

Changing the Game: Representing Innovation Through Football

When most people think of American Football, they imagine bone-crushing tackles, fantastic plays, and the Super bowl. We would like to add another item to this list, Innovation. This seems like an odd descriptor for any sport, let alone a sport that cherishes its physical toughness and brutality. To see how innovation fits within this metaphor, we must remember what exactly the word means. Innovation is defined as the introduction of something new (Webster, 2005), and football has been introducing change since its inception. To effectively demonstrate how football exemplifies innovation, we will focus our discussion to how offense, and especially the quarterback, has changed throughout time. Football teams, like many corporate organizations, needs unity, common vision, leadership, and, most importantly, change to succeed. We will first discuss how this practice of change in football mimics the changes that occur in any organization that considers itself an innovator.

Football originated from tough stock. The traditional football game involved minimal (if any) pads and all plays involved running the ball until someone put the ball carrier on his back. Running plays dominated all areas of offense, and passing was usually only used in the form of a pitch or a trick play. This era of football lasted for quite a while, until the forward pass could be implemented with success. This change represents what our readings refer to as a 'technological substitution' (Tushman, Anderson, O'Reilly, 2005). This substitution refers to a major shift in the way that a process is completed. In the case of offensive strategy in football, the introduction of the forward pass created an entirely new dimension to the game, and a new way to move the ball towards the goal line. This changed the responsibilities of the players, and changed the hierarchy of the playing field. Quarterbacks went from being the person who handed off the ball to the running back, to a central figure on the field. The reading claims that as an industry evolves, so must its individual subsystems (Tushman, 2005). We can see the different positions as different subsystems of the football team, and as the game evolved, the responsibilities of each position/subsystem must evolve as well. Changing to fit the passing scheme did not result in an instantaneous success; instead, time must be taken to learn the new responsibilities of each position. The first step of this learning cycle is referred to as the era of ferment (Tushman, 2005), in which organizations simply became familiar with the capabilities of the new technology (in our case the technology is an offensive strategy). As passing moved past the notion of trick plays and Hail Mary's, we witness completely novel ideas such as the introduction of the wide receiver. When a process evolves, its tools must evolve as well, and the introduction of new positions demonstrates this necessity.

Many experts would argue that American football stayed in an age of ferment until a man named Bill Walsh invented what we call the Dominant Design (Tushman, 2005). This design came in the form of the West-Coast Offense (WCO). Walsh's offensive scheme integrated passing plays into an offense with a previously unseen effectiveness. Walsh first developed his WCO while at Stanford, a fact that should come as no surprise. We expect this to be the case not because Stanford is a special place, but that the college level represents a smaller organization as compared to the National Football League. The smaller and less constricting market of a college sports climate allowed for the emergence and the development of this innovative design. Smaller organizations tend to be more flexible, organic and susceptible to change, as opposed to larger organizations where change is slow and deliberate (Daft, 2004). When he became

head coach of the San Francisco 49er's he put into practice what he had been developing as a 'small timer.' When the NFL witnessed how effective this design proved to be, there was no option but to react by learning the ways of the West-Coast Offense. This led to the final stage of the learning cycle in which incremental improvements were occurring throughout the league as a whole. Over the next few years, players and coaches were able to incrementally increase their physical skills, their ability to run and call precise plays, and their reaction times. However, these incremental increases will only occur until the next paradigm shift arrives, and we can see its approach in the form of a double threat Quarterback.

The illustrations used in the Technology Cycles article show one technological substitution cycling into the next, and this could not have been truer than in the case of football. Throughout the whole cycle of the forward pass, an increasing emphasis has been placed on the role of the quarterback. The west-coast offense required quarterbacks to be more football-intelligent than ever before. The position became the focal point of the offensive scheme, and all decisions passed through this prominent player. The incremental development of this role continued over the years until a completely new type of quarterback emerged. This change can most easily be seen through two prime examples, Peyton Manning and Michael Vick. Manning has proven himself the ultimate west-coast offense quarterback. He can change plays instinctively, understands his offense, and is very precise and consistent. However, this new evolution of football is headed in the direction of Michael Vick. He defied what was expected of a quarterback when he entered the league as an athlete that combined the physical abilities of a running back, with the natural responsibilities of a quarterback. This new role is proving itself more than just a trend as the prospective all-star quarterbacks embody this double-threat skill set. Football as a whole will continue to evolve from this point, but now we shall discuss some of the more specific areas in which this metaphor embodies innovation.

Some of the more interesting points from the readings about successful innovation come from the Toyota Way. Principle one states: Base your management decisions on a long-term philosophy, even at the expense of short term financial goals (Liker, 2004). This principle has proven true many times throughout football history. When Walsh first introduced the WCO, it took time for his team to get used to the complexity of the plays and for them to get in the demanding shape that was required to be successful. However, once successful, the San Francisco 49er's went on to win multiple championships. The success of his team leads to the demonstration of another Toyota Way principle, the idea of growing leaders who thoroughly understand the work, live the philosophy, and teach it to others (Liker, 2004). This was demonstrated by the fact that the most successful coaches of the last decade trained under Mike Walsh. These include Mike Holmgren, Mike Shannahan, Norv Turner, and John Gruden, in which three out of four of these coaches were able to bring home Super Bowl rings for their teams. This shows that not only did they understand the philosophy of the west-coast offense, they also believed in it and felt the responsibility to teach it to others.

Our readings also emphasize the need for the organizational structure to support the changes that were occurring in the organization (Tushman, 2005). This is of extreme importance on the football field. The coaches, coordinators, owners must be on the same page as the actual players, or the change will be ineffective. The increase in the use of the forward pass resulted in positions such as offensive coordinator, mechanics trainers

for quarterbacks, and separate coaches for the receivers. These changes demonstrate how structure of the team has to change in order to support the new needs of the team. This structural change also resulted from football's integration of certain technologies. For example, when headsets were introduced to coaches and QB helmets, coordinators moved from the field to the booths so that they could better communicate information to coaches and players.

The importance of shared learning and redundant information is evident throughout many aspects of the football team. Every member of a football team must know what the principles and the overall strategy of that team is. Furthermore, each division of the team (offense, defense, special teams) must know what specific goals and strategies they employ for success. This is most evident in the use of plays. Because of the cooperative nature of the sport, every member of the team must be familiar with the plays and their roles in it. Nonaka states, "This excess information increases the reliability and induces an expansion of the significance of such requisite information (Nonaka, 2005)." This translates to players that can play multiple roles and that can react to unforeseen changes in plays if necessary.

The last aspect of innovation that we will liken to the reading pertains to how innovation is typically created. The reading suggests that most change comes from environments in which the elements for change are already present (Morrison, 2005). This statement implies that the real necessity for innovation is an individual that can recognize the potential for improvement. Walsh and his west-coast offense were able to demonstrate this idea. Walsh did not create new positions or change the rules; he simply changed the way that his players were used in their existing positions. This was demonstrated most accurately by Walsh's treatment of the tight end. This position was initially previously thought of as a small lineman that was mobile enough to help in screen and option plays, but under different leadership, the position became a prime target for short passes. Walsh was able to transform many positions in this manner and resulted in a team that was able to out-perform its rivals.

We hope to have shown the validity of the football metaphor throughout this paper, but more importantly, we hope to demonstrate how innovation is present in even the simplest aspects of daily interactions. It has been said in many ways, but always true, without change there is no progress. Innovation is a term that describes the active pursuit of that change, and it is necessary for the survival of all organizations of any kind, even those that wear face paint.

Bibliography:

Nonaka, I. *Redundant, Overlapping Organization: A Japanese Approach to Managing the Innovation Process*. IOE 522 Coursepack. Ann Arbor: Dollar Bill Copying, 2006.

Tushman, M; Anderson, P; O'Reilly, C. *Technology Cycles, Innovation Streams, and Ambidextrous Organizations: Organization Renewal Through Innovation Streams and Strategic Change*. IOE 522 Coursepack. Ann Arbor: Dollar Bill Copying, 2006.

Liker, J. *Chapter 6: The Toyota Way in Action: New Century, New Fuel, New Design Process – Prius*. IOE 522 Coursepack. Ann Arbor: Dollar Bill Copying, 2006.

Morison, E. *Gunfire at Sea: A Case Study of Innovation*. IOE 522 Coursepack. Ann Arbor: Dollar Bill Copying, 2006,

Webster, M. The Merriam-Webster Dictionary. Merriam Webster Publishing, 2004.