Chapter 4

Modeling the Skunkworks Technology: Sharing Experience to Make the Difference

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ABSTRACT

Management view the skunkworks approach as an enriched environment composed of individuals possessing the required experience critical in the formulation of strategy to advance efficiency and effectiveness in the firm. It is a purpose-built forum where learning happens by sharing experiences to design and implement new products in at least four modalities. The first is its capability to ignite the company’s mission by co-construction a shared vision. Organizations need to appreciate what the future may look like. The second is the collective experience of its membership where new ideas can lead to the design and implementation of the technology to progress the job. A company must do all it can to differentiate itself to compete successfully. The third is its ability to create diffuse and distribute knowledge to cognitive areas where it will be put into organizational context. The fourth is the need to sustain change by continuing to learn and improve. This chapter models the skunkworks technology.

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Modeling the Skunkworks Technology

INTRODUCTION

The skunkworks technology developed by a small team of individuals at Lockheed Martin Aeronautics Engineering Company to design and implement the most lethal fling combat machine in existence. Ben Rich and Leo Janos were part of what became the Skunkworks team that made America’s quest to dominate the skies a reality. The skunkworks technology can be adapted in peacetime to recruit and select a team possessing the knowledge skills technology and the brashness to design and implement new products and re-examine existing tools to make new equipment to enhance the dexterity necessary to increase productivity (Rich and Janos, 2015).

Lev Vygotsky was a Russian neuropsychologist who wrote many theories about learning and cognitive development. When he developed the Zone of Proximal Development (ZPD) theory, he had no business organization in mind. Vygotsky was influenced by the systemic thinking of the scholars associated with German-American Gestalt psychology movement such as Kurt Lewin and Chris Argyris, among others, whose postulations were directly related to organizational development (Wertsch, 1984).

On-job training has been in use as a skills development strategy since time immemorial. It is one-on-one training located at site or office. It implies that people are taught how to complete the task while they are doing the job. Many scholars such as Senge (1990) and Mupepi and Mupepi (2016), have built upon OJT as strategy to create the competitive edge in successful organization.

This chapter juxtaposes the Skunkworks, ZPD, and OJT to advance shared meaning in system-wide organization aimed at increasing productivity.

BACKGROUND INFORMATION

In their audio book, Ben Rich and Leo Janos tell the story of how their company Lockheed Martin developed new products such as the Stealth Fighter jet which answered America’s quest to dominate the skies. The team’s mission was characterized by the notion that failure was not an option. The Skunkworks team was selected from military personnel who had aeronautical, electrical, ballistic, information systems, mechanical, and logistics engineering backgrounds. The Skunkworks team was located in an abandoned barn where real skunks and raccoons and the occasional owl thrived. The team got its name from that habitat. It had to clear the barn to make room for their meeting place, offices, computer simulation, and break rooms. When the Skunkworks finally got to work, their end products were numerous classified military technology resulting in products such as the U2 reconnaissance aircraft and Stealth Fighter Jet. The gregariousness of the Skunkworks team was characterized
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