

# Sequentially Linked Cases

## Increasing Understanding through Case Studies

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### **Abstract**

Case studies have become an essential component of business education. Although case studies provide a viable platform for the transfer of knowledge (a fundamental principle of education), we question whether they provide business students with opportunity for skill development and reflection based on real world experiences. This research will present a justification for sequentially linked cases as a means to enrich the learning experience with case study methodology. Sequentially linked cases are cases which are written in series and where each case is dependent on the case or cases that precede it.

### **Introduction**

The use of case studies, in their various forms, has become an essential component of business education. The objective of a case study is to support learning through knowledge transfer which is a fundamental principle of education. Willis Emmons (2010) states that Harvard University considers knowledge transfer to be the first level of learning. They consider "skill development" to be the next level of learning. This includes analytical skills, decision-making skills and diagnosis skills. The third level of learning is what Emmons refers to as attitude. This deals with students learning about themselves, their own identity by utilizing self-reflection and by learning to work with other people (Emmons, 2010).

The challenge then becomes what knowledge is useful a business education and what are some of the short-comings? This research will present a justification for using case studies based on a literature review of the current use of case studies in business education and consider the use of sequentially linked cases as a means to enrich the learning experience with case study methodology. Sequentially linked cases are cases which are written in series and where each case is dependent on the case or cases that precede it. We will follow this up with an overview of writing sequentially linked case studies.

### **Traditional Case Study Methodology**

The education debate has centered on how we teach students not only at the primary and secondary levels but the tertiary levels as well. Arguments have been put forth that graduating students from business schools across the world are unprepared for the business environment (Luparelli, 2010; Pfeffer & Fong, 2002). Case studies present an opportunity to provide a glimpse into that business environment (Credle, Beale, & Maheshwari, 2009; Iqbal, Shaikh, & Nazar, 2010). When using case studies the educator is attempting to put the student in a real life situation to gain a deeper understanding of how various business and management concepts can

be applied (Luparelli, 2010; Pariseau & Kezim, 2007). This is truly an admirable step forward getting away from memorization and theoretical application and providing students with the skills necessary to apply the knowledge they have gained (Christensen & Carlile, 2009; Pariseau & Kezim, 2007).

What we see often lacking in business case studies is follow up information. In other words, did the students' decisions reflect the real world decisions? If we are to provide real life experience then we should follow it up with real life decisions. Whether those decisions were the correct decision according to theory or not they still provide learning opportunities. As is commonly the case business decisions are made without valuable information and at times are made by individuals without management/business training. That is the reality of the world we do business in. There are so many factors that influence a decision that by not following a case up with an analysis of the real world decision we lose the real world value of the lesson. We believe the answer lies within sequentially linked cases. These cases follow a business decision from the beginning to the end. Thus students can see the results of decisions and learn valuable lessons from the triumphs and failures illustrated in case studies.

This concept of pushing the boundaries of business education to the edge of experiencing real life without leaving the classroom is in some situations absolutely necessary to prepare students for life after a degree (Blood, 2006; Christensen & Carlile, 2009). The Dean of the Harvard Business School credits the use of case studies for providing students the experience of solving management problems (Nohria, 2012). However, he has recently taken the step to provide students with real world experiences through an extensive global business immersion program. This is an ideal solution but, unfortunately, not all institutions have the financial resources or site access that Harvard is privy to. Some countries, particularly in developing countries, have educational systems that are based ideas of learning which have historical roots that have remained static for decades. These are based on memorization and a teaching methodology is teacher centric, not student centric; teaching style still relies on one-way communications rather than dialogue (Hofstede, 2001).

Students from developing countries with high unemployment rates and/or an underdeveloped business environment may be lacking relevant business experience which could make it difficult for them to understand the context of a case. There can also be an issue with case studies where that instructor may not have to depth of experience to provide a deep understanding of the case and the potential impact of various decisions to the situation being analyzed. The researchers argue that providing opportunities to reflect on real world scenarios is increasingly important in a tertiary education and the use of sequentially-linked cases may provide a more enduring learning experience.

### **Sequentially Linked Cases**

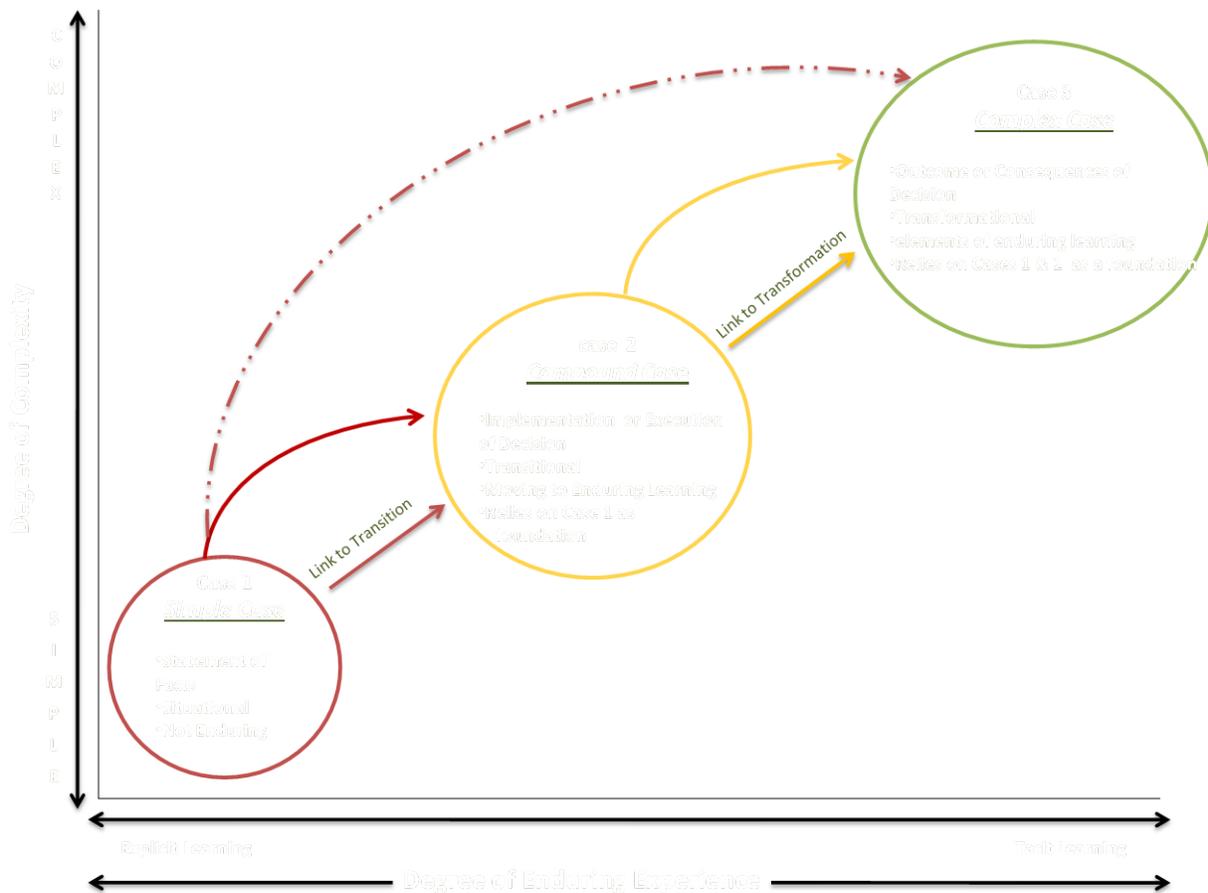
Single cases are generally situational and while they are elaborate, they focus primarily on a single situation and are a statement of fact. This type of case will generally require some form of analysis and possibly a decision. If the situation is solely descriptive, the analysis may be all that is required. This type of case has no distinct sequential linkage. Sequentially linked cases are researched and written in series as they happen with each case being separate and distinct. For presentation and learning purposes, each case is dependent on the case or cases that precede it.

The next stage of a sequentially linked case study will explicitly state what decision was made and explain why it was made. This is in essence the rationalization of the decision. This

can be from a strategic perspective, an operational perspective or whatever perspective or perspectives are deemed appropriate. The case will also show the implementation of the decision and document what actions were taken to ensure the success of the decision. This is now a compound series of sequentially linked cases; the first case being situational and the second case being transitional. The degree of complexity will increase with the second case. The second case will be dependent on the first case and enhances the value of the first case while having limited value itself as a stand-alone case. The learning experience moves towards being more enduring through the vicarious experience.

The third stage of a sequentially case study will examine and explain the outcomes of the decision and implementation. It is results oriented and may be considered transformational if the outcome is positive or consequential if the outcome is negative. It will follow the perspectives established in the second case. It is directly dependent on the second case and indirectly dependent on the first case. This now takes the cases from being compound to exhibiting an increasing degree of complexity and moves the learning to a more enduring experience by closing the loop. The student develops an understanding of the three phases of decision-making.

Figure 1: Sequentially Linked Case Study Learning Experience

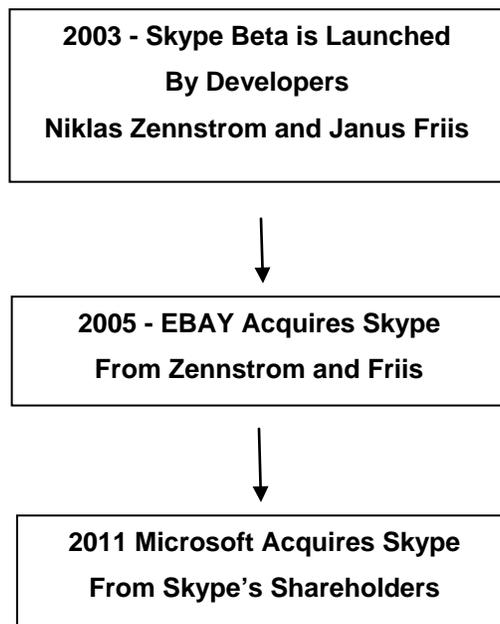


Graphically, this may be seen in Figure I. The simple case is primarily a learning experience and the knowledge imparted might be seen by the student as being superficial. As the student moves through the three stages of the case the learning will shift from knowledge to understanding. Wiggins and McTighe (2005) state that knowledge relates to facts such as right or wrong or that an individual will respond on cue with what they know. Understanding demonstrates the meaning of the facts and that the individual will understand why it is and will judge when to use what they know. Understanding is considered to be a more complex and means "...to grasp the meaning of a thing, event or situation is to relations to other things." (Wiggins & McTighe 2005, p. 38)

### **Researching and Writing Sequentially Linked Cases:**

When writing sequentially linked case studies there are generally two sources of research into the subject. One is the use of public information and the second is the use of non-public information utilizing interviews or transcendental phenomenology where the researcher is part of the process being documented. The history of the ownership of Skype from its inception in 2003 through to its sale to Microsoft in 2011 provides three separate phases of Skype's history, each of which could be written as a case. ABC News' article "At a Glance: Important Dates in Skype's History" can be used as a model for sequentially linked cases from public information (ABC, 2012). Three hypothetical cases sequentially linked cases would be as seen in Figure 2.

Figure 2: Sequentially Linked Cases from Public Information – Skype



The first example of sequentially linked cases illustrates the use of public information. The example documents the launch of Skype Beta in 2003 by Niklas Zennstrom and Janus Friis, who had previously created Kazaa, a music downloading service. The teaching objective would be to have students understand the entrepreneurial model that Zennstrom and Friis applied to peer-to-peer networks in order to make the transition from file sharing to developing an international

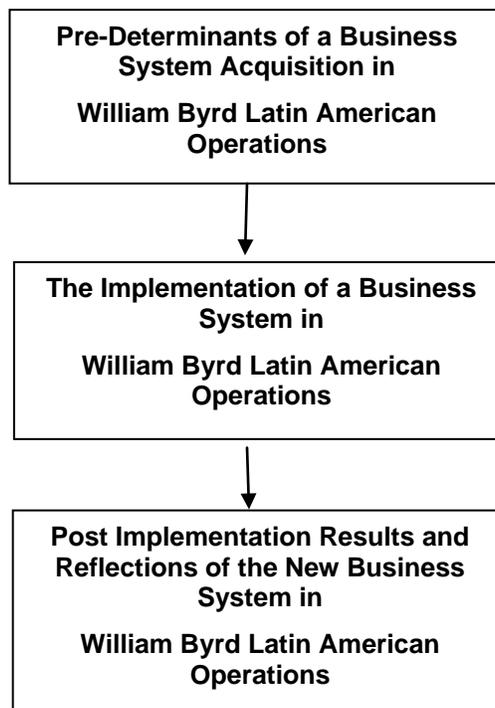
telephone network. Case 1 could document the decision to apply peer-to-peer networks to a “voice over internet provider” (VOIP) protocol. The second case would document at the development of the model and its implementation. The third case could examine transformation of inexpensive global communications using VOIP.

The second set of sequentially linked cases study could document with the sale of Skype to EBay in 2005 for \$2.6 billion. This first case could cover the valuation of the acquisition, the second case could document the integration of Skype into EBay and the third case would document the subsequent write-down of investment and the process that lead up to the subsequent public offering in August 2009. The teaching objective would be to take the student through the acquisition process to the public offering which in this case was part of the life-cycle of Skype.

The last set of sequentially linked cases could analyze the subsequent acquisition of Skype by Microsoft for \$8.5 billion following the same pattern as the previous set of cases. The teaching object would be to understand why Microsoft gave Skype such a higher value that EBay had six years earlier.

At a higher level the linkage would be Skype going from an entrepreneurial enterprise to a division of a multinational corporation to the final divestiture. At a minimum, the researchers would need to support the case with information from legitimate news sources, corporate releases and legal submissions made to various government agencies. This should allow the student to understand the initial decision by EBay and track the implementation and consequences of this decision.

**Figure 3.** Sequentially Linked Cases Using Transcendental Phenomenology – William Byrd Latin American Operations



The standardization of business systems in William Byrd's Latin American operations (Attachment #1) provides an example of a case study that uses transcendental phenomenology. In this case the researcher/primary case writer was involved in the project from its inception due to his responsibilities as the senior financial manager for Byrd's Latin American operations. As a member of the decision-making team and the implementation team, he had deep insight into the decision-making process and the underlying rationale for why things happened as they did. The three sequentially-linked cases were structured as shown in Figure 3.

The first case gives an overview of William Byrd's Latin American operations with particular emphasis on the Division's business system situation in 1998. The case goes on to explain how the organization was not prepared for the Y2K threat and, as a consequence, needed to decide optimal solution for eliminating the threat. The case ends with William Byrd's management team looking at four possible solutions to their dilemma. This then allows the students to make their own assessment of the four options and select one or develop an alternative option. Note that this is written as a single case. Under the model in Figure I this would a situational case and its function is to position the subsequent cases.

Each operation of William Byrd, Inc. was in a separate country. In 1998 the company was facing the Y2K millennium crisis and needed to either upgrade existing systems in its Latin American operations which was considered to be a high risk, low return option or introduce new business systems throughout the region. The management in the US headquarters felt that they had four options:

1. They could try and develop patches the existing systems to get them through the Y2K threat although this carried the risk that if the patches were not successful, there could be a major disruption the operations. If the patches were not successful, the operations would also be in violation of a corporate mandated that stated all systems had to be in compliance with Y2K guidelines which required the systems be failsafe.
2. They could implement local systems that would not be standard across the region. This would not necessarily require a coordinated plan.
3. They could implement MFG/PRO in some but not all operations.
4. They could proceed with the full regional implementation simultaneously in all six operations or phased in over a slightly longer period of time.

The first case deals with the decision by explaining the back ground of the organization and the determinants of the decision-making process. Questions for the students could include:

1. List the merits and drawbacks of each four options.
2. Do you think the current management style in the Latin American operations will be an impediment or a benefit? Justify your answer.
3. Based on your responses to the above questions what is the most appropriate way forward for William Byrd Latin American operations? Justify your answer.

The second case states the decision that the manage team from William Byrd made which was to implement MFG/PRO in Brazil, Venezuela and Mexico, the three largest operations immediately and the other three operations would follow in mid 1999. The case then goes on to document the regional implementation strategy and the local implementation template. This gives the students insight into the implementation of the decision at a regional and local level. Under the model in Figure I this would a transitional case and its function is to bridge the prior case and the subsequent cases. This makes the cases compounded cases. The second case addresses the implementation of the decision which was the fourth option. Questions could include:

- 1) What are the advantaged and disadvantages do you anticipate for a single regional capital expenditure request (CAPEX)?
- 2) Who should take ownership of the CAPEX? Justify your answer.

- 3) What are the strengths and weaknesses of the planned implementation process?
- 4) What problems do you anticipate operationally and regionally with the system implementation?

The third case examines that actual implementation relative to the planned implementation by outcomes and the consequences of the decision and subsequent implementation. The case then goes on to reflect on the process after it was completed. This is one of the advantages of using transcendental phenomenology; the students now see what went as planned and what did not go according to plan and allows the student to understand some of the stumbling blocks that were never considered in the planning stage. Under the model in Figure I this would a complex case and its function is close the loop. The third case addresses the “Post Implementation Results” and questions could include:

- 1) What are the advantages and the disadvantages of standardizing on a single software supplier in Latin America and in the Americas?
- 2) What are some of the main considerations that a company would need to anticipate in standardizing on a single software solution?
- 3) What obstacles would one anticipate in this process?
- 4) What benefits, both quantitative and qualitative, would one anticipate receiving over the medium term?

As can be seen with the examples provided the limitation of sequentially linked cases is the time involve in the evolution of the cases. The Skype example unfolds over a nine year period and the William Byrd case covers a three year window. However, history has provided case writers with a cornucopia of failures and success that can be utilized for sequentially linked case learning.

### **Conclusion**

We have argued that although case studies are an essential part of learning in today’s tertiary education systems, especially in business education, they need to reflect a higher level of learning rather than just knowledge transfer. Using sequentially linked cases as a teaching tool we believe elevates the learning experience from tacit (knowledge transfer) to explicit learning (complexity and application). The process of following a decision from formation to implementation and results creates a vicarious, enduring learning experience. Business students graduating from universities across the globe are now faced with an environment that has become interconnected and dynamic. To match pace with this new environment, students must understand it and have the skills to compete within it. We believe sequentially linked cases provides a viable teaching method to obtain insights and skills that will prepare students for the dynamic environment they step into.

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