

CIS 410-01 – Management of Information Systems (Spring Term)



Background

Waco Manufacturing was the supplier for automotive parts, they specialized in the manufacturing of custom-machined parts for the automotive industry. In 1986, Waco decided to implement a new security and information system at one of their manufacturing plants. Waco installed transceivers in its manufacturing plant, a transceiver is a device that can both receive and emit a radio signal. Waco installed these transceivers every 25 feet in the manufacturing plants corridors. Furthermore, they embedded transceivers in the badges of their employees at the manufacturing plant. "The goal is not to improve one measurement in isolation. The goal is to reduce operational expenses and reduce inventories and increase throughput simultaneously" (Goldratt). The transceivers were used to keep a constant tracking on the manufacturing plants employees. The managers hoped that the new security and information system would shed some light on the on all capabilities within Waco's grasp. Within the case they give us an example of those capabilities, "a telephone call to an employee would ring at the phone nearest to that person, which often was not that individual's office phone." (Barker)

The Case & Problem

About a year after the implementation of the new security and information system at Waco's manufacturing plant, in September 1987, the are manager Monique Saltz expressed her opinion on the project that was required to be done by the end of the year. Saltz went to the plant engineering manager, Monk Barber, to express her grief about the project. Saltz in particular was upset that a new set of designs for the composite-based products was running behind schedule. Barber was insistent in defending himself, saying that he has repeatedly met with the three

engineers in charge of the project, and had emphasized extensively the importance of this project and how important the deadline was. Barber then went on to say he was "at his wits' end" with the three engineers: Sherman McCoy, Telly Frank, and Wanda Gogan, because they had simply not been in contact with him and keeping him up to date on the status of the project.

After this interaction with Barber, Saltz took it upon herself to confront the three engineers working on the project. After to speaking with the three engineers Saltz was extremely confused, because McCoy, Frank, and Gogan told her that they had not met with Barber regarding the composite design project. The three engineers were none-the-wiser on the importance of this project. Later that day, Saltz met with the plant manager, Shelly Tomaso, and she described the situation to her. Tamaso decided rather than confronting Barber on what he had said, she was going to utilize the transceiver system they installed and see what kind of insights the data would show her. After analyzing the data from the transceivers, she saw that Barber had not been in the same room as McCoy, Frank, and Gogan at all that entire year. If the brain of a project is not talking to the body, the body will not function correctly. (Morgan)

Saltz now is faced with a problem because she has used the new security and management information system to see if Barber was telling the truth about meeting with the three engineers: McCoy, Frank, and Gogan. The data stored within the database from the transceivers told her that Barber had not met with McCoy, Frank, and Gogan at all in 1987.

Industry Competitive Analysis (ICA)

Generic Strategy

Waco's generic strategy is differentiation, because they are a manufacturing plant of custom-machined parts, if they did not supply a vast variety of custom parts, they would not be

able to maintain profitability. "Differentiation is aimed at the broad market that involves the creation of a product or services that is perceived throughout its industry as unique." (Tanwar)

Organizational Structure

I would say that Waco's organizational structure would be functional, because within the case we only discuss one division of Waco Manufacturing. "Since an organization's performance is dependent on all functions working together in a coordination manner, the functional structure requires extensive information exchange among functions." (Cash)

Porter's Five Forces

Competitive Rivalry: High

Waco's is not the only manufacturer of custom-machined part, within the automotive industry, there are other manufacturers customers can buy from. The services Waco provided could be done by anyone with the correct specifications for the parts needed to be designed. Therefore, another company could potentially manufacturer the same products as Waco, and potentially steal a market share from Waco.

Threat of New Entrants: High

Manufacturing plants are not a difficult to start up, the only real barrier is the capital backing a venture. Once you have the capital to back the start of a manufacturing plant the only other big necessity, besides a labor force, is the machinery needed to develop the custom-machined parts. The factor of new technology also drives up the threat of new entrants, if a company could develop a new part that changes the industry, or they could improve upon the current machinery and potentially steal a market share from Waco.

Threat of Substitutes: Low

Waco's manufacturing plant specializes in the development of custom-machined automobile parts. There aren't many substitutes for an automobile part that has been specially made with a particular purpose in mind.

Bargaining Power of Suppliers: Low

Waco has a low bargaining power of suppliers because they do not rely on a third-party supplier. They are a manufacturing plant and a supplying chain for their products.

Bargaining Power of Customers: High

The bargaining power of the customer is high because they are manufacturing custom parts, and if they mess up and a part does not work for their client, the client could potentially drop Waco as their manufacturer, and go find a supplier who won't mess up the design of their custom parts.

Stakeholders

Monique Saltz

Saltz has a vested stake in the decision because these designs are very important to the project she is currently working on. And, if they are not completed on time, she will not be able to complete her project by its deadline.

Shelly Tomaso

Tamaso has a vested stake in the decision made because she is the manager of the entire Waco Manufacturing plant. If these designs are not done by the deadline for this project, then it will reflect poorly on her, and potentially could put pressure on her job security. It is important for the manager to make sure that the company works together in order to deliver the products in good fashion and on time. (Cash)

Monk Barber

Barber has a vested stake in the decision within the case because he is the engineering manager in charge of the design of these composite-based products. If they are not done on time it will have a direct impact on his management skills.

McCoy, Frank, and Gogan

These engineers have a vested stake in the decision made, because they were supposed to be the three engineers in charge of the design of these composite-based products. If they do not deliver on what is expected of them, there is a strong chance that they lose their jobs.

Alternatives

Fire Monk Barber

Barber is the pant engineering manager in charge of the design of the composite-based products in question. He has lied to Saltz, by telling her that he has spoken to the three engineers tasked with the design of these product: McCoy, Frank, and Gogan. But, after further investigation Saltz saw that their new transceivers had not seen Barber in the same room as McCoy, Frank, and Gogan, for the entire year of 1987. My expectation is that when the projects due date comes, he is going to blame his engineers for not completing the project on time, when we know that he did not convey the importance of the project to them. There are different managing techniques, but blaming your employees is not a good strategy (Morgan).

I do not see any of the stakeholders having a problem with this decision except Barber himself. Saltz would be getting rid of a manager that lied to her about a project he was put in charge of. Tomaso would be getting rid of a manager who does not hold himself accountable for his own projects, which would allow a qualified individual to take his place. The three engineers

would most likely be happy because they would be getting a new boss that will hopefully communicate better.

Push back the completion date for the Project

If Waco pushes the project completion date back that would allow the three engineers to have a valid amount of time to complete the project correctly. This would most likely result in tensions growing between Waco and the customer in question who requested the composite-based products. This would also make it seem like lying about communication within the company is okay, which would start a whole new issue that I'm sure Waco does not want to deal with.

Saltz would be upset with this decision because it puts the progress on her project at a halt, because of a lack of communication. Tomaso would not be happy with the decision because she would have to tell the client that they were not able to complete their request on time. Barber would be happy because he will have gotten away with lying about communicating with his engineers. McCoy, Frank, and Gogan would be stressed out because they would be blamed for a project extension, that they had no clue about in the first place. Due to a lack of communication by their manager Barber.

Do Nothing

This decision could be a toss-up, because if McCoy, Frank, and Gogan are able to complete the project before the end of the year they would be in the clear, unless there was a design flaw with the composite-based products. But, if McCoy, Frank, and Gogan are not able to complete the products they would be blamed for not completing project on time and would very likely lose their jobs.

Saltz would disagree with this decision because she wants to figure out who is in the wrong in terms of why the project has not been being worked on. Tomaso would not be happy because she would be banking on three engineers being able to complete a project in three-four months that they have had the whole year to work on. Barber would take credit if the engineers were able to finish the product and would blame them if they were not able to finish on time, saving his own job security. McCoy, Frank, and Gogan would be pressed for time trying to finish the product and could potentially mess up if they do get it finished on time, and the product would be defective. On the other hand, if they don't finish, they would be blamed and most likely let go from Waco.

Recommendation

In my opinion, the best course of action for Waco as a company would be to fire Monk Barber. I believe this is the best option because it was extremely obvious that he lied about communicating to his employees the importance of these composite-based products. Not only did he lie about communicating with his engineers, but he also blamed his engineers for not communicating with his about the status of these composite-based products. These are horrible traits for any employee, especially a manager. He lies about his communication with his engineers, and then instead of confessing his own mistake he blames the engineers who he had not been told they were to work together. The three engineers McCoy, Frank, and Gogan should not be punished for the mistakes of their reporting manager, and Waco should not tolerate employees who blatantly lie and blame others for their own mistakes.

Works Cited

Barker, Management Information Systems, Case 5-2: The Incident at Waco Manufacturing

Cash, James. Building the Information-Age Organization: structure, control, and information technologies.

Morgan, Gareth. Images of organization. Sage Publications, 2014.

Tanwar, Ritika. "Porter's Generic Competitive Strategies." IOSR Journal of Business and Management 15.1 (2013): 11–17. Web.