

Destinee Matsoumou

CIS 410

Prof Reinhardt

30 October 2022

Introduction/Problem

Agrico was a \$500 million portfolio, farm and ranch management service company, this company was in several midwestern states. It was one of the largest agricultural management firms. They had four regional offices. Agrico provided cost effective management services for more than 350 farms and ranches. It was an agent for its clients and bought equity interest in farms and ranches and ultimately managed them for clients. Agrico also managed their cash flows, and managed the capital appreciation. The agreement between Agrico and tenants was that tenants would agree to farm land managed by Agrico in return for a portion of each year's crops. In 1985 Executives at Agrico decided that their existing arrangement for computer service was not adequate for their present or future needs. They needed to improve things and bring in more technology to enhance productivity. Agrico specifically wanted to improve their computer systems, so they worked with a large computer consulting firm for solutions to fixing their technology needs. The recommendation given to Agrico by the consulting firm was to do an in house data processing. And to minimize cost and installation lead time it would be best for them to use a software package. Agrico had three property management and a single software package was expected to be used for all three. The best software package for Agrico would need to be integrated and be able to accommodate all of Agrico's functional requirements.

So they started planning for this phase of finding a vendor, with the best software package. Ultimately Agrico discovered AMR, A small software company founded in 1977. AMR specialized in farm and ranch management software, this was perfect for Agrico. It was everything Agrico wanted and needed to advance their company forward. So in 1986, Agrico and AMR signed an agreement and the expectation was that AMR would provide software consistent with Agrico's needs. AMR was responsible for making modifications to Agrico's software package. After everything was finalized and installation was completed at Agrico, the software acceptance test began. Agrico quickly realized that the software package AMR had installed did not meet their functional requirements. First, each version installed by each employee was different, there was no standard software, so no two installations were the same. There was an issue with combining the softwares and many functions had never been tested. AMR's method of operation was to install software, barely do any testing and wait for clients to find bugs and then they can begin corrections. So Agrico had to dedicate more time for software acceptance testing. Many more flaws were identified during this phase, AMR then beginning their process of correcting these errors.

AMR's installed software needed improvement and was costing Agrico thousands of dollars so Burdelle, the VP of information systems, was demanding AMR to share the source

code with Agrico. The main reason Agrico wanted the source code was because the software installed by AMR were all unique and there was no standard. Without the source code there was the concern of being locked into the system with no possibility for enhancement and modifications. Agrico wanted to be able to improve the system years down the line as needed and for backup purposes.

However there was a contract in place that prevented Agrico from making copies, or altering the source code. Under the agreement signed by both Agrico and AMR, it states that Agrico could examine the source code as necessary to test the system. However, modifications, alterations or sharing of the code was not acceptable. Per the contract, "The software may not be copied or reprinted in whole or in part without the prior written permission of AMR" and "The source code listings shall not be removed from Agrico's premises" There were many lines in the contract that strictly prohibited Agrico from doing what they wanted to do with the source code.

Another major factor of the contract, was the agreement between both parties to place a copy of the source code in the custody of a third party, escrow. Under escrow both Agrico and AMR had to agree to the terms and conditions of the contract, so this gave Agrico some leverage in doing what they wanted with the source code but there could be ramifications for it. Agrico consulted with an attorney and what was identified was a classic case of ambiguity. Per the contract, both Agrico and AMR had rights to the source code but not to the same extent. The contract stated that AMR had to provide Agrico access to the source code, for understanding purposes but only AMR had the right to copy and store it.

Porter's five forces

Threat of New Entrants: Low

The threat of new entrants in land management is low. This is a high cost industry, and to enter you need a lot of capital. The cost of land itself would be very large and to implement a software system to manage it would require even larger investment. Not many would be able to get into a business like this to be successful so Agrico does not have to worry too much about new intrants.

Threat of Substitutes: Low

The threat of substitutes is low in this industry because again it's not a lot of people who can break through this industry so landowners do not have a lot to choose from. Agrico is so wide and offers a palette of products and services to its business partners so they do not have to worry about substitutes.

Supplier Power: medium

Power of suppliers in this industry is low, because Agrico does not require many raw materials, they are mostly focused on the management of farms and ranches. However, they do have to worry about the upkeep of the land so they will outsource for that, for equipment and tools for harvesting crops.

Buyer Power: Low

The buyer power in this industry is low, customers are required to spend upfront for their farms and during specific periods, from limited land management services so customers have to work with what they've got. And also the more that buyers can produce the less they have to cater to suppliers.

Degree of Rivalry: medium

The degree of rivalry is medium for this industry. Agrico does really well in the land management business. Their portfolio is worth half a billion dollars and with the incorporation of a new software package that works as intended, they will be unstoppable. However, there many farming and harvesting companies do really well without needing to subscribe to a management service so there might not be a need for them.

Stakeholders

Employees

Agrico employees' jobs could be affected by Agrico's decisions. Already the company has suffered massive financial losses with installing the new system and if they are unable to acquire the source code, they are at risk with the software they are using and this could trickle down and employees will eventually have to be let go.

Corporate Management and CEO

The VP of Information security at Agrico is George Burdelle. He has a lot riding on him, he is working hard to acquire the source code from AMR to protect the future of Agrico and as well as its reputation as a top farm management service. His decisions, such as whether or not to make a copy of the source code after it was left unattended by a AMR employee could have ramifications.

Stockholders/shareholders

Agrico's portfolio is worth \$500 million, this tells you how many investors and stockholders/shareholders it has. It has a very promising future as long as they figure out their current issue with the source code and decide whether to stick with AMR or make another investment with another vendor that can supply them with a software package for all their locations.

clients

Clients make up for the majority of Agrico's revenues. However, customers' data is at risk with them not being able to acquire the source code. Also their farms are being managed by Agrico and if Agrico goes out of business they will have to scramble to find a new management service or struggle to do that on their own.

AMR

AMR's source code has been left out and is at risk of being duplicated. This is not the wishes of Roger, the owner of AMR. With their source code being altered would be a violation of an established contract and there is a risk of this code not being the same anymore.

Courses of Action/Alternatives

1. Do Nothing

The agrico case begins with the dilemma of whether or not the source code left out by an AMR employee should be copied for security purposes of Agrico. A source code contains computer program statements written by programmers in high level programming languages. Having that information will releve many issues that Agrico could face in the future. However, there is a contact set in place that strictly prohibits Agrico to have a copy of that information. So if Burdelle, VP of information systems, chooses to not do anything with the source code, Agrico will be abiding by the contract set in place and will therefore not risk legal actions against them for not respecting the contracts guidelines. There was a discussion of the escrow and how it gives some loopholes to make copies; however, breaching a contract is not a good look for a company. Their reputation could suffer a lot. On the other hand, if they do not make a copy and also do nothing else to renegotiate their contract with AMR, their business will continue to go downhill. They will continue wasting thousands of dollars on fixing bugs and having to depend on AMR to always fix their system and do their updates.

2. Make a Copy of the Source Code

Agrico's VP of information systems can make the executive decision to make a copy of the code and send it off to an off site facility. This would allow Agrico to make their own change and not have to worry about issues down the line with making modifications to the software. With each of AMR installations being unique, it is very important for Agrico to also have a copy of the codes, so they can be independent of AMR if needed. The company needs to take the risk of being locked down with the same software for years on end with no possibility of enhancement or improvements. Also with the issue with AMR, they have not proven to be a reliable company. They do things in a non-traditional way and the VP, Burdelle was worried that the source code was not adequately protected. However, if the source code was secretly duplicated despite the contrats laws, there could be serious consequences for Agrico, they would have to spend thousands of dollars in court, their reputation would be destroyed, they would be viewed as untrustworthy and no one would want their business,

3. Have a new contract signed

The contract signed between Agrico and AMR needs to be renegotiated because as it is, Agrico does not have a lot of liberty. There is not much they can do without first consulting with

AMR and having AMR approval, despite this being a partnership. Agrico has already invested a lot of money into AMR and this method will help them retain all the progress they've already made and have better laws established that both sides concur with. From the research that was conducted there were only two vendors offering the software package Agrico was looking for. One of them is AMR, So Agrico almost does not have much of a choice but to challenge the current contract. They already spent thousands of dollars with AMR. Agrico had already spent many months dealing with AMR, switching vendors would require them to first have the AMR software package removed and go through the whole ordeal of agreeing to the new vendor's terms and conditions before they can begin installing a software package. Next, they would have to go through the software acceptance testing and so on. This move would be just as costly for them if not more, considering how much they already wasted with AMR. Taking on a whole other project was not the best move for Agrico, especially since AMR software was now working fine, but of course the concern was for future modifications and the product's viability

3.

Recommendation

I would recommend Agrico to renegotiate the contract. They already invested too much to walk away from it all. After all the time invested in AMR and its software package, it would be the best move for them to find a common ground with AMR, where their needs and AMR's needs are met. I would not recommend them making a copy of the source code, because it is explicitly noted in the contract multiple times how that would be a violation. The ramifications of an act like that would be terrible for Agrico, they could lose millions of dollars in the lawsuit that would be filed against. And if Agrico wanted to end their deal with AMR and work with the other vendor, that would require so much time and money. First, they would be required to first have the AMR software package removed, then go through the whole ordeal of agreeing to the new vendor's terms and conditions before they can begin installing a software package. Next, they would have to go through the software acceptance testing and so on. This move would be just as costly for them as was AMR, if not more, considering how much they already invested with AMR. Especially since AMR software was now working as it should per Burdelle's comment "I was convinced the software now worked as it should, but I was concerned about future modifications"(Text). Things are working now as they should be, so it would be best for Agrico to not let processes already made, all the money already spent, and all the time already used go to waste. With the Source code being left out just for anybody to see, that gives them leverage when they negotiate a new contract. They find better common grounds that work for both parties.

Work Cited

Goldratt, Eliyahu M, and Jff Cox. The Goal: A process of Ongoing Improvement. North River Press, 2004.

Fried, Louis. Managing Information Technology in Turbulent Times. Wiley-QED Publication, John Wiley & Sons, Inc. Canada, 1995.

Barker, R. M. (n.d.). Management of Information Systems

Porter's 5 Forces Explained and How to Use the Model (investopedia.c