CHAPTER 22

Learning from Sports: Samhandling and Risk in Soccer

Trygve J. Steiro¹ and Per Øystein Saksvik²
¹,²Norwegian University of Science and Technology

Abstract

This study shows some generic characteristics from sports that are of relevance to samhandling structures under risk. The findings are based on a case study of the concept of “Total Football” and the Rosenborg Football Club (RBK) in Norway. Football is a dynamic sport with several factors that come into play and where flexible solutions are demanded. The case is also of relevance for organizations in handling risk. RBK’s samhandling is based on “Total Football” and flow theory. In analyzing RBK, we also apply theories of improvisation. RBK created a platform that gave both direction to choices and a clear playing pattern. This platform further ensured that tasks could be executed at high speed and high intensity, described as “flow”. Flow contributed to both speed and precision in the playing pattern. It is concluded that the following is relevant for other organizations: 1) Forming a deeper understanding of samhandling and ensuring top management commitment; 2) Creating, establishing and maintaining samhandling in a manner that suits the organization; and 3) Minimal structures can be of great importance for organizations in unforeseen and risky situations.

Keywords: Samhandling, interaction, football, competence, flow theory, risk, unforeseen

License: CC BY-NC 4.0
**Introduction**

Are there characteristics in sports that are of relevance for *samhandling* structures that can also have relevance for risk situations and unforeseen situations in other organizations and branches? We have examined the *samhandling* concept, play pattern and philosophy of RBK. A well-performing and functioning soccer team can be viewed as the product of several factors. In the following example, football will be used. It can be used to determine which football team is performing best. A football player has ten other players to relate to; he or she also has eleven other players on the opposing team to consider.

This provides a myriad of possibilities, which makes the game complex. In that sense, football is a very good example of studying the unforeseen. “Football players have to react to surprising moves from the opposition and also generate moves that catch opposing players off guard” (Montuori, 2003:240). Improvisation plays a key role here. This can be termed as “react and act” (Bjurwill, 1993). The coach has less impact on the team during the match, when the noise in the stadium prevents verbal communication and communication is reduced to short messages or signals. Hedberg et al. (1976) observes that system designers have weak direct influence on participants’ behavior. That is, it is not possible to command and control the situation.

The risk concept here is linked to both the potential for injuries during training and matches and to the uncertainty of match results. Firstly, training will need to identify hazard signals and maneuver away from them, often very quickly. Secondly, both players and the team as a whole must have an overview of the game. The uncertainty of match results is linked to the extent to which team-based play systems and the individual’s skills work along the way, when faced with the other team, and the game’s development from second to second.

Similarly, Hedberg et al. (1976) suggests that designers should reconceive their roles as catalysts for a system’s self-design. Becker (1986) offers the concept of culture to explain the phenomenon of concerted activity and draws insight from playing improvised music such as jazz. Therefore, Weick (1993; 1999) suggests the jazz band as a preferable prototype organization. Barret (1998) claims that an orchestra metaphor, connoting
pre-described musical scores and having a single conductor as leader, is limited when compared to the ambiguity and high level of turbulence that many managers experience. Alvesson and Spicer (2011) claim that how we understand and interpret leadership is absolutely central to whether we actually respond to it. What is more important is what we do with the metaphors (Davidson, 1984; Hatch, 1997:2002; Rorty, 1989).

Morgan (1986) points out that viewing through a metaphorical lenses provides a way of seeing that might actually block other ways of seeing, putting us in a position of not being able to see. Barrett (1998) writes, “Jazz players do what managers find themselves doing: fabricating and inventing novel responses without a pre-described plan and without certainty of outcomes, discovering the future that their action creates as it unfolds.” (Barrett, 1998:605). Perky (1991) also supports the view that organizational strategy may be seen through the lens of jazz improvisation. His central premise is that the organization might be better off if they started to conduct themselves with the sense of flexibility and environmental negotiation that jazz improvisation employs. Brady (2011) examines the Battle of Stalingrad and stresses that, while the German commander, Field Marshal Friedrich Paulus, stuck to the plan and doctrines too rigidly, his opponent, the Russian Marshal, Georgij Zjukov, improvised and allowed improvisation by the Russian high command, Stavka, providing him with more freedom and flexibility to adapt to urban warfare.

The case in this article concerns RBK and their *samhandling* pattern under coach Nils Arne Eggen’s leadership. This chapter examines the following research question: How can RBK’s way of playing be explained by structure and the ability to improvise? We use football and jazz as metaphors for understanding organizations dealing with complexity and the unforeseen.

**Brief case description**

During Nils Arne Eggen’s term as head coach, spanning from 1988–2002, RBK experienced remarkable success. In short, they won the national series thirteen times during this period (and every year between 1992–2002), becoming Norwegian Cup champions five times in the same

The influences on their play can be traced back to two sources. The most influential source is “Total Football” (Eggen & Nyrønning, 1999). Here we can connect “Total Football” to Nils Arne Eggen and his focus on the *samhandling* between players as a means of exploiting opportunities. Nils Arne Eggen uses the term *samhandling*. The other important term is the favored foot (“Godfoten”). The idea is that you should focus on your strongest side and use it as a part of the system, for the benefit of all. Steiro & Torgersen (2013) imply that *samhandling* is about something to do “in action” rather “on action”; that is, it is a deeper form of cooperation which involves more direct influence between individuals, building on each other’s skills and competence. The latter can also be traced to Belbin (1998; 1999), Miles & Watkins (2007) and Torgersen & Steiro (2009), focusing on complementary skills and roles.

**Theoretical background**

“Total Football” and *samhandling*

“Total Football” was developed by the legendary Dutch coach, Rinus Michels, and the legendary player and later coach, Johan Cruijff. Michels (2003) borrows the conductor metaphor of the philharmonic orchestra but, at the same time, he pinpoints some obvious differences: in contrast to the musicians, who can sit down and concentrate, football players are constantly confronted with elements all around them (Michels, 2003). Wilson (2008) notes, “‘Total Football’ is the label given to an influential tactical theory of association football, in which any outfield player can take over the role of any other player in a team…. You make space, you come into space. And if the ball doesn’t come, you leave this place and another player will come into it.” (Wilson, 2008:37). “Total Football” was pioneered by Ajax and the Dutch national football team. “Total Football”
was exported to Barcelona Football Club when Rinus Michels moved to the club; he was later joined by Johan Cruyff (Wilson, 2008; Winner, 2000). Space and the creation of space are central to the concept of “Total Football”. The constant switching of positions that became known as “Total Football” only came about because of this spatial awareness. On the dynamics of football coaches, Carson (2013) writes, “As with many leadership arenas, football leadership has become a whole lot more complex. But the leader who can use his team of staff to bring simplicity out of the complexity will win the day.” (Carson, 2013:122).

The second influence is that of Nils Arne Eggens’s coaching colleague, Kjell Schou Andreassen, who led the Viking Football Club to three championships between 1971–1974 in Norway. They coached the Norwegian national team together, albeit with limited success. Andreassen was later strongly influenced by the psychologist Csikszentmihalyi (1996; 2002) and the focus on flow theory (Andreassen & Wadel, 1989).

Kuper and Szymanski (2009) explain Johan Cruyff’s thinking, “He was a philosopher of football and the most important thing about football, for Cruyff, was the pass. ‘You never passed to a teammate’s feet,’ he lectured, ‘but always a yard in front of him, to keep the pace in the game.’ While the first player was passing to the second player, the third player already had to be in motion, ready to receive the second player’s pass.” (Kuper & Szymanski, 2009:397). *Samhandling* between the players and their special skills in a more structured setting becomes more important and raises tactical awareness. For Cruyff, 4-3-3 was the formation that best covered all spaces on the football field. It was a more explicit way of using the wings and focusing on complementary skills. The wing backs could also be used offensively, given that other players covered their defensive tasks.

**Improvisation and flow**

Eisenberg defines improvisation as “making do with minimal commonalities and elaborating on simple structures in complex ways” (Eisenberg, 1990:154). Eisenberg writes further on players balancing autonomy and interdependence. Improvisation can be labeled as flow, that is, a phenomenon in which spontaneity and creativity reach such high levels that radical transformation happens in real time (Csikszentmihalyi, 1996).
Hatch (1997) focuses on intuition guiding something in a spontaneous but historically contextualized way. Organizational improvisation can be defined as “the conception of action as it unfolds, by an organization and/or its members, drawing on available material, cognitive, effective and social resources” (Cunha, Cunha & Kamoche, 2002:99). Seligman (2003) proposes that flow is more likely if a person concentrates on using their “signature strengths”. The theoretical foundation can be linked to Csikszentmihalyi (1996; 2002). Most studies of flow in sport have focused on individual sports, as it has been argued that these are more likely to elicit flow, particularly sports that are repetitive and provide fast feedback (Csikszentmihalyi, 1975). However, there is empirical support of flow experience in team sports as well (Jackson, 1995).

**Flow theory and samhandling**

Flow theory can be linked to *samhandling* in football. In all situations, the balance between challenges and skills is important. Challenges beyond our skills push us out of the comfort zone and lead to frustration and then anxiety (Andreassen & Wadel, 1989; Eggen & Nyrønning, 1999; Simonsen, 2005; Skrede, 1992). Left alone, one cannot adjust this imbalance and is in need of good helpers. Eggen explains, “Teammates using their ‘favored foot aim at your favored foot, resulting in plus experiences. A platform of mastery is built together.” (Skrede, 1992:106). Eggen & Nyrønning (1999) point out that, “There are no problems in performance demands that bring you out of the flow zone, if you collectively control performance you can be adjusting and be rooted at a higher performance level.” (Eggen & Nyrønning, 1999:225). Flow is defined as “that holistic sensation that people feel when they act with total involvement” (Csikszzentmihalyi, 1975:36). Csikszentmihalyi (1997) and Jackson and Marsh (1996) identified nine characteristics that are the fundamentals of flow: balance between challenges and skills, fusion of action and consciousness, clear goals, immediate feedback, concentration and focus on activities, feeling of control, loss of self-consciousness, time distortion and autoelic experience. Flow can be achieved by job design (Bakker, 2008; Demerouti, 2006; Salanova, Bakker & Llorens, 2006). There are similarities between
Csikszentmihalyi (1975; 1997; 2003) and the Demand and Control Model proposed by Karasek and Theorell (1979). The model states that there is an interactional effect between demand and control. Karasek and Theorell (1990) added social support to the model later. Leitao (2009) studied RBK and concluded that ability is not the sum of the group’s individual competence, but the sum of competence that is created together. Herberg, Torgersen & Rundmo (2018) (Chapter 15) found that samhandling is the most important factor in risk situations and meeting the unforeseen. Lagadec (1993) has stressed that the foundation for crisis management is established before the crisis occurs.

Therefore, it is of great interest to study an organization that has been very aware of samhandling and see how it has been both developed and maintained. Sports have the advantage of making it easier to assess good performances, particularly over a period of time. A football team can work with a plan but needs to take into account the dynamics of the situation. They need to take certain risks to win or to secure a good result.

**Method**

The empirical data of this study is based on document analysis and semi-structured interviews. The starting point is Nils Arne Eggen’s book Godfoten: Samhandling – veien til suksess [The favored foot. Samhandling as the road to success] (Eggen & Nyrønning, 1999). It describes the football philosophy clearly. Skrede (1992) has also provided insight into the ideas behind the RBK philosophy and Nils Arne Eggen’s way of leading.

The following two documents provide valuable insight into the development of ideas. Ásvoll, Gudmundsdottir & Karlsdottir (2002) studied coach Bjørn Hansen (head coach of RBK between 1984 and 1985, and assistant coach to Nils Arne Eggen 1990 –1997). Simensen’s (2005) book Godfotarven [Favored foot heritage] also provides an important window into the RBK mentality. Nils Arne Eggen and four key players of the golden era were interviewed between September 2015 and February 2016. The interview guide was based on reading the documents listed above and linked directly to the problem formulation. Nils Arne Eggen was interviewed for one and a half hours. We also asked four key players for
interviews, which they all agreed to do. These interviews lasted between 45–60 minutes. The players’ identities are kept anonymous. They are all players who were considered to be part of the starting 11, who had played for several seasons and who had substantial Champions League experience. Thematic analysis was adopted to analyze the interview material (Braun & Clarke, 2006). Our analytical approach was driven by the researchers’ interest in the research question and, in particular, the works of Skrede (1992) and Eggen and Nyrønning (1999).

The analysis can be classified as a deductive, thematic analysis or a “top down” process, according to Braun & Clarke (2006). A theme was defined as patterned response or meaning within the data set (Braun and Clarke, 2006:82). In addition, we have used concepts from Torgersen and Steiro (2009) as a framework. We have also examined other relevant chapters in this anthology (see Chapter 1, Torgersen, 2018), in order to put the current study within a context of risk and the unforeseen.

Results and discussion

Nils Arne Eggen was very concerned with collective issues and his philosophy is best illustrated by the following quotation: “The highest form of collaboration is when the player moves away from ‘must do’ to ‘want to do’ the same thing.” The foundation lies in the individual player’s educational skills: their ability to make others good. The ability to take responsibility for others’ development and performance. Nils Arne Eggen focuses a lot on social resources that bring out the best in players. A left wing needs to constantly run, either to get a pass or to open up and create a space for the second or even third attacker. The left wing player “Mini” Jakobsen needed to get a pass which allowed him to utilize his “favored foot”; in this case, a low pass in front of him. This is completely in line with the thinking of “Total Football” (Michels, 2003; Wilson, 2008). High, curved balls would not lead to mastery but only frustration for this left wing. According to Nils Arne Eggen’s philosophy, the following points are the foundation for the postulates and the interaction: 1) You will play well if you make others good, and 2) It is all about channeling the ego-drives to a collective effort. This was very evident both from
the literature review and from the interviews. The players mentioned the collective as a crucial point.

**From football to jazz**

It is interesting to note that Nils Arne Eggen uses an example from jazz, claiming, “...it is not until common ground is established that creative improvisation provides meaning and development.” (Eggen and Nyrønning, 1999:125, authors’ translation). Montuori (2003) has also compared football to jazz. Amabile (2001) stresses the importance for a group to share excitement over the team’s goal and mutual recognition of each other. Løfdali (2014), referring to RBK’s success, says “Eggen’s explanation of the basis of success can be summed up in one word: *samhandling*. What the players highlight is the coach’s clear picture of how to play football and his unique ability to transfer this to the players.” (Løfdali, 2014:29, authors’ translation).

This is also supported by By Rise (2014). In the interviews this was very evident too. All the players agreed that the basic structure could be identified and they all talked about focusing on the group before one’s own interest. The players recognized an overall theme. They also acknowledged the high quality of training using the same theme. “*After a while, we got tired of Nils Arne’s nagging and adapted to his style. We recognized the pattern, became familiar with our roles and a feeling of mastery developed.*” (Player 1).

**Minimal structures**

The RBK philosophy consisted of 50 postulates which cannot be fully articulated here. For a complete overview, see Eggen & Nyrønning (1999). The game postulates were first introduced in 1994 to ease learning. Presented in keywords and articulated briefly, they are best understood in relation to practical execution (Eggen & Nyrønning, 1999). Based on the interviews, the following postulates seem to be of special importance and are often repeated, therefore serving as an educational tool. Other postulates are also relevant but these seven are the most common. They are presented in Table 22.1.
Table 22.1 Play postulates and their explanation

<table>
<thead>
<tr>
<th><strong>Advance ahead</strong></th>
<th>Start movement before a pass is made.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Third attacker movement</strong></td>
<td>Attacker one and two move, attracting the attention of the opposing team, allowing the third attacker to excel.</td>
</tr>
<tr>
<td><strong>Play in longitudinal direction</strong></td>
<td>Focus mainly on forward play.</td>
</tr>
<tr>
<td><strong>Speedy transfers</strong></td>
<td>Exploit the immediate possibilities that a mistake or non-intended pass from a co-player provides.</td>
</tr>
<tr>
<td><strong>Concurrent movements</strong></td>
<td>Several movements that the opposing team have to react to, also linked particularly to the third attacker movement.</td>
</tr>
<tr>
<td><strong>Create outnumbering situations</strong></td>
<td>One or two players in attack, such as on the left flank, open up different opportunities, creating a dilemma for the right back in defense.</td>
</tr>
</tbody>
</table>

Table 22.1 illustrates the play postulates of minimal structures. Minimal structures can be used as powerful tools in training. During the Battle of Britain, the Royal Air Force adopted the minimal structure, “Beware of the Hun in the sun.” (Holland, 2010; Hillary, 2015). The German fighters preferred to attack from above, with the sun behind them. The German Messerschmitt BF 109E had its strength in steep dives and steep climbs to attack the British fighters, Spitfire MK 1 and 2 and Hurricanes MK 1 and 2. “Beware of the Hun in the sun” is simple; it was easy and essential for a fighter pilot’s survival in the Battle of Britain.

Similarly, it is worth noticing that the play postulates, in Eggen’s own words, are very brief and need to be seen in relation to practical exercises. The team trains intensively on a few selected movement patterns that are so clearly set out that they become automatic, releasing a significant amount of energy for improvisation and creativity. The jazz musician Charles Mingus focused heavily on collective improvisation and insisted, “You can’t improvise on nothing; you’ve got to improvise on something” (Kernfeld, 1995:119). This is also illustrated by Nils Arne Eggen, “It can be an educational and linguistic challenge to slightly vary the same message from time to time, just like jazz. This is an important skill for a coach. Good coaches manage to convey the same message using slightly different words.” (Olsen, Eggen & Ulseth, 2010:98, authors’ translation).
Shadow training

The same idea was very clearly expressed in Eggen’s book (Eggen & Nyrønning, 1999) and both the coach and players reported that this was reinforced during training sessions: “Look out for opportunities. A bad pass can create a new opportunity.” The last twenty minutes of training were spent on “shadow training”. Here, the eleven players from the starting lineup played against the rest of the team. In addition, Eggen demanded a fast pace during training. However, when necessary, Eggen would intercept with his characteristic “Stop!”, meaning freezing play momentarily while he demonstrated a principle, such as “creating outnumbering situations,” to get the players to interact properly. In the interviews, all of the players highlighted the quality of training, from Monday to Friday. “The training sessions were the foundation, with clear objectives and high quality” (Player 3). “We were the best team, so when the attack formation played against the defense they were up against the very best. If we had flow, we knew match day would not be any harder” (Player 1). We can see this in relation to the thinking of “Total Football”, of being aware of one’s own role and seeing one’s contribution – “I can participate too” (Michels, 2003; Wilson, 2008).

Conclusion

This study shows that there are several factors we can learn from sports that are important for samhandling under risk. Firstly, in the current study, a very interesting approach emerges, regarding the use of complementary skills in a framework or picture. As Charles Mingus put it, so succinctly: You can’t improvise on nothing; you’ve got to improvise on something.” The picture is an educational tool to illustrate, create, train and adjust skills and competencies to the structure. It also demonstrates an example of focusing on competence rather than position. Secondly, it also illustrates that it takes time to establish samhandling. We see a strong link to the Dutch concept of “Total Football” and this has been a major inspiration for samhandling. The generic lessons from this case study for other organizations where samhandling is important can be summed up as follows in Table 22.2, with the implications on the right.
Table 22.2 Summing-up of the important factors for *samhandling*

| 1. Form a deeper understanding of *samhandling* and ensure top management commitment | It is important that the organization does not have plans that cover everything. Organizations should plan, but at the same time, they should create a framework for *samhandling* that is rooted in some basic structure within the culture of the organization. This could be, for example, acknowledging the competence of the people in the sharp end to make sound decisions. |
| 2. Create, establish and maintain *samhandling* in a sense that suits the organization | The organization, with the support of top management, should train the organization for the unforeseen and make resources available in accordance with existing culture. |
| 3. Minimal structures can be of great importance for organizations in unforeseen and risky situations. | Minimal structures, as demonstrated in this chapter, could serve as guiding principles that are recognizable throughout the organization. Rather than stressing that everything should be covered by plans, minimal structures could be enforced as strong guiding principles, regardless of the situation. |

The understanding of, or again, the picture of *samhandling* needs to be created and reinforced by leadership and institutionalized within the organization. We can see from the current study the importance of *samhandling* through the alignment of educational, organizational and operational structures.

The main point is that top leadership creates the framework and the people in the sharp ends find out how to execute it. This means that all levels in an organization are important but in different ways. Minimal structures can create a strong common ground and, at the same time, provide flexibility within a certain framework, which is so important for meeting the unforeseen.

**Acknowledgements**

We would like to express our sincere gratitude to Nils Arne Eggen and the four players for participating in interviews and contributing to our work. This work has been carried out as part of the project “Learning from successful operations,” and generously sponsored by the Research Council of Norway through the PETROMAKS 2 Research Program.
References


