Case Study 5-2 Santa Cruz Bicycles

1. **Would you consider this transformation to be incremental or radical? Why?**

A. Santa Cruz Bicycles has undergone a significant change in the way it designs and creates its products, I would consider this transformation to be a radical shift. The company has moved away from its traditional design approach and physical prototyping to a more digital method that utilizes simulation tools and fast prototyping techniques. This change has led to a reduction in the design-to-prototype process time, from an average of 28 months to only 12-14 months. Additionally, the company has greatly reduced its reliance on CAD software, which had limitations that the new software PLM has overcome. It allowed the team to analyze and model capabilities in efficient manner and make design adjustments immediately. These changes represent a significant shift in the way Santa Cruz Bicycles operates, making it a radical transformation.

2. **What, in your opinion, was the key factor in Santa Cruz Bicycles' successful process redesign? Why was that factor the key?**

A. In my opinion, the key factor in Santa Cruz Bicycles' successful process redesign was the adoption of PLM software. This software allowed the company to analyze and model capabilities in a more efficient manner, use simulation capabilities to test designs on rough mountain terrain, and quickly make adjustments to the design. using this software, company was able to significantly reduce the time to go from design to prototype. This aspect was crucial because it addressed the biggest issue the business had with its design and engineering process—like, how long it took to create and test new concepts using the available CAD tools. The company was able to greatly speed up the procedure by implementing PLM software, which allowed it to bring new goods to market more quickly and maintain industry competition. By acquiring PLM software, hiring a new master frame builder, and purchasing a van-size machine, the company was able to significantly accelerate its design-to-prototype procedure.

3. **What outside factors had to come together for Santa Cruz Bicycles to be able to make the changes it did?**

A. Several outside factors had to come together for Santa Cruz Bicycles to be able to make the changes it did. One factor is the use of advanced technology such as PLM software that allowed for more efficient modeling and simulation capabilities. Another factor was

the availability of skilled talent in the form of a new master frame builder capable of building and testing prototypes. Furthermore, the company had to invest in a van-size machine capable of fabricating intricate parts for the prototypes, which required significant financial resources. The company has undergone a significant change in the way it designs and creates its products, which required a significant change in management. Finally, to justify the investment in the new process design, the company needed a customer base that was prepared to pay for newer technologies and advancements in the biking sector.

4. Why is this story more about change management than software implementation?

A. This story is more about change management than software implementation because it highlights the significant overhaul of Santa Cruz Bicycle's design and engineering process, which required a significant amount of change management. The company had to be willing to completely redesign its process, which included implementing new software, investing in new equipment, and hiring a new master frame builder. The implementation of new software alone would not have sufficed to achieve the desired result, as significant changes to the company's existing processes and culture were required. As a result, rather than simply implementing new software, the successful redesign was due to the company's ability to manage change its management effectively.