and the validity of the collected data was

achieved through using triangulation method, which uses different sources of data to understand the researched phenomenon (Yin 1994). In this study, various sources of data were used, including semi-structured interview, unstructured interview, observations, and secondary data to ensure the validity of the results.

Secondly, reliability is achieved if a measure, procedure or instrument produces the same result on the different trials (Eriksson & Kovalainen 2008). Using the case study can enhance reliability of collected data; the collected data should be recorded instantly to improve the reliability (Yin 1994). As agreed between the researcher and the chairman of IDP, no audio record was allowed to protect the confidentiality of IDP, and the researcher also felt that it was hard to record the discussions and conversations with respondents since these were often taken place suddenly in the workplace or in the cafeteria. To cope with this, the researcher always documented the findings immediately after every discussion and conversation, observation, and interview in order to enhance the reliability of this study.

Moreover, the researcher's skills in conducting ethnographic research are also important in enhancing the validity and reliability of this study. Those skills are interview skills and managing skills. Interview skills include opening and closing interviews, asking questions, listening to answers. Managing skills consist of crisis management when facing difficult participants, bias elimination, and issues clarification. (Yin 2003) In this study, I had carefully created interview questions that were free of jargons and corresponded to the levels of understanding of respondents. Interview questions created for semi-structure interviews were used for interviewing management board of IDP, and interview questions created for unstructured interviews were used for interviewing farmers partnering with IDP. Besides, to enhance the validity and reliability of this study, the researcher also paid special attention to the body language of respondents as part of interview process.

In narratives, the stories told by the respondents about the past are often influenced by their beliefs and moods at the time of interviewing (Saunders et al. 2007). As such, the researcher should conduct interviews at the right time with the respondents. In this study, trust was built between the researcher and the respondents because I had been conducting research at IDP for 4 months. Being trusted by the respondents, the researcher could ask in-depth questions in order to understand the reasoning and logics behind the different decision-making processes.

It is very important that the researcher has careful preparations in advance for interviews, because this enhances the validity and reliability of this study. Preparations for interview include logistic preparations, physical preparations, mental preparations, which are important to have successful interviews (Saunders et al. 2007). In this case study, the researcher prepared each and every interview carefully to create the comfortable interview environments for the respondents.

Thirdly, objectivity refers to the inter-subjective agreements between observers on the observed subject (Lincoln & Guba 1985). In this study, the possibilities for bias were reduced as the researcher spoke the same language with the respondents and came from the same country with the respondents. From that fact, there was no language and cultural differences in this study. As the language used in all interviews and discussions was in Vietnamese, the researcher recorded and made sure all data were correctly translated into English to warrant the objectivity of this study.

4 RESULTS

4.1 Evolutionary change process

The foundation of IDP and its market resembled the evolutionary change process developed by Van de Ven and Poole (1995). According to them, evolutionary change process proceeds through an uninterrupted cycle of variation, selection, and retention.

Firstly, the Chairman and CEO of IDP Mr. Nguyen's variation of means clearly resembled the variation stage in the evolutionary change process. His variation of means was best illustrated by his various identities, knowledge, financial source, and networks. At the time when he decided to run a company of his own, Mr. Nguyen already had made a fortune in real-estate investment. This was a very important mean along with his identities, which included a good communication skill, an extra ordinary intelligence, a work-oriented mindset. He was also an adventurous and hard-working person. Moreover, with over 40 years of experiences in food industry, he had a very good network. He said that all above-mentioned means were the starting point for him to imagine about the possible opportunities for his business (Chairman & CEO Nguyen Tuan Khai 10.01.2014).

The second stage in the evolutionary change process is selection stage. With his various means, Mr. Nguyen had many options to choose from. He said that he might open a sea-food exporting company, or food processing company. Another option for him was to work for a big corporation at a very high position and to save all money he had. (Chairman & CEO Nguyen Tuan Khai 10.01.2014.) As adventurous and ambitious as he was, he did not do that. After discussing with his family, friends, and colleagues and studying about the food industry of Vietnam, he suddenly saw a potential opportunity and had a personal interest in the local dairy industry. That was how IDP was born. It was clear that, this selection of one specific option from the list of possible options resembled the selection stage of evolutionary change process.

The last stage in the evolutionary change process is retention stage. As Mr. Nguyen's idea of opening a small dairy company turned out to be successful, he wanted to retain this business and develop it further. To understand the success of IDP, the researcher would use the narrations in the form of storytelling by Mr. Nguyen and his staffs to analyze the organizational process of IDP. This could be explained in the following critical events' discussions and analysis:

The first critical event was the Melanin crisis happened in 2008, when Melanin, a toxic ingredient, was found in imported milk powder from China. In this outbreak, milk products' sales dropped by 5% of total market. To cope with the decreasing demand, big companies in local dairy industry chose to reduce their production. While all of their

UHT milk was reconstituted, they specifically chose to reduce fresh milk products, which were mainly cheese for children. As a result, they changed to buy only 50% of the amount they used to buy from farmers before the crisis. They could do that because the contract signed between them and household farmer suppliers was made in the favor of buyers but not sellers. This left the farmers in a very difficult situation.

Meanwhile, in this crisis, IDP had a different situation. Firstly, their sale was little affected due to several reasons. 70% of their products were yogurt and most of products were distributed in local stores located in residential area instead of big supermarkets. More importantly, they also had annual contracts with local schools, which made their sale fairly stable despite the decreasing sale in the whole market. Secondly, Mr. Nguyen CEO and Chairman of IDP had been thinking about expanding production. He saw this crisis as an opportunity to buy part of unsold milk sources from farmers who IDP had no contracts with. Thirdly, his buying decision-making process was consistent with his core value of helping local farmers. Lastly, his means that included his identities of adventurous and determined person, and his knowledge and network also contributed to his decision of helping local farmers.

The outcome of Mr. Nguyen's response to this crisis was that he decided to buy part of unsold milk sources from farmers who IDP had no contracts with. This additional milk sources were used for the extra production capacity. By doing all these, he helped not only local farmers but also the local dairy industry to overcome the melanin crisis. Hence, local government and farmers praised his action. As with IDP, he gained better networks with local farmers, and made IDP's brand name and products more popular in consumers' minds.

Mr. Nguyen said,

“In 2008, officials in Vietnam discovered Melanin, a very toxic ingredient, in milk powder imported from China. Sale decreased by 5% within the whole industry. Big corporations only used fresh milk to make some dairy products and not liquid milk. Big dairy corporates, as a result, cut off 50% of fresh milk they bought from local farmers. This left the farmers in a very bad situation. At that time, IDP was a fairly small company, taking around 10% of the market in Northern Vietnam. We had been cooperating with a small group of local farmers near Hanoi. After discussing with my family, I made the decision to use my personal financial source to buy all abundant milk from farmers in several provinces in the North. I had never worked with them before, but I knew that, with my network and resources, I could help them to distribute their cow milk. This event once again firmly reminded us that we always continued to follow our core value, which emphasized farmers' benefits. Right after this event, we became better known and had support from farmers, consumers and local officials. This support assured us that it was possible to balance the benefits of farmers-consumers-company. (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)”

The second critical event was the opening of a dairy training farm. In 2010, there had not any training center for dairy farmers in Vietnam. Farmers worked with their own intuition, and experiences passing from the old generations. They did not have access to modern technical services or professional vet, and thus had many difficulties. Big dairy corporates collected milk from farmers to use in their production process, but they did not actively and directly involve in training the farmers and providing them with scientific knowledge and effective techniques.

In responding to this event, Mr. Nguyen said that he decided to invest in a dairy training farm. In this farm, local cows were bred and raised with modern farming techniques. IDP took in 300 farmers for each training course, which lasted 2 months and was completely free. Local farmers were invited to participate in the course. During the training, they were provided with: (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)

- Basic scientific knowledge about cows and their dairy production.
- Modern techniques in dairy farming, including hygiene control in cow farm
- Common diseases of cows, initial actions and when to call a vet
- Knowledge about different dairy products, and how to effectively produce milk
- Introduction to the most up-to-date technologies and modern technique in dairy farming

The generative mechanisms or motor of change for Mr. Nguyen was that *“We believed that the more educated the farmers were, the better future we had for everyone, including the farmers, consumers and dairy companies”* With this motor of change, Mr. Nguyen had changed that fact mentioned above. From 2010 to 2014, there were over 7000 farmers in Northern Vietnam participated in and graduated from IDP’s training courses. Since 2012, many farming centers, corporates and organizations had been supporting IDP’s dairy farm training center financially and technically. That was a positive outcome for IDP’s dairy farm training opening. (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)

The last critical event was the absence of 100% fresh UHT milk and yogurt products for Southern market. This market was dominated by several big corporations selling reconstituted UHT milk and yogurt products. There were no other dairy companies that sold dairy products made from 100% fresh milk source. *“Dairy corporations made way too much money while tricking their consumers to buy reconstituted milk, thinking that any milk in the bottle should be fresh milk”* (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)

In responding to this fact, in the beginning of 2012, IDP invited Mr. Tran Bao Minh to work for IDP as a Sale and Marketing Director. Mr. Tran was assigned to make plans for a new Love’in Farm product line and took care of the media campaigns to raise awareness about real fresh milk in Vietnam, specifically Southern market. Love’in Farm

was the second product line of IDP that was also made from 100% fresh milk source, but was the very first 100% fresh milk and yogurt product line sold in Southern market.

The generative mechanisms or motor of change for Mr. Nguyen was that *“What we wanted to do was not selling as many products as possible and getting as much benefit as possible. We aimed to change the whole milk-drinking habit of Vietnamese people and raised awareness about what was real, qualified fresh milk. We wanted the whole industry to move on to better products, and never looked back to bottle milk made from milk powder. We wanted to bring real fresh milk to people. We wanted them to understand about the dairy products they were buying, because they deserved to get what they paid for.”* (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)

From the change and motor of change mentioned above, Mr. Nguyen and Mr. Tran had made a success for Love’in Farm product line. Love’in Farm became the most selling dairy products in Southern market in summer 2013. *“With this product line, we also succeeded to put our foot in Southern Vietnam’s market, which had always been dominated by two other very big dairy corporations”* (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)

In conclusion, through the critical events, responses to those events, and the motor of change, it was clear that the foundation of IDP and its market resembled the evolutionary change process developed by Van de Ven and Poole (1995). Mr. Nguyen started with his variation of means, imagined a set of possible effects, and selected one specific effect that was the creation of IDP and its market. Mr. Nguyen had made IDP as a success today and would retain and develop IDP and its market. By retaining current form of IDP, Mr. Nguyen would reduce the variation of means and the availabilities of potential effects, affecting the future development of IDP. However, retaining IDP and its market in current form would be a way to exploit the current potentials of IDP’s products and market. Mr. Nguyen also wanted to continue developing the product lines of IDP and to create more markets. Mr. Nguyen said that he wanted to develop 100% organic UHT milk and yogurt products in the near future to serve the local consumers better. (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)

4.2 Teleology change process

The future plan of IDP resembled the teleology change process developed by Van de Ven and Poole (1995). According to them, development of an organizational entity proceeds toward a repetitive sequence of goal formulation, implementation, evaluation, and modification of goals.

Firstly, the future goal of IDP resembled the goal formulation stage in the teleology change process. IDP was the pioneer in 100% fresh milk market segment, so they

gained first-mover advantage. However, in 2014 big corporations launched their organic dairy products. IDP had no choice but to follow this new market trend. Mr. Nguyen set a future goal for IDP. The goal was to develop an organic product line, and the first batch of organic products would be sold in 2015. Moreover, Mr. Nguyen targeted 3% of total organic dairy product market segment in the first year. He also said that as IDP had set a strong foothold in Northern market, this market would be his focus in the beginning (Chairman & CEO Nguyen Tuan Khai 28.01.2014). He considered this goal as an achievable one. As a result, IDP followed the goal formulation stage in the teleology change process to set their future goal.

The second stage in the teleology change process is implementation stage. In order to implement their goal, IDP had a very detailed plan with several steps. In the first step, within one year, they would expand their dairy farm and invest in modern technology to produce organic fresh milk and yogurt. At the same time, at the training centre, which was placed inside the dairy farm, they would provide farmers with techniques to organic farming. Later on in the future, when IDP expanded their organic production, those farmers would have enough knowledge to keep up with the change. The very first line of organic products would be introduced to the market in 2015, starting in Hanoi and the nearby provinces. The second step would be producing organic whey protein and diet supplements at highest standard. Those products were planned to introduce to buyers in 2016 and very likely would be the very first in the market. IDP also had a plan to re-organize their operational process, since there would be more control at every stage of organic production. Additionally, at the time of the interview with Mr. Nguyen in 2014, he said that they already signed some contracts with foreign companies to import machines, technologies and new material to gradually move to bio-tech and bio-material. (Chairman & CEO Nguyen Tuan Khai 28.01.2014) Mr. Nguyen emphasized that, even though IDP was not the first to enter organic dairy product market, they were very confident in their own market share and prestige. Mr. Nguyen was rather happy with this market change, since it was for the good of the whole society. *“With so many health concerns of the modern life, organic products and bio-tech would be a sustainable trend of the future, so competing with other companies to be the first or second, or the third, would be unnecessary.”* (Chairman & CEO Nguyen Tuan Khai 10.01.2014) As a result, IDP followed the implementation stage in the teleology change process to implement their goal.

The last two important stages of teleology change process were evaluation and modification stages. After IDP launched first batch of organic milk and yogurt products to market, they would evaluate the feedbacks from consumers. Moreover, they would also evaluate the volume of sales to decide on the next production level. After these evaluation stages, they would decide on whether they should expand production, introduce different organic product lines, or modify package, flavor to better match with consum-

ers' tastes. As a result, IDP followed the evaluation and modification stages in the teleology change process.

In summary, the future development of IDP proceeded toward a goal or an end state. They were purposeful and adaptive. They created an envisioned end state, took actions to achieve it, and monitored the progress. They followed the repetitive sequence of goal formulation, implementation, evaluation, and modification of goals. (Van de Ven and Poole 1995)

4.3 Effectual decision-making process

In this case study, the establishment decision of IDP was an effectual decision-making process developed by Sarasvathy (2001), Wiltbank et al. (2006), Dew et al. (2009), and Chandler et al. (2011). According to them, the effectual decision-making process went through different steps and based on different key principles. The different steps were that the entrepreneur started with his means, then imagined about the possible goals he could achieve from those means, contacted potential stakeholders for actual commitment, negotiated with and persuaded stakeholders with the result of expanding cycle of resources and converging cycle of constraints on goals. All these steps contribute to the creation of new markets. In addition, the different key principles included means driven action, affordable loss, leveraging contingencies, controlling an unpredictable future, and strategic partnership.

Firstly, Mr. Nguyen began with his means that include his identities, knowledge, and networks. Mr. Nguyen's identities comprised of a good communication skill, an extraordinary intelligence, a work-oriented mindset. In daily working life, Mr. Nguyen was not a talkative, but a very caring person. He has a genuine passion in working for the community. He was a businessman with very good future oriented visions and a heart of gold. Moreover, with over 40 years of experiences in food industry, he had a very good network. Hence, the means possessed by Mr. Nguyen were matched with the means of entrepreneur in the effectual decision-making process described by Sarasvathy (2001) and Wiltbank et al. (2006).

The second step was that basing on his means, Mr. Nguyen then imagined about the possible goals he could achieve. In the process of goal setting, he started contacting his family, friends and colleagues and asked them for actual commitments. At this stage, the goals were not clear yet. Mr. Nguyen said,

“After working for 20 years in the food industry, in 2004, I wanted to invest in a food producing company, because at that time I had a quite big amount of money gaining from the stock market and real estate. At the beginning, I did not think about a dairy company, but something with higher financial benefit, for example seafood exporting.

However, while I was studying about the food industry in Vietnam and discussing with my family, friends, and colleagues, I happened to notice that the dairy industry was having many problems, with many potentials wasted. We had several farming areas, in which local farmers had very good experiences raising dairy cows. While they had been doing it for many generations, they did not have a stable source to sell their cow milk, and they did not have access to modern technologies and new farming techniques.

Meanwhile, biggest dairy companies in Vietnam mostly made “fresh milk” from milk powder imported abroad to maximize financial benefit and only bought a very small amount of real fresh milk from dairy farming areas. This fact left local farmers in many difficulties and the customers were cheated. I thought about this a lot, and I decided that I would establish a very special dairy company, in which we worked closely with local farmers, buying cow milk from them and providing them with up-to-date farming techniques. I also wanted to bring fresh milk of good quality to Vietnamese people. Balancing the benefits of farmers, customers and company has always been our core value right from the start. In 2004, I also had a great network within food industry, which is why I believed I could make it. (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)”

The third step was that after negotiating with and persuading his family, friends, and colleagues, Mr. Nguyen acquired more resources with more available means, and at the same time encountered constraints on goals. This effectual process enabled Mr. Nguyen to create new firm and new market. In 2004, he created International Dairy Production Joint Stock Company (IDP). The founding family holds 78% of the Company’s equity, with the remaining 22% of equity held by a number of individuals. IDP was the first company that sold UHT milk and yogurt products made from 100% fresh milk. (IDP Marketing Department 2013) As a result, Mr. Nguyen applied effectual decision-making process to create IDP and its market.

Moreover, Mr. Nguyen and his stakeholders take effectual actions and decide on how to make effectual commitments based on five key principles:

- Means-driven action

In the beginning, Mr. Nguyen did not have any intention to establish a dairy company, but he wanted to do something with his money, networks, and experiences. He did not have a set goal in advance, but instead after interacting with his stakeholders he set the goal. His goal was to change the consumers’ habit of using liquid milk, and pushed the whole dairy industry to turn to fresh milk instead of power milk in the production process. As such, he based on means-driven action to set up IDP.

- Affordable loss as evaluation criteria

As the market for 100% UHT milk and yogurt products were not existed before the inception of IDP, Mr. Nguyen could not calculate the expected return for his resource investments. For that reason, he established IDP in 2004 as a small company with 60 staffs and worked with 200 farmers. At that time, IDP captured only 2% of total UHT

milk and yogurt markets. With no calculation for expected return, he said that if his subjective justification were wrong, then he could afford to lose (Chairman & CEO Nguyen Tuan Khai 28.01.2014.) This is totally within his control.

- Leveraging contingencies

In the melanin crisis when all other dairy companies reduced the amount of milk they bought from farmers because milk products' sales dropped dramatically. Mr. Nguyen treated this contingency as an opportunity. He took the risk that was affordable to him. He decided to buy part of unsold milk sources from farmers. By doing this, he helped not only local farmers but also the local dairy industry to overcome the melanin crisis. As a result, local government and farmers praised his action. He said that,

“This event once again firmly reminded us that we always continued to follow our core value, which emphasized farmers’ benefits. Right after this event, we became better known and had support from farmers, consumers and local officials. This support assured us that it was possible to balance the benefits of farmers-consumers-company.” (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)

- Controlling an unpredictable future

Mr. Nguyen was very confident from the inception of IDP. Although IDP was established late and a very small company compared to its competitors, IDP had unique business model of using 100% fresh milk for the production of UHT milk and yogurt products. Mr. Nguyen had good strategic partnerships with his stakeholders. With his unique business model and strategic partnerships with his stakeholders, Mr. Nguyen could control an unpredictable future by creating his own market for 100% UHT milk and yogurt products. He further said that he believed *“the future is in our hands, so we have to create it”* (Chairman & CEO Nguyen Tuan Khai 10.01.2014.)

- Strategic partnerships

As IDP helped local farmers to overcome the melanin crisis, more and more farmers wanted to become partners with IDP. They wanted to sell their cow milk exclusively to IDP. IDP always considered farmers as important partners, and treated them with very much respects. IDP provided farmers with extensive training and technical support in taking care of the milking cows. As a result, this strategic partnership benefited both farmers and IDP. Moreover, IDP also developed strategic partnership with Mr. Tran Bao Minh. In 2012, Mr. Tran was invited to work for IDP as Sales and Marketing Director and also to become one of the shareholders of IDP. Mr. Tran was well-known figure in the local dairy industry and behind the success of big corporations like Vinamilk and TH True Milk. With the means and extensive networks of Mr. Tran, he could enable IDP to achieve its goals. As stated in the interview with Mr. Nguyen,

“In fact, IDP was a very small company when comparing to big corporations that Mr Tran used to work with. Therefore, this was considered a very big success that we achieved. He was a truly talented and powerful person. He said he chose to work with

IDP because he shared with us the goal to work for the benefits of the whole community and not only for the company. He believed that our business model was sustainable and a good choice for future.” (Chairman & CEO Nguyen Tuan Khai 10.01.2014)

In conclusion, Mr. Nguyen’s decision-making process resembled effectuation decision-making process. He followed different steps and based his decision-making on different key principles of effectual decision-making. These steps and principles enabled Mr. Nguyen to build IDP and its market. His creation of IDP and its market could be summarized in the following decision-making process. Mr. Nguyen started with his means. He did not set the predetermined goal in the beginning, but instead utilized his means to imagine about the possible effects that he could create. He exploited contingencies with affordable loss and acceptable risk factors in mind. He later contacted and negotiated with his family, friends, and colleagues to ask for their actual commitments. The logic of control was attained through the strategic partnership with these stakeholders. As the result of this strategic partnership, more means and constraints on goals occurred simultaneously in the construction of new market. In deed, Mr. Nguyen followed the effectual decision-making process and its key principles developed by Sarasvathy (2001), Wiltbank et al. (2006) and Chandler et al. (2011). As a result, Mr. Nguyen was successful in building IDP and its 100% fresh UHT milk and yogurt market.

4.4 Causal decision-making process

As discussed in the effectual decision-making process, at certain point in the effectual process, there are no more new goals added to the effectual process since the stakeholder acquisition process has completed; the entrepreneurs start reexamining the balance of prediction and control as the structures of the market begin to take visible shape. (Wiltbank et al. 2006, 992). In this case study, most of the decisions made by Mr. Nguyen on the historical development of IDP were effectual decision-making process. The creations of IDP, its 100% fresh milk and yogurt market, and its success today were all effectual decision-making process. Nevertheless, Mr. Nguyen’s decision making for future development of IDP was causal decision-making process. There were two critical reasons why Mr. Nguyen had to shift from effectual decision-making to causal decision-making. Firstly, Mr. Nguyen followed different steps and based his decision-making on different key principles of effectual decision-making process. These steps and principles enabled Mr. Nguyen to build IDP and its market. IDP was founded in 2004 when there was no market for 100% fresh milk dairy products. At that time, big corporations sold only reconstituted milk products to market. Being the pioneer in selling 100% fresh milk dairy products, IDP gained tremendous advantage. Secondly, in 2014 when all other players followed IDP to produce dairy products using 100% fresh milk source,

and they began to introduce organic products. Considering that people were more and more aware about food quality, moving to organic product was an inevitable trend of future. While big corporations had resources to start the organic dairy market segment in Vietnam, it would take IDP longer, because they had less financial and technical potentials. As a result, in this organic market, IDP would not again have first mover advantages, yet they would have to find a plan to adapt with market change. To cope with new situation, Mr. Nguyen said that he decided to develop an organic product line in 2015 and aimed to capture 3% of total organic dairy market segment in the first year. He also said that they would focus mostly in Hanoi market, in which they always had high popularity (Chairman & CEO Nguyen Tuan Khai 10.01.2014). This plan, thus, seemed to be practical and well considered. Moreover, along with organic product line, IDP also had a plan to turn to biotechnology and biomaterial. Mr Nguyen said: *“As committed as we are to public interests and environment friendly technology, we would like to change to use bio-tech and bio-material altogether. However, this change would be very costly and cannot be done in a short time. Our plan is a gradual change within 15 years.”* (Chairman & CEO Nguyen Tuan Khai 10.01.2014.) Consequently, Mr. Nguyen had shifted from effectual decision-making process to causal decision-making process.

Shifting from effectual decision-making process to causal decision-making process, Mr. Nguyen followed five principles of causal decision-making process to achieve his goal. The first principle was goal-oriented action. As the organic dairy market segment already existed, Mr. Nguyen set goal to enter this new market. His goal was to develop an organic product line in 2015 and to capture 3% of total organic dairy market segment in the first year. The second principle was expected return as evaluation criteria. Since big corporates had sold their organic dairy products to this new market, IDP could search for products' prices and the average quantities bought by consumers monthly and quarterly. From these numbers, IDP could calculate expected return for their investment in developing new organic dairy product line. The third principle was avoiding contingencies. To avoid contingencies, IDP made sure that they could control the standard quality of organic fresh milk source. To achieve this, they would expand their dairy farm and invest in modern technology to produce organic fresh milk and yogurt. The production of organic milk would be centralized in their dairy farm. They would also provide farmers with techniques to produce standard organic milk source, so when IDP expanded their organic production, those farmers would have enough knowledge to keep up with the change. As a result, they could avoid contingencies. The last two principles were predicting uncertain future and competitive analysis. To be competitive, IDP had to predict uncertain future. As the late entrant to the organic milk market, IDP needed to predict the future of this market. Mr. Nguyen said that organic whey protein and diet supplements at highest standard would be in demand in the future, so IDP

should be prepared for this to be more competitive in the future. (Chairman & CEO Nguyen Tuan Khai 28.01.2014.) Therefore, Mr. Nguyen had used causal decision-making process to be more competitive in organic dairy market segment.

In conclusion, Mr. Nguyen's decision-making process for developing organic product line resembled causal decision-making process. He followed different key principles of causal decision-making process. This process enabled Mr. Nguyen to develop IDP's organic dairy products in existing organic dairy market segment. His creation of new organic dairy product line could be summarized in the following process. Firstly, Mr. Nguyen set goal for entering organic dairy market segment. Secondly, Mr. Nguyen used organic dairy products' prices and sales volume to calculate expected return for his investment in developing organic dairy products. Thirdly, he avoided contingencies by centralizing the organic milk production, at the same time equipping farmers with organic farming for future expansion. Lastly, he predicted the future of organic dairy market segment, so IDP could position more competitive in the future. As such, Mr. Nguyen followed the causal decision-making process and its key principles developed by Sarasvathy (2001).

4.5 IDP's decision-making processes

From the above discussion of evolutionary change process and effectual decision-making process of IDP, both processes were linked in certain ways. Firstly, both processes started with Mr. Nguyen's variation of means that include his identities, knowledge, and network. Secondly, from his means Mr. Nguyen imagined about a set of possible effects that he could achieve. Thirdly, from a set of possible effects Mr. Nguyen selected one specific effect that was the creation of IDP and its market. Lastly, from the selected effect of opening a small dairy company, Mr. Nguyen had made IDP as a success today and would retain and develop IDP and its market.

Moreover, through critical events, responses to event, and motor of change, Mr. Nguyen had shown that he followed key principles of effectuation decision-making process in managing IDP. This could be exemplified by three critical events. The first critical event was the Melanin crisis happened in 2008. In this event, Mr. Nguyen had applied affordable loss principle, leveraging contingencies principle; he decided to buy part of unsold milk sources from farmers who IDP had no contracts with. He could afford to lose, but in fact he leveraged on this contingency to expand production. The second event was the opening of dairy training farm in 2010. In this event, Mr. Nguyen had applied strategic partnership principle, and controlling future principle; he decided to invest in a dairy training farm. Local farmers were invited to participate in the course. The opening of a dairy training farm benefited everyone, including the farmers, con-

sumers and dairy companies. The last event was the absence of 100% fresh UHT milk and yogurt products for Southern market. In this event, Mr. Nguyen had also applied strategic partnership principle, and controlling future principle; he invited Mr. Tran Bao Minh to work for IDP as a Sale and Marketing Director, and assigned Mr. Tran to make plans for a new Love'in Farm product line. As a result, there was a link between evolutionary change process and effectual decision-making process because both started with an entrepreneur's a set of means. In another word, IDP employed effectuation mechanism, which was based on evolutionary process until they reach the stage of a viable tested business model.

From the above discussion of teleology change process and causal decision-making process of IDP, both processes were linked in certain ways. Firstly, both processes started with setting up goal. However, before setting up goal, IDP had to calculate expected return, to predict future demand, and to make competitive analysis. After doing all these, IDP set up a goal to enter existing organic dairy market. Secondly, both processes took actions to achieve that goal. To attain set goal, IDP avoided contingencies by centralizing organic milk production process together with training farmers on organic farming for future expansion. Lastly, both processes monitored the progress of achieving goal. This monitoring process could be done by comparing the actual results with preliminary future prediction, expected return calculation, and competitive analysis report. As a result, there was a link between teleology change process and causal decision-making process because both process started with predetermined goals. In another word, IDP used goals and teleology as driving mechanisms and tried to exploit and fill potential resource gaps to achieve these goals.

In conclusion, teleology change process and evolutionary change process helped explain the historical development of IDP. These change processes were linked with causal and effectual decision-making processes. These links contributed to the interaction between two decision-making processes. This interaction was exemplified in IDP case study. The finding from IDP case study was that Mr. Nguyen's decision-making processes follow different phases. Mr. Nguyen applied effectual decision-making process to develop a unique business model of working with local farmers to create a 100% fresh milk market. As this model proved to be viable for growth, after the first two years, Mr. Nguyen decided to continue with it. However, IDP was pushed to change their strategy when other dairy companies created a new organic dairy market segment, which IDP could not afford to follow right away. Since the organic market was an inevitable trend, IDP needed to set a new goal (entering the new market) and to collect more means to achieve that goal. They started to invite foreign investors and gradually prepare for organic technology. This was a shift to causal decision-making process with the focus on prediction to formulate the future goal. Mr. Nguyen used this goal and teleology change process as driving mechanisms and tries to exploit current means and

capture more means to fill the gap of resources to achieve the predetermined goal. At the same time, as with given well-established means, Mr. Nguyen employs effectuation mechanisms, which are based on evolutionary change process to develop a new market for IDP (organic whey protein and diet supplements market). It could be seen that, the effectual and causal decision-making processes co-exist in Mr. Nguyen's decision-making processes. Table five shows the logical map of data analysis part:

Table 5 Logical map of data analysis

Main Research Question	Sub-research questions	Themes	Literature Constructs	Empirical Data	Analysis Section
How are the interactions between effectual and causal decision mechanisms in IDP's journey to success?	How did IDP from small beginnings become one of major player in its industry?	Process Approach	Evolutionary change process	Variation of means	4.1
				Selection of a specific effect	
				Retention of that effect	
			Teleology change process	Goal formulation	4.2
	Goal implementation				
	Goal evaluation				
	Goal modification				
	How are the processes of causation and effectuation interacting?	Effectuation Process	Effectual decision-making process	Means driven action	4.3
				Affordable loss	
				Leveraging contingencies	
Controlling unpredictable future					
Strategic Partnership					
Causation Process		Causal decision-making process	Goal oriented action	4.4	
			Expected Return		
			Avoiding contingencies		
			Predicting unpredictable future		
			Competitive Analysis		

5 DISCUSSION AND CONCLUSIONS

5.1 Scientific Importance of the Study

The first sub-research question of this study is:

- How did IDP from small beginnings become one of major player in its industry?

In this study, the process approach in the form of narrations is used to answer process questions. Under the process approach, the researcher uses evolutionary change process and teleology change process to answer first sub-research question. The answer to the sub-question enables the researcher to understand the different developments of the case.

In IDP case study, Mr. Nguyen's creation of a new 100% fresh milk market was best explained by evolutionary change process and the development of an organic dairy product line to compete in an existing organic dairy was best explained by teleology change process. As such, these change processes explain different developments that IDP went through. Moreover, Mr. Nguyen is considered as unit of analysis. He is a progressing central subject, which makes events to happen and to which events occur. Based on his narratives in the form of storytelling, analysis is made on critical events influenced by him. Mr Nguyen's goal to change the consumers' habit of using liquid milk, and to push the whole dairy industry to turn to fresh milk instead of reconstituted milk in the production process is seen as the causal mechanisms for the specified development and change of IDP. Considering Mr. Nguyen as unit of analysis and his goal as the causal mechanisms for the specified development and change of IDP helps to simplify the understanding of development and change of IDP. Moreover, depending on a central subject Mr. Nguyen and critical events influenced by him, necessary causality for explaining development and change of IDP is tracked down.

To summarize the answer of first sub-research question, Mr Khai's goal of changing the consumers' habit of using liquid milk, and pushing the whole dairy industry to turn to fresh milk instead of reconstituted milk in the production process is the causal mechanisms for the specified development and change of IDP. By responding to critical events and taking into account the total set of forces affecting his decision-making process, Mr. Nguyen has changed the whole local dairy industry for better. As a result, *the finding of this study has contributed to current development of process approach by providing the real world example with critical events, responses to events, the motor of change that cause observed events to happen, and the specific circumstances when these motor of changes work.* This finding is consistent with the arguments for the development of process approach of Harre and Madden (1975) and Tsoukas (1989).

The second sub-research question of this study is:

- How are processes of causation and effectuation interacting?

Process approach and two change process theories are used to study the processes that explain the development of IDP, in order to understand how IDP from small beginnings became one of the major players in its industry. This understanding enables the researcher to answer second sub-research question of how processes of causation and effectuation are interacting.

In IDP case study, Mr. Nguyen's decision-making processes follow different phases. Mr. Nguyen applied effectual decision-making process to develop a unique business model of working with local farmers to create a 100% fresh milk market. As this model proved to be viable for growth, after the first two years, Mr. Nguyen decided to continue with it. However, IDP was pushed to change their strategy when other dairy companies created a new organic dairy market segment, which IDP could not afford to follow right away. Since the organic market was an inevitable trend, IDP needed to set a new goal (entering the new market) and to collect more means to achieve that goal. They started to invite foreign investors and gradually prepare for organic technology. This was a shift to causal decision-making process with the focus on prediction to formulate the future goal. Mr. Nguyen used this goal and teleology change process as driving mechanisms and tries to exploit current means and capture more means to fill the gap of resources to achieve the predetermined goal. At the same time, as with given well-established means, Mr. Nguyen employs effectuation mechanisms, which are based on evolutionary change process to develop a new market for IDP (organic whey protein and diet supplements market). It could be seen that, the effectual and causal decision-making processes co-exist in Mr. Nguyen's decision-making processes.

The main research question of this study is:

How are the interactions between effectual and causal decision mechanisms in IDP's journey to success?

The answers to the two sub-research questions enable the researcher to answer the main research question. Answer to main research question contributes to the gap of interactions between effectual and causal decision-making processes, and can be put in general term as: *Business develops with the help of effectuation process until a business model is established, executed, and viable for growth. It continues to use this process up to a certain degree. When the market changes, the company needs to collect more means to adapt to the changes. They need to set new goals and this is a shift to the use of causal process, which builds on prediction. It uses goals and teleology as driving mechanisms and tries to exploit and fill potential resource gaps to achieve these goals. At the same time, there are new iterations that look to establish new lines or types of business with the given means, which are now well established. This again employs ef-*

fectuation mechanisms, which are based on evolutionary process, until they reach the stage of viable tested business model. As a result, effectuation and causation decision-making processes can be combined in different phases of business development. Table six summarizes the scientific importance of this study.

Table 6 Summary of scientific importance of the study

Specific scholarly discussions	Specific references	Different findings of the study
Development of process approach	Harre and Madden (1975) and Tsoukas (1989).	<i>Contributing to current development of process approach by providing the real world example with critical events, responses to events, the motor of change that cause observed events to happen, and the specific circumstances when these motor of changes work</i>
Development for the interactions between effectual and causal decision-making processes	Chandler et al. (2011, 376)	<i>Business develops with the help of effectual process until a business model is established, executed, and viable for growth. It continues to use this process up to a certain degree. When market changes, company needs to collect more means to adapt to change. They need to set new goals and this is a shift to the use of causal process, which builds on prediction. It uses goals and teleology as driving mechanisms and tries to exploit and fill potential resource gaps to achieve these goals. At the same time, there are new iterations that look to establish new lines or types of business with the given means, which are now well established. This again employs effectuation mechanisms, which are based on evolutionary process, until they reach the stage of viable tested business model</i>

Moreover, the contributions to the process approach and interactions between effectual and causal decision-making processes are visualized in the figure eleven that is the

modified framework of interactions between effectual and causal decision-making process.

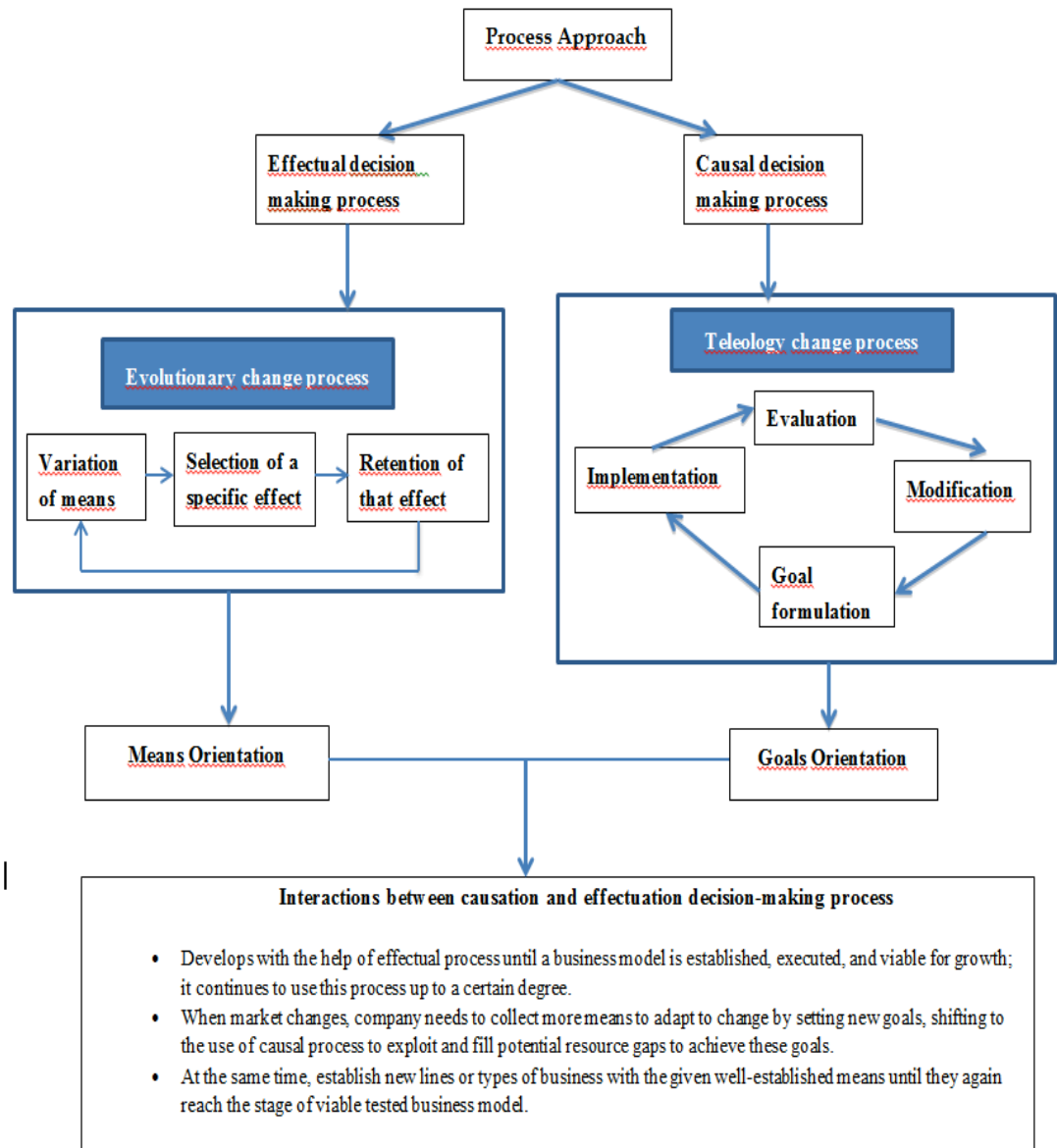


Figure 11 Modified framework for interactions of causation and effectuation decision-making process

The purpose of this study is to develop a framework that explains the interactions between effectual and causal decision-making processes. Figure eleven shows the modified framework for the interactions between two important decision-making processes. It is developed based on the comparisons between preliminary theoretical framework and findings from case study.

This framework starts with the process approach. Under process approach, two decision-making processes, namely effectual decision-making process and causal decision-

making process are discussed to understand the different decision-making processes of an entrepreneur. Moreover, evolutionary change process and teleology change process are applied to explain the different development of the case.

It was found out that evolutionary change process and effectual decision-making process both start with an entrepreneur's set of means. In another word, IDP employed effectuation mechanism, which was based on evolutionary process until they reach the stage of a viable tested business model. Moreover, teleology change process and causal decision-making process both start with predetermined goals. In another word, IDP uses goals and teleology as driving mechanisms and tries to exploit and fill potential resource gaps to achieve these goals.

Moreover, the links between evolutionary change process and effectual decision-making process, and between teleology change process and causal decision-making process, contribute to the interactions of causation and effectuation decision-making processes. The interactions between two decision-making processes are that business develops with the help of effectual process until a business model is established, executed, and viable for growth. It continues to use this process up to a certain degree. When the market changes, the company needs to collect more means to adapt to changes. They need to set new goals and this is a shift to the use of causal process, which builds on prediction. It uses goals and teleology as driving mechanisms and tries to exploit and fill potential resource gaps to achieve these goals. At the same time, there are new iterations that look to establish new lines or types of business with the given means, which are now well established. This again employs effectuation mechanisms, which are based on evolutionary process, until they reach the stage of viable tested business model. In summary, effectual and causal decision-making processes can be combined in different phases of business development. As a result, the order of the modified framework is changed from the preliminary theoretical framework.

5.2 Entrepreneurial and managerial importance of this study

Below is a list of entrepreneurial and managerial contribution of this study, as a real life example.

- Strategic decision-making in establishment stage: market choice and distribution strategy

While it is optimal for entrepreneurs to create their own new market, this is not always practical in real life, due to the lack of resources. It is therefore more effective to focus on a niche market in which their already-obtained resources are most useful. In this specific case, IDP chose to start with their local market, although that was not the biggest market for dairy product, because they wanted to use their connection and save

on distribution and transportation cost. They also avoided entering big supermarket or advertising in mass media and confronting with giant rivals right away. They again made use of their connection and signed contracts with local schools, and in this strategy they gradually increased their sales and profits without worrying about any decline in the whole market.

- Strategic partnerships

Choosing the correct partners is one of the determining points in business. For small firms, they usually have difficulty in finding good partners, and their lack of attraction comes from their limited resource. However, making the right choice and showing values other than financial source might help. For example, IDP had always been consistent with their core value, which was trying to balance the benefit for the company-farmers-the whole society. Not only they started off with this core value, they also adjust all their goals and plans in every stage of their development to keep it. This core value, while might sound impractical at first, actually helped IDP to gain lots of expertise, knowledge resources and become successful.

- Strategic use of current means

Most small firms start up with limited resources. However, making the most out of their current means is a better way than setting up impractical goals and playing high risk. It is effectual to start with means before goals at first. After the establishment, if the business model proves to work, means will be accumulated gradually, providing resources to make a big change and achieve bigger goals in the next steps.

- Taking affordable risk

While there is always a chance that business might fail, taking risk with a careful and thorough study of the situation is a way for a small firm to drastically become bigger. It is true that in every difficulty lies opportunities. Being prepared for changes and opportunities is very important.

- Combining effectual and causational decision making processes

The findings of this study can help any companies to understand better the interactions between causation decision-making process and effectuation decision-making process so that they can execute their decision-making processes more effectively.

5.3 Limitations and Suggestions for Future Research

The most obvious limitation of this study is that it is based solely on a single case study. Therefore, the framework has to some extent limit of generalization. However, as debated by Mohr (1982), the framework built on the process approach does show some patterned regularities over time that can be verified in other situations to attain generalized conclusion, and even though process approach does not contribute to context-free

generalizations, its results can be generalized in such a way that necessary conditions can lead to a reasonable causal explanation when they are combined in a specific way as to tell the story of how and at whatever time the outcome occurs. As such, the first recommendation for future research is for more studies also taking a process approach with longitudinal and narrative settings on verifying the success of IDP over time in other situations to achieve generalized conclusion.

Secondly, the most important finding of this study is that business develops with the help of effectual process until a business model is established, executed, and viable for growth. It continues to use this process up to a certain degree. When the market changes, the company needs to collect more means to adapt to changes. They need to set new goals and this is a shift to the use of causal process, which builds on prediction. It uses goals and teleology as driving mechanisms and tries to exploit and fill potential resource gaps to achieve these goals. At the same time, there are new iterations that look to establish new lines or types of business with the given means, which are now well established. This again employs effectuation mechanisms, which are based on evolutionary process, until they reach the stage of viable tested business model. In summary, effectual and causal decision-making processes can be combined in different phases of business development. However, the limitation of this study is that although managers and entrepreneurs of small firms can apply this finding, hoping to successfully establish and run an effective business, it should be taken into consideration certain important characteristics. For example, IDP had a very talented CEO, a special core value, resulting in a very special business model, and was set up in a developing country, in which the dairy market still had many rooms to grow. Therefore, it is recommended that contribution of this study be served as a starting point for further research as well as a real life example for new firms.

6 SUMMARY

“The path to new venture creation may follow a well-defined causation approach in which those who identify opportunities, bring together resources efficiently, and work according to a plan may achieve competitive advantage; however the path to new venture creation may also be a process of experimentation, affordable loss, and flexibility that results in entrepreneurial success. It will be up to future research to determine the circumstances under which each approach is more appropriate for a particular individual or an opportunity”. (Chandler et al. 2011, 376) This study has taken steps towards conducting a research on the different circumstances that affect the decision-making processes of firms. A case study is used to explore the determinants of both decision-making processes, and acts as an important context for exploring the applicability of both processes. Importantly, it explores the interactions between causation and effectuation decision-making processes.

This study makes the entrepreneur Mr. Nguyen, CEO and Chairman of IDP, the unit of analysis. Mr Nguyen’s goal was to change the consumers’ habit of using liquid milk, and push the whole dairy industry to turn to fresh milk instead of reconstituted milk in the production process. Mr. Nguyen is considered as a unit of analysis and his goal as the causal mechanisms for simplifying the understanding of the specified development and change of IDP. Through this consideration, this study then attempts to answer the first sub-research question of How did IDP from small beginnings become one of major player in its industry? To answer this question the process approach together with two prominent change processes, namely evolutionary change process and teleology change process, were used to track down the critical events, responses to events, and generative mechanisms leading to the outcomes. As a result, the understanding of different change processes leading to the success of IDP was achieved. This understanding contributes to current development of process approach, providing the real world example with critical events, responses to events, the motor of change that cause observed events to happen, and the specific circumstances when these motor of changes work.

In addition, after using process approach and two change theories to explain the different developments of IDP, the researcher then attempts to answer the second sub-research question of How are processes of causation and effectuation interacting? To answer second sub-research question, Mr. Nguyen is considered as the unit of analysis together with his goal as the causal mechanisms for his decision-making processes. From IDP’s inception to its current state, Mr. Nguyen uses both decision-making processes to respond to changes, but focuses more on effectual decision-making process. He also flexibly applies both decision-making processes for dealing with various circumstances. As such, he shifts from effectual decision-making process to causal decision-making process, and vice versa.

Finally, the answers of two sub-research questions enable the researcher to answer the main research question of How are the interactions between effectual and causal decision mechanisms in IDP's journey to success? This understanding contributes to the interactions gap between effectual and causal decision-making processes, and can be generalized as follows: when business develops with the help of effectual process until a business model is established, executed, and viable for growth. It continues to use this process up to a certain degree. When the market changes, the company needs to collect more means to adapt to changes. They need to set new goals and this is a shift to the use of causal process, which builds on prediction. It uses goals and teleology as driving mechanisms and tries to exploit and fill potential resource gaps to achieve these goals. At the same time, there are new iterations that look to establish new lines or types of business with the given means, which are now well established. This again employs effectuation mechanisms, which are based on evolutionary process, until they reach the stage of viable tested business model. As a result, effectual and causal decision-making processes can be combined in different phases of business development.

REFERENCE

- Abbott, A. (1988) *Transcending general linear reality*. *Sociology Theory* 6, 375-392.
- Abbott, A. (1990) *Conceptions of time and events in social science methods: causal and narrative approaches*. *Hist. Methods* 23, 140-150.
- Aldrich, H. E. (2001) "Who Wants to be an Evolutionary Theorist?: Remarks on the Occasion of the Year 2000", OMT Distinguished Scholarly Career Award Presentation, *Journal of Management Inquiry*, Vol. 10 (2), 115-127.
- Angrosino, M. (2007) *Doing Ethnographic Observational research*. Sage Publications, London, England.
- Ansoff, H.I. (1979) *The changing shape of the strategic problem*. In D. E. Schendel & C. W.
- Ansoff, I. (1991) Critique of Henry Mintzberg's "The design school: Reconsidering the basic premises of strategic management." *Strategic Management Journal*, Vol. 12 (2), 449-461.
- Atkinson, P. - Coffey, A. - Delemont, S. - Lofland, J. – Lofland, L. (2007) *Handbook of Ethnography*, SAGE Publications, London, England.
- Atkinson, P. - Hammersley, M. (1994) *Ethnography and Participant observation*, SAGE publications, London, England.
- Bloor, M. – Wood, F. (2006) *Keywords in Qualitative Methods A Vocabulary of Research Concepts*. SAGE Publications, London.
- Brews, P. – Hunt, M. (1999) Learning to plan and planning to learn: resolving the planning school/learning school debate. *Strategic Management Journal*, Vol. 20 (10), 889-914.
- Chandler, G. N. - DeTienne, D. R. - McKelvie, A. - Mumford, T. V. (2011) Causation and effectuation processes: A validation study. *Journal of Business Venturing*, Vol. 26 (1), 375-390.
- Dean, J. J. – Sharfman, M. P. (1996) Does decision process matter? A study of strategic decision-making effectiveness. *Academy of Management Journal*, Vol. 39(2), 368-396.
- Dew, N. - Read, S. - Sarasvathy, S. D. - Wiltbank, R. (2009) Effectual versus predictive logics in entrepreneurial decision-making: differences between experts and novices. *Journal of Business Venturing*, Vol 24 (4), 287-309.
- Eriksson, P. - Kovalainen, A. (2008) *Qualitative methods in business research*. London: SAGE.
- Fisher, C. (2010) *Researching and writing a dissertation. An essential guide for business students*. Essex: Pearson Education Limited.

- Goll, I. – Rasheed, A. M. A. (1997) Rational decision-making and firm performance: the moderating role of environment. *Strategic Management Journal*, Vol. 18 (7), 583-591.
- Harre, R. – Madden, E. A. (1975) *Causal powers*. Totowa, NJ: Littlefield Adams.
- Harvey, L. J. - Myers, M. D. (1995) Scholarship and practice: the contribution of ethnographic research methods to bridging the gap, *Information Technology & People*, Vol. 8 (3), 13-27.
- Hough, J. R – White, M. A. (2003) Environmental dynamism and strategic decision making rationality: an examination at the decision level. *Strategic Management Journal*, Vol. 24 (5), 481-489.
- Leininger, M. (1985) Ethnography and ethn nursing: Models and modes of qualitative data analysis. In: *Qualitative research methods in nursing*, ed. by Leininger, 33-71. New York: Grune & Stratton.
- Lincoln, Y. - Guba, E. (1985) *Naturalistic Inquiry*. Newbury Park: SAGE Publications.
- Malhotra, N. K. – Birks, D. F. (2006) *Marketing Research, An Applied Approach*. Updated Second European Edition. Prentice Hall, England.
- March J. G. (1978) Bounded rationality, ambiguity, and the engineering of choice. *Journal of Economics*, Vol. 9 (2), 587-604.
- March, J. G. (1982) The technology of foolishness. In: *Ambiguity and Choice in Organizations*, ed. by March, 69-81. Universitetsforlaget: Bergen, Norway.
- Miller, C. C – Cardinal, L. B. (1994) Strategic planning and firm performance. *Academy of Management Journal*, Vol. 37 (6), 1649-1665.
- Miller, D. - Friesen, P. H. (1983) Strategy-making and environment: the third link. *Strategic Management Journal*, Vol. 4 (3), 221-235.
- Mintzberg, H. - Waters, J. A. (1985) Of strategies, deliberate and emergent. *Strategic Management Journal*, Vol. 6 (3), 257-272.
- Mohr, L. B. (1982) *Explaining organizational behavior*. San Francisco: Jossey-Bass.
- Pearce, J. A.– Robbins, D. K. – Robinson, R. B. (1987). The impact of grand strategy and planning formality on financial performance. *Strategic Management Journal*, Vol. 8 (2), 125–134.
- Pentland, B. T. (1999) Building process theory with narrative: from description to explanation. *Academy of Management Review*, Vol. 24 (4), 711-724.
- Pettigrew, A.M. (1990) Longitudinal field research on change: theory and practice. *Organization Science*, Vol. 1 (1), 267-292.
- Poole, M. S. - Van de Ven, A. H. - Dooley, K. - Holmes, M. E. (2000) *Organizational Change and Innovation Process*. Oxford University. Press, Oxford, UK.

- Porter, M. E. (1980) *Competitive strategy: Techniques for analyzing industries and competitors*. New York: Free Press.
- Priem, R. L. - Rasheed, A. M. A. - Kotulic, A. G. (1995) Rationality in strategic decision processes, environmental dynamism, and firm performance. *Journal of Management*, Vol. 21 (5), 913-929.
- Read, S. – Song, M. – Smit, W. (2009) A meta-analytic review of effectuation and venture performance. *Journal of Business Venturing*, Vol. 24 (6), 573-587.
- Sarasvathy, S. D, Dew, N. (2005) New market creation through transformation. *Journal of Evolutionary Economics*, Vol. 15 (1), 533-565.
- Sarasvathy, S. D. (2001a) Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, Vol. 26 (2), 243-263.
- Sarasvathy, S. D. (2001b) Effectual reasoning in entrepreneurial decision making: existence and bounds. Best paper proceedings, *Academy of Management*, 2001. Washington, DC.
- Sarasvathy, S. D. (2001) Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, Vol. 26 (2), 243- 256.
- Saunders, M. - Lewis, P. - Thornhill, A. (2007) *Research Methods for Business Students*. Fourth Edition. Prentice Hall, England.
- Simon, H. A. (1996) *Sciences of the Artificial* (3rd edition). MIT Press: Cambridge, MA.
- Stake, R. E. (1995) *The Art of Case Study Research*. Sage Publications, Inc, California.
- Stake, R. (2005) *Qualitative case studies*. In: *Handbook of qualitative research*, ed. by Denzin – Lincoln, 443–465. Thousand Oaks: Sage.
- Szulanksi, G. – Amin, K. (2001) Learning to make strategy: balancing discipline and imagination. *Long Range Planning*, Vol. 34 (2), 537-556.
- Tsoukas, H. (1989) ‘The validity of ideographic research explanations’. *Academy of Management Review*, Vol. 14(4), 551-561.
- Tushman, M. L. - Romanelli, E. (1985) Organizational evolution: A metamorphosis model of convergence and reorientation. In: *Research in organizational behavior*, ed. by Staw – Cummings, 171-222. Greenwich, CT: JAI Press.
- Van de Ven, A. H. - Engleman, R. M. (2004) Event and outcome driven explanations of entrepreneurship. *Journal of Business Venturing*, Vol. 19(2), 343–358.
- Van de Ven, A. H. - Poole, M. S. (1995) Explaining development and change in organizations. *Academy of management review*, Vol. 20 (3), 510-540.

- Van de Ven, A. H. - Poole, M. S. (2005) Alternative approaches for studying organizational change. *Organization Studies*, Vol. 26 (9), 1377–1404.
- Van de Ven, A. H. - Sun, K. (2011) Breakdowns in implementing models of organization change. *Academy of Management Perspective*, Vol 15 (2), 58-74.
- Welch, C. - Piekkari, R. – Paavilainen, M, E. (2011) Theorising from case studies: towards a pluralist future for international business research. *Journal of International Business Studies*, Vol. 42 (5), 740-762.
- Willis, J. W. (2007) *Foundations of qualitative research: interpretive and critical approaches*, SAGE publications, California, United States.
- Wiltbank, R. - Dew, N. - Read, S. - Sarasvathy, S. D. (2006) What to do next? The case for non-predictive strategy. *Strategic Management Journal*, Vol 27 (10), 981–998.
- Yin, R. K. (2003) *Case Study Research design and Methods*. Third Edition Applied Social Research Methods Series Volume 5. Sage Publications, United States.
- Yin, R. (1989) *Case study research. Design and methods*. Newbury Park: Sage Publications.

FIELD DATA AND SECONDARY DATA

- Bao Nguyen (2013) Article on the CEO and Chairman of IDP in Vietnamese economic magazine. Published, 07.10.2013. Vol. 20 (5), 20-21.
- Chairman & CEO Nguyen Tuan Khai (2014) Discussion at the work place. 28.01.2014, from 10:30 to 11:30. Tay Ho, the meeting room. Hanoi.
- Chairman & CEO Nguyen Tuan Khai (2014) One-to-one in depth interview. 10.01.2014, from 14:30 to 15:30. Tay Ho, the CEO & Chairman's room. Hanoi.
- Global Dairy Report (2011) United States Department of Agriculture, retrieved 05.11.2013.
- Homepage of IDP (2013) <<http://www.idp.vn/>> retrieved 15.11.2013.
- Production Manager Nguyen Tuan Minh (2014) One-to-one in depth interview. 12.01.2014 from 10:00 to 11:00. Tay Ho, the meeting room. Hanoi.
- Project Diary Information Memorandum (2013) IDP Marketing Department, retrieved 10.11.2013.
- Sales and Marketing Manager Tran Thai Bao (2014) One-to-one in depth interview. 01.01.2014 from 10:30 to 11:30. Tay Ho, the meeting room. Hanoi.
- Staff Bui Thai (2014) Discussion with the staff at the work place. 05.01.2014 from 10:30 to 11:30. At the main building of IDP.
- Technical Manager Phan Sy Minh (2014) Responsible of technical department. Discussion at the workplace. 02.01.2014 from 9:30 to 10:30. At the main building of IDP.
- Vietnam Dairy Industry Report (2012) Economist Intelligence Unit. retrieved 15.11.2013.
- Vietnam Dairy Industry Report (2012) Vietnam Ministry of Industry and Trade. retrieved 20.11.2013.

APPENDIX 1 SEMI-STRUCTURED INTERVIEW WITH THE CHAIRMAN AND
CEO OF IDP

1. Could you please tell me about the reasons why you decided to establish a dairy company in 2004?
2. Could you please tell me about the event in 2008 when IDP stepped up and bought all redundant milk from local farmers after the Melanin crisis?
3. Could you please tell us more about your dairy training farm, which was opened in 2010?
4. Could you please tell us more about Love 'in Farm product line, which was more expensive than other dairy products in the market?
5. Along with introducing Love 'in Farm, IDP made headlines in many business magazines in 2012 because you started to work with Mr Tran Bao Minh, one of the most powerful person in Sale and Marketing area of Vietnam. He brought success to many giant brands in food industry, namely Vinamilk, TH True Milk and so on. Could you please share some thoughts about this?
6. Could you please share with us some future plans for IDP?

APPENDIX 2 SEMI-STRUCTURED INTERVIEW WITH PRODUCTION MAN-
AGER OF IDP

1. In 2010, you were responsible for technical set up of the training centre in IDP's dairy farm. Could you please tell us about your work during that time?
2. It was reported that IDP would be changing to bio-technology and bio-material. Could you explain more about this plan?
3. IDP has a very unique business model, comparing to other dairy companies in Vietnam. What do you think about this? Could you please tell me some of your feelings about IDP and the company's BOD?
4. IDP is very well known for the special core value, attaching company's benefit with customer's and society's. Please share some of your thought about this.

APPENDIX 3 SEMI-STRUCTURED INTERVIEW WITH MARKETING MANAGER OF IDP

1. Love'in Farm was the very first line of dairy product made from 100% fresh cow milk for southern market Vietnam. This product line was considered the biggest success of IDP so far. What made it so successful, in your opinion?
2. IDP has a very unique business model, comparing to other dairy companies in Vietnam. What do you think about this? Could you please tell me some of your feelings about IDP and the company's BOD?
3. IDP is very well known for the special core value, attaching company's benefit with customer's and society's. Please share some of your thought about this.

APPENDIX 4 UNSTRUCTURED INTERVIEW WITH LOCAL FARMER

1. Why did you choose to work with IDP and not other companies? Could you please share some thoughts, feelings or memories about IDP?
2. You were one of the first people attending training course at IDP's training centre. What do you think about the course?