Soft Systems Methodology: A Case Study of the Decline of BlackBerry

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Abstract
This report contains a case study of the real-world problem of the decline of Blackberry. The case study has been analysed through the application of Peter Checkland's Soft Systems Methodology (SSM) framework. The first four stages of the conventional seven-stage SSM model have been utilized to aid our enquiry of the problem space and the human activity system. The set of related human activity systems that influence Blackberry are analysed and defined by the production of a rich picture, root definitions and conceptual models, the output being a conceptual representation of the problems and potential areas that may be explored in an attempt to resolve these.
# Table of Contents

ABSTRACT ............................................................................................................. 2  
FIGURES ................................................................................................................. 4  
TABLES .................................................................................................................. 4  
1 INTRODUCTION .................................................................................................. 5  
2 BACKGROUND ..................................................................................................... 5  
3 SOFT SYSTEMS METHODOLOGY ...................................................................... 6  
   3.1 RICH PICTURE ............................................................................................. 6  
   3.2 PROBLEM 1 .................................................................................................... 13  
      3.2.1 Root Definition ...................................................................................... 13  
      3.2.2 CATWOE ............................................................................................ 13  
      3.2.3 E's Criteria .......................................................................................... 13  
      3.2.4 Conceptual Model ............................................................................... 14  
   3.3 PROBLEM 2 .................................................................................................... 16  
      3.3.1 Root Definition ...................................................................................... 16  
      3.3.2 CATWOE ............................................................................................ 16  
      3.3.3 E's Criteria .......................................................................................... 16  
      3.3.4 Conceptual Model ............................................................................... 17  
   3.4 PROBLEM 3 .................................................................................................... 18  
      3.4.1 Root Definition ...................................................................................... 18  
      3.4.2 CATWOE ............................................................................................ 18  
      3.4.3 E's Criteria .......................................................................................... 18  
      3.4.4 Conceptual Model ............................................................................... 19  
4 CONCLUSION ....................................................................................................... 19  
5 REFERENCES ....................................................................................................... 20  
6 APPENDICES ...................................................................................................... 21  
   6.1 APPENDIX A ................................................................................................. 21
Figures

Figure 1: Spray Diagram ................................................................. 6
Figure 2: Individual Rich Picture Attempt (1) .................................. 6
Figure 3: Individual Rich Picture Attempt (2) .................................. 7
Figure 4: Defining the Stakeholders and how they inter-connect ...... 8
Figure 5: Planning the Rich Picture ............................................... 8
Figure 6: Rich Picture ................................................................... 9
Figure 7: Problem 1 Conceptual Model ........................................ 14
Figure 8: Problem 1 Expanded Conceptual Model (1) ................. 15
Figure 9: Problem 1 Expanded Conceptual Model (2) ................. 15
Figure 10: Problem 2 Conceptual Model ....................................... 17
Figure 11: Problem 3 Conceptual Model ....................................... 19
Figure 12: Meeting Minutes ......................................................... 21

Tables

Table 1: Problem 1 CATWOE ...................................................... 13
Table 2: Problem 1 E’s Criteria .................................................... 13
Table 3: Problem 2 CATWOE ...................................................... 16
Table 4: Problem 3 E’s Criteria .................................................... 16
Table 5: Problem 3 CATWOE ...................................................... 18
Table 6: Problem 3 E’s Criteria .................................................... 18
1 Introduction

This report documents the application of Peter Checkland’s Soft Systems Methodology (SSM) to the recent failings of BlackBerry. Following this methodology has allowed an exploration of the problem space and ideation of potential areas of improvement.

2 Background

BlackBerry, initially founded as Research in Motion (RIM) in Canada in 1984 (Hill, 2013), became a leader in the mobile communications market in the early 2000’s. From the introduction of the first “modern” smartphone in 2003, Blackberry saw rapid growth, surpassing 10 million subscribers in 2007, followed by a turnover of $145bn in 2008. Even after the introduction of Apple’s iPhone, Blackberry continued to dominate the market, eventually reaching 50 million subscribers and leading to an expansion of the company. It was only with the introduction of the iPad in 2010 that Blackberry’s position as a mobile communications organization was seriously challenged. The failure of Blackberry’s subsequent rival product, the Playbook, coupled with the continued increase of iPhone users led to share prices falling below $25. The company’s reputation was further damaged following several Blackberry service outages in 2011, and compounded with the success of Android powered smartphones. In an attempt to curb RIM’s losses a third party company was hired to provide strategic advice, leading to the cuts of 5000 jobs (The Telegraph, 2013). The resignation of Jim Balsillie and Mike Lazaridis in 2012 highlights the internal issues faced at Blackberry, and despite the introduction of two new handsets and a new operating system the company face losses of $1 billion at the end of 2013, in addition to another round of job cuts that saw 40% (4,500) of employees lose their jobs.
3 Soft Systems Methodology

3.1 Rich Picture

The spray diagram (Figure 1) was created as a starting point for group discussions and helped define the problem space and various relationships within it.

Figure 1: Spray Diagram

Figure 2: Individual Rich Picture Attempt (1)
The above (Figures 2 and 3) are individual first attempts at the rich picture to initiate further discussions and research into the problem space.
Figure 4: Defining the Stakeholders and how they inter-connect

Figure 4 was created to define the various “entities” and perspectives within the rich picture and help gain an understanding as to how it could be presented.

Figure 5: Planning the Rich Picture
Figure 5, showing the stakeholders (yellow) and their corresponding views of the problem (pink), helped to organize the various elements of the rich picture.

Figure 6: Rich Picture

Figure 6 shows the completed rich picture that presents a holistic view of the problem space. Below is a brief description that expands on the various stakeholder perspectives, as represented in the rich picture.

**Consumer**
Several factors contributed to the declining Blackberry brand and poor consumer reception of new products. Consumers were particularly put off by the lack of the latest applications, the old, unappealing hardware designs, the lack of innovative features and the inability to access the full range of internet features.
In addition to issues with the actual products, consumers were also deterred from purchasing a Blackberry because of the confusing, unclear marketing material and the "social acceptability" of owning a Blackberry over an iPhone or Android powered device. Especially amongst younger consumers, Blackberry was no longer the desirable brand or the "cool", must have accessory.

**Competitors**
Blackberry's constant slow and un-innovative approach to product development and design (as well as a host of other inadequacies) created a huge gap between themselves and their competitors. This has left Blackberry in an incredibly weak state, for instance Apple as of 2013 was able to make more iPhone Revenue in one weekend than all of what Blackberry will sell for (Kovach, 2013). Competitors such as Apple pioneered the App revolution, changing how phones would be viewed by consumers forever. Apple and other companies implemented 4G capabilities, introduced smart brand image marketing, created a range of innovative products, understood the market and more.
All of these achievements shadowed Blackberry’s attempts and were usually started a long time before Blackberry would join the fray, for example Blackberry was on the coat tails of Apple when it came to including Apps into their phones and supporting developers for a long period of time. The range of consistent failures by Blackberry affected a whole set critical factors for their success in the market. Poor build quality, un-innovative and boring phones were not desirable to consumers. To further compound this effect Blackberry were battling against companies such as Apple and Samsung which were financially supported by other product lines, created desirable products, produced phones quickly and reliably provided their consumers with consistent product releases. Since Apple’s app revolution Blackberry have been outperformed in all aspects of competitive trading.

Developers
Apple has benefited from their support of third party app developers. By releasing a relatively easy to use method to create apps for their product Apple ensured there would be a constant stream of new content to their products. This has been one of the factors which has allowed apple to dominate the mobile phone market. When we compare this to Blackberry we can see their use of old technologies and lack of support lead to the disinterest in their platform from third party developers. With third party developers not wanting to create apps for Blackberry products, Blackberry quickly became synonymous as a product with ugly looking and poorly working apps.

Network Providers
The network provider Verizon lost faith in RIM when they requested that they create an ‘iPhone killer’ in 2007 which RIM failed to deliver. Verizon did not have a contract with Apple as they were exclusive to AT&T so it was vital that RIM provided them with a new innovative product.
(The Huffington Post Canada, 2013) states that,

‘Verizon Wireless approached BlackBerry maker Research in Motion in 2007 to help them create an “iPhone killer” but BlackBerry failed to live up to the challenge.’

Verizon turned to Google following the failure of RIM’s ‘iPhone killer’ to ask them to attempt to provide a competitive product. Google gained a large market share with their product including obtaining a large part of RIM’s market share. RIM had no USP to offer network providers which has led network providers to focus on marketing more popular devices such as iPhone and Android devices. This is not good for attracting potential RIM consumers.

Another problem that RIM had with network providers was the launch of 4G. They delayed in providing their new range of ‘10’ phones that were 4G compatible which was damaging their reputations with the network providers they had contracts with such as LTE, WiMAX and HSPA+. The reputation RIM has with network providers could affect them obtaining contracts in the future.

Shareholders
Blackberry shareholders have a negative view of the organisation in recent years due to share prices dropping because of a drop in market share. Blackberry’s largest shareholder Fairfax Financial Holdings Ltd planned to buy the organisation for $4.7 billion but they cancelled the agreement with Blackberry and it was agreed that they would lead investors to support the organisation by providing $1 billion to help make changes to the organisation. Due to this, Blackberry’s shares fell by 16%.
Kahn Swick & Foti, one of BlackBerry’s former shareholders made a lawsuit against the organization which accused the organisation of misleading them regarding their financial situation. (Hesseldahl, 2013) states that,

‘BlackBerry failed to inform investors that, contrary to the Company’s statements that its new BlackBerry 10 line of smart phones financially strengthened BlackBerry and positioned the Company on the road to recovery, BlackBerry’s business, operations and financial situation was made even worse by the introduction of the BlackBerry 10 platform, which was poorly received by the market,” the law firm said in its press release.’

Due to the way Blackberry has treated its shareholders and the media coverage about this story, shareholders have lost faith in the organisation. This could affect future shareholder investments.

Jim Basille
Jim Basille was an important and influential board member. After arguments over directions the company should take and tensions in the board room Jim Basille left Blackberry. Jim’s departure encapsulates the problems RIM’s executives were having at the time such as arguments over the company’s future.

Media
The media’s view of Blackberry has been negative over the past few years. They have reported stories about Blackberry via television, the internet, newspapers and radio. An example of this is a quote from the BGR website where (Ciaccia, 2013) states that,

‘It’s not just about the second-quarter earnings which showed a near $1 billion write-down for unsold BlackBerry Z10 phones. It’s not about the fact that the BlackBerry PlayBook, the company’s first and only tablet offering, failed. It’s not about the fact that CEO Thorsten Heins, who took over Jim Balsillie and Mike Lazaridis, was stiff and never resonated with consumers, the media or investors. BlackBerry’s downfall stems from much more than that, going back six years.’

The fact that the media focuses on the negative aspects of Blackberry has a large impact on the way consumers and competitors view the organisation. The media portrays Blackberry in a way which will make consumers not want to purchase products from them as they will feel that the products they are producing are not as good as their competitors such as Apple’s iPhone. It has been noticed that wherever Blackberry are receiving negative reviews in the media, their competitors are receiving positive reviews as a comparison. Blackberry’s public image and reputation has been damaged due to this negativity.

RIM/Blackberry
The problems at RIM can be classified as structural, leadership or operational issues. From a structural viewpoint, RIM’s organization was not suited to the rapidly evolving mobile phone industry; having two CEO’s (Jim Balsillie and Mike Lazaridis) managing specific departments and operations effectively split the company in two (Silcoff, McNish and Ladurantaye, 2013). This silo effect essentially meant that the Engineering, Product Management and Supply Chain departments under Lazaridis could not easily communicate with the Sales, Finance and other Corporate departments under Balsillie; instead information had to go up through the organizational structure to the executive level where it may have been passed over before working its way down the other side. This was a major reason for Blackberry being slow to market with delays in product launches.
Blackberry also failed to integrate newly acquired companies efficiently. When RIM acquired QNX Software they decided to keep the QNX team, who were given the task of building the foundations for Blackberry 10, isolated and apart from existing programmers working on maintaining Blackberry 7 (Silcoff et al, 2013). Once again however this created further splits, tension and disillusioned existing Blackberry employees not involved with the QNX team who worried about their future at the company.

Arguably some of the critical factors in Blackberry’s failure came from poor decisions by the leadership team. Firstly, a consequence of errors in its strategy meant the business was too focused on the corporate market, as opposed to the growing and potentially more lucrative consumer market. Secondly, Blackberry did not foresee and prepare its infrastructure for the rapidly growing “app economy”, one of the key reasons for the success of the iPhone and Android phones. Finally, Blackberry failed to grasp that the fundamental concept of the mobile phone was changing, from that of e-mail enabled phones to powerful mobile computers that would allow a user to complete computing-intensive activities quickly and with a user friendly interface (Gustin, 2013).

The blame for Blackberry having a very narrow portfolio of products must also rest with the executive board. Unlike their competitors, Blackberry had many phones available for purchase at the same time, but they all offered something very similar in terms of features and build quality. The only other product offering from Blackberry was the failed tablet device, known as the Playbook. This approach severely limited the potential revenue streams for Blackberry and left them reliant on the success of their mobile phones, unlike Apple and Google who between them also sold computers, tablets, MP3 players, multimedia entertainment and other online services (REFERENCE!).

Gustin (2013) also comments on a number of rifts at the “executive and boardroom levels” which hindered the company’s agility and product development process.

Finally, the operational issues primarily revolved around poor marketing campaigns and a failure to capitalize on a potential partnership with Verizon. With regards to the former, Blackberry continued to name their phones with a seemingly random selection of letters and numbers, whilst the message in their marketing material was unclear. The latter was Blackberry’s opportunity to create a rival to Apple’s iPhone, but failures and delays in the development process led to Verizon abandoning the partnership before collaborating with Google on the Android project; the eventual outcome of which was an operating system that overtook Blackberry’s.
3.2 Problem 1

Looking at the problem space from a consumer perspective as indicated in the rich picture, it is clear that Blackberry products are not differentiated enough from those of competitors and fail to provide any added value for the customer. A critical area of improvement is therefore the creation of a Blackberry unique selling point (USP).

3.2.1 Root Definition

A system, owned by RIM, will provide desirable products through the creation of a Blackberry USP developed by the employees of RIM in an effort to attract customers whilst abiding by applicable trading laws.

3.2.2 CATWOE

<table>
<thead>
<tr>
<th>Client</th>
<th>Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor</td>
<td>Employees of RIM</td>
</tr>
<tr>
<td>Transformation</td>
<td>Create a Blackberry USP</td>
</tr>
<tr>
<td>Worldview</td>
<td>Provide desirable products</td>
</tr>
<tr>
<td>Owner</td>
<td>RIM Executive Board</td>
</tr>
<tr>
<td>Environment</td>
<td>Applicable trading laws</td>
</tr>
</tbody>
</table>

Table 1: Problem 1 CATWOE

3.2.3 E’s Criteria

<table>
<thead>
<tr>
<th>Efficacy</th>
<th>Increased market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>Sales levels, critical acclaim Profit margin</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Improved Sales levels and critical acclaim</td>
</tr>
</tbody>
</table>

Table 2: Problem 1 E’s Criteria
3.2.4 Conceptual Model

![Conceptual Model Diagram]

Figure 7: Problem 1 Conceptual Model
Figure 8: Problem 1 Expanded Conceptual Model (1)

Figure 9: Problem 1 Expanded Conceptual Model (2)
3.3 Problem 2
Closely linked to the previous problem, consumers feel that Blackberry’s lack of desirability and innovative features. This has become a damaging influence to Blackberry’s brand image and reputation, leading to their inability to attract new consumers.

3.3.1 Root Definition
A system, owned by RIM, will become a desirable, popular brand by RIM’s employees improving its brand image and reputation to its customers whilst still abiding by applicable laws.

3.3.2 CATWOE

<table>
<thead>
<tr>
<th>Client</th>
<th>Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor</td>
<td>Employees of RIM</td>
</tr>
<tr>
<td>Transformation</td>
<td>Improve brand image and reputation</td>
</tr>
<tr>
<td>Worldview</td>
<td>Become a desirable, popular brand</td>
</tr>
<tr>
<td>Owner</td>
<td>RIM Executive Board</td>
</tr>
<tr>
<td>Environment</td>
<td>Applicable trading laws</td>
</tr>
</tbody>
</table>

Table 3: Problem 2 CATWOE

3.3.3 E’s Criteria

<table>
<thead>
<tr>
<th>Efficacy</th>
<th>Customer loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>Marketing budget compared to net gains</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Positive Product reviews</td>
</tr>
</tbody>
</table>

Table 4: Problem 3 E’s Criteria
3.3.4 Conceptual Model

![Diagram showing the concept model]

Figure 10: Problem 2 Conceptual Model
3.4 Problem 3
The third problem is presented from the perspective of Blackberry as it attempts to improve upon internal issues, such as operational efficiency, through the restructuring of its executive level management.

3.4.1 Root Definition
A system, operated by RIM’s CEO, aims to reassert the company as a competitive operator by restructuring the executive management board whilst abiding by applicable employment laws.

3.4.2 CATWOE

<table>
<thead>
<tr>
<th>Client</th>
<th>RIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor</td>
<td>CEO</td>
</tr>
<tr>
<td>Transformation</td>
<td>Restructure executive management board</td>
</tr>
<tr>
<td>Worldview</td>
<td>Become a competitive operator</td>
</tr>
<tr>
<td>Owner</td>
<td>CEO</td>
</tr>
<tr>
<td>Environment</td>
<td>Employment laws</td>
</tr>
</tbody>
</table>

Table 5: Problem 3 CATWOE

3.4.3 E’s Criteria

<table>
<thead>
<tr>
<th>Efficacy</th>
<th>Increased and consistent share price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>Loss of potential earnings vs project earnings</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Regaining market share from competitors</td>
</tr>
</tbody>
</table>

Table 6: Problem 3 E’s Criteria
3.4.4 Conceptual Model

![Conceptual Model Diagram](image)

**Figure 11: Problem 3 Conceptual Model**

### 4 Conclusion
Through the use of the Soft Systems Methodology we have presented the problem space and identified a range of potential improvements to be investigated. The development of the rich picture helped improve our understanding of the various stakeholders, environment, and the relationships between interconnecting systems surrounding the failure of Blackberry.

The three problems described through the development of root definitions and structured as conceptual models would be, given the time, explored further as outlined in the final stages of SSM. Although our work ends with the creation of conceptual models, to truly test them against the proposed E’s criteria they would need to be applied in the “real world”.

19
5 References


6 Appendices

6.1 Appendix A
As team leader, Georgina Hughes kept minutes of each meeting, as shown in figure 13 below.

![Figure 12: Meeting Minutes](image)

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Attendees</th>
<th>Topics discussed</th>
<th>Tasks set</th>
<th>Next meeting scheduled</th>
<th>Previous tasks completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th Oct</td>
<td>1000</td>
<td>Canvassed and common</td>
<td>Georgina Hughes, Ivo</td>
<td>Discussed the research that he had carried out and the benefits that we could see.</td>
<td>Updated our research with the help of the research team.</td>
<td>Next meeting will take place on 14th Oct at 10:00 and will last 1:15 minutes.</td>
<td>N/A</td>
</tr>
<tr>
<td>10th Oct</td>
<td>1000</td>
<td>Canvassed and common</td>
<td>Georgina Hughes, Ivo</td>
<td>Discussed the research that he had carried out and the benefits that we could see.</td>
<td>Updated our research with the help of the research team.</td>
<td>Next meeting will take place on 14th Oct at 10:00 and will last 1:15 minutes.</td>
<td>N/A</td>
</tr>
<tr>
<td>21st Dec</td>
<td>13:15</td>
<td>Student Union Bar</td>
<td>Georgina Hughes, Ivo</td>
<td>Discussed the research that we had carried out and the benefits that we could see.</td>
<td>Next meeting will take place on 14th Dec at 10:15 and will last 1:15 minutes.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>30th Oct</td>
<td>18:30</td>
<td>Library Meeting Room</td>
<td>Georgina Hughes, Ivo</td>
<td>Created ideas using post-it notes and task photographs.</td>
<td>Next meeting will take place on 14th Dec at 10:15 and will last 1:15 minutes.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>3rd Nov</td>
<td>14:00</td>
<td>Library Meeting Room</td>
<td>Georgina Hughes, Ivo</td>
<td>Created ideas using post-it notes and task photographs.</td>
<td>Next meeting will take place on 14th Dec at 10:15 and will last 1:15 minutes.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>7th Nov</td>
<td>15:00</td>
<td>OM205</td>
<td>Georgina Hughes, Ivo</td>
<td>Created ideas using post-it notes and task photographs.</td>
<td>Next meeting will take place on 14th Dec at 10:15 and will last 1:15 minutes.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>31st Dec</td>
<td>13:00</td>
<td>Library</td>
<td>Georgina Hughes, Ivo</td>
<td>Completed the research that we had carried out and the benefits that we could see.</td>
<td>Next meeting will take place on 14th Dec at 10:15 and will last 1:15 minutes.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>27th Nov</td>
<td>14:00</td>
<td>OM205</td>
<td>Georgina Hughes, Ivo</td>
<td>Completed the research that we had carried out and the benefits that we could see.</td>
<td>Next meeting will take place on 14th Dec at 10:15 and will last 1:15 minutes.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>30th Nov</td>
<td>14:00</td>
<td>OM205</td>
<td>Georgina Hughes, Ivo</td>
<td>Completed the research that we had carried out and the benefits that we could see.</td>
<td>Next meeting will take place on 14th Dec at 10:15 and will last 1:15 minutes.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>4th Dec</td>
<td>14:00</td>
<td>OM205</td>
<td>Georgina Hughes, Ivo</td>
<td>Completed the research that we had carried out and the benefits that we could see.</td>
<td>Next meeting will take place on 14th Dec at 10:15 and will last 1:15 minutes.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>10th Dec</td>
<td>14:00</td>
<td>OM205</td>
<td>Georgina Hughes, Ivo</td>
<td>Completed the research that we had carried out and the benefits that we could see.</td>
<td>Next meeting will take place on 14th Dec at 10:15 and will last 1:15 minutes.</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

Figure 12: Meeting Minutes