

From “Scratch” to “Qualified Olympic Athletes in Athens 2004”

# The Olympic Road to Performance Improvement

by Michiel Bloem and Arnoud Vermei

**H**ave you ever dreamed of participating as an athlete in the Olympic games? And did you succeed? Well, we didn’t succeed as athletes, but as performance consultants we created our own opportunity called TopSwimming Amsterdam (TSA). Conceptualized in 2000 in a bar in Amsterdam, this initiative was launched to close the gap between athletes’ 2001 performance level and the highest Olympic-level swimming performance in 2004.

In this article we share our experiences in this exciting journey, showing how common performance improvement concepts proved their value in the world of elite sports. In addition, it may inspire you to think about your own Olympic dream.

## Elite Sport and HPT: Where Rummler Meets Inge de Bruijn

By applying human performance technology (HPT) concepts to the world of elite sports, by applying business performance experiences with physical and mental research, and by shaping a performance environment driven by ambition and with a structural shortage of funding—this is where “Rummler meets Inge.” Based on fundamentals of HPT (Rummler & Brache, 1995), a team of people created strategies, processes, and (human performance) systems to fulfill Olympic ambitions.

The real-life case of TSA started from scratch in 2001, and this elite swim team was present in the 2004 Olympics with perspective on the finals and even Olympic medals. Very often, only the moments of glory in elite sports are broadcast. Sometimes you see an athlete train either on television or in real life. In this article, we present what we did behind the scenes to help bring out the best in our athletes.

The model illustrated in Figure 1 outlines the six-step process we used. TSA started as our **dream** (see #1 in the figure). Then the **design** (#2 in the figure) and **building** (part 4) phase took place, including a swim analysis (2a), which established the foundations for a strategic system design (2b) and the first building stones, that is, principles and plan (2c). This phase (2a–c) in turn resulted in the first “moment of truth”: the justification of the effort and plan (3). The **build and improve** phases (4 and 5) are set above the line of visibility, where the training program and the performance **improvements** between 2001 and 2004 were conducted. In the end, you might be interested to know where all this work led. Thus, our article concludes with the last step, namely the Olympic performances (part 6 of the figure), and shows the results.



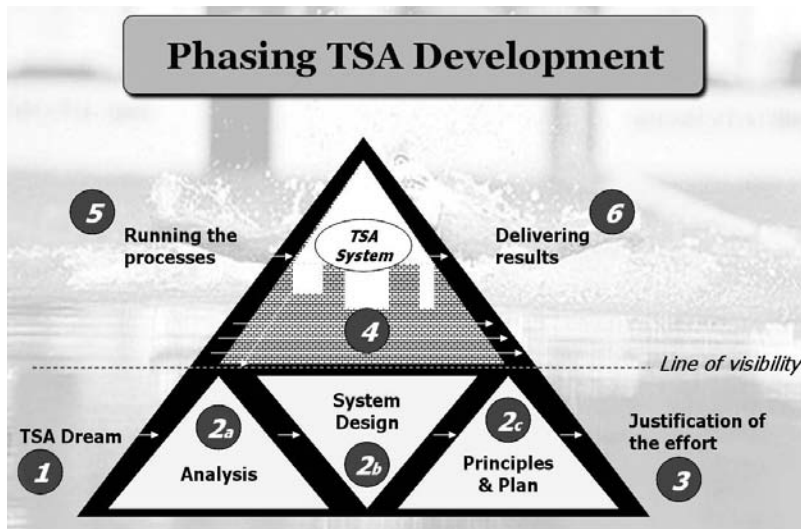


Figure 1. Phasing TopSwimming Amsterdam Development.

## The Dream: How It All Started

It was September 2000 and the Olympic games in Sydney Australia were afoot. The Dutch swimmers were showing their best with Pieter van den Hoogenband—who won two gold medals—and “Incredible Inky,” who won three gold medals.

In December 2000 in Holland, three Dutchmen still animated by the Olympic excitement in swimming found themselves talking, in a casual setting, about setting up an organization to create “new Pieters and Inges” (and golden coaches like Jacco Verhaeren) and to be present in Athens in 2004. Usually those ideas die right in the beer, but this one survived gloriously. We dreamed of watching Olympic swim finals in 2004 with our athletes, brought to that high Olympic level by a performance approach that created an ideal performance environment in swimming so the gap between club swimming and Olympic performances could be closed. This dream project would be designed by former swimmers and performance consultants, built by a team of people who shared the inspiration of a dream (Jackson & Csiskzentmihalyi, 1999). There was one remarkable distinction regarding the usual performance consulting approach: We did not start our work with identification of value to clarify the problem, business issue, or opportunity; we started from scratch with a dream.

One similarity in the performance consulting approach, however, was crystal clear. As noted in the foreword of Rummler’s *Serious Performance Consulting* (2004), the work of performance consulting is rooted in a systematic approach that begins at the end rather than the beginning by asking, “What should the results be when the work is done?” Well, those results should be swimming in the Olympic finals in Athens in 2004, and this is exactly where our dream and our work started in December 2000.

## Design for the Medal Zone

Designing TSA was not about designing a world-class training program for athletes. It was about creating a high-performance environment with all facilities that enable elite swimmers to reach the highest Olympic level. It is about shaping a culture that breathes “performance,” ultimately leading to Olympic finals for swimmers. To convince future sponsors of our dreams, we needed a good plan, based on sound performance principles and built on a true performance-based design. Not only did we need to assure ourselves that our intuitive assessment of the actual situation in Dutch swimming was right by conducting a performance analysis, but we wanted to be informed on the specifics of what would optimize our impact on athletes’ performance.

### Performance Analysis: Existing Situation in Dutch Swimming

Observing elite swimming in the Netherlands in 2000, we saw in a landscape in which—

- 30 swimmers swam in one lane
- Swimmers were coached by a part-time volunteer writing training programs for all swimmers, independently of the discipline (long distance or sprinter, backstroke, freestyle, breast, etc.)
- Training took place at 4:00 a.m. and 5:00 p.m. in a 25-meter pool (instead of the Olympic 50-meter size) and lasted 90 minutes at most

In order to understand the situation, we analyzed performance at three levels (Rummler & Brache, 1995). We had meetings with athletes, board members of the Dutch Olympic Committee and the Dutch Swimming Federation, and “Team van den Hoogenband,” for the two-time Olympic gold winner in the Sydney 2000 Olympic games. We discovered performance barriers at all three levels of performance:

- **Organization level:** The Dutch Swimming Federation had no clear strategy for developing talent to the highest standards. In the mindset of the federation executives, elite swimming was the responsibility of local swimming clubs. Occasional successes were the result of coincidence involving an exceptionally talented coach meeting an exceptional young talent. Despite a very successful exception to this rule—the private swim initiative built around van den Hoogenband—no comparable initiatives had been launched or supported.
- **Process level:** Federation and swimming clubs organized around key functions (i.e., technical training, facilities, medical support, communication). Though policies were in place to optimize performance within these functions, we found no structures in place to manage performance cross functionally.

The Three Levels of Performance	The Three Performance Needs		
	Goals	Design	Management
Organizational Level	Organization Goals	Organization Design	Organization Management
Process Level	Process Goals	Process Design	Process Management
Job/Performer Level	Job Goals	Job Design	Job Management

**Figure 2. The Nine Performance Variables** (Source: Rummler & Brache, 1995).

- **People level:** Athletes considered achieving A status (the Dutch Olympic standard required to receive a financial income) as their most important goal. There was a lack of career perspective within the coaching profession; current coaches were only involved in training. Very limited attention was given to land training and the application of other fields like mental training and education for athletes.

At that time, the way elite swimming was organized and managed was not driving performance at the Olympic level at all. We concluded that a successful approach should be built on different principles and firm fundamentals.

### TSA Performance Design

Based on our experience with performance models in the business environment, we used Rummler & Brache's (1995) nine performance variables to design a performance system that would address these barriers as shown in Figure 2.

At each level of performance (organization, process, job/people), three performance variables can be distinguished (goals, design and management), resulting in a total of nine performance variables. The process level serves as the pivotal link, ensuring that the achievements of people contribute efficiently and effectively to the ambitions and goals of the organization. Figure 3 shows this matrix as it was used to design the TSA Performance System. At the organizational level we took our dream ambition as the starting point and sketched out the necessary functions in TSA. A permanent TSA management team, supported by an advisory board, took responsibility for achieving goals on this level. TSA should become more than a one-time experiment.

The definition of three primary processes was seen as one of the key elements in the design:

- **Training:** a process that ensures the synergy between the technical training, physical training, mental training, nutrition, and logistics function

- **Communication:** a process that uses the outputs of the training process and the fundraising process to influence all stakeholders in TSA
- **Fundraising:** a process that ensures a continuous flow of funding to enable TSA ambitions

These primary processes would be “owned” by one of the permanent staff members and would be managed by process teams, which consisted of delegates from the different functions in TSA.

The third layer in the design handled the human resources. A staffing plan with job descriptions was set up. Besides functional responsibilities, every staff member had responsibilities in at least one process team as well. This structure ensured that job achievement would contribute to the performance of one of the three key processes and thus contribute to the ambitions of TSA.

### TSA Principles and Plan

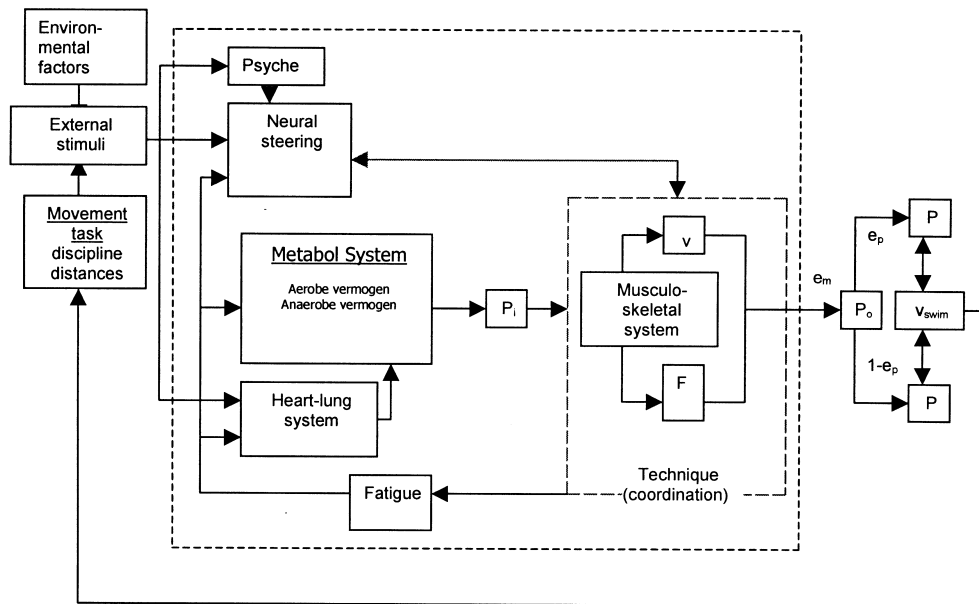
We linked the design into a plan of activities using solid principles to guide action. As shown and explained below, these principles expressed the fundamental beliefs of the management team and served as *the* decision making touchstone for any future decisions:

- PROGRAM above TEAM above ATHLETE
- Each compromise will cost an Olympic athlete

The ambitious program that was to lead to TSA success had to be endorsed as a critical success factor and had to serve as an action trigger for all involved. Only a team made up of experts and athletes who would be ambitious enough to achieve consensus on the importance of the program would implement it, yielding individual athletes

TSA Performance Design			
	Goals	Design	Management
Organisation	<ul style="list-style-type: none"> <li>▷ Olympic Swimming finals in Athens 2004</li> <li>▷ Olympic medals in Beijing 2008</li> </ul>	Functions in TSA: <ul style="list-style-type: none"> <li>▷ Medical</li> <li>▷ Physical/training</li> <li>▷ Nutrition</li> <li>▷ Mental</li> <li>▷ Logistics</li> <li>▷ Communication &amp; relationship mgt.</li> </ul>	<ul style="list-style-type: none"> <li>▷ TSA Management team</li> <li>▷ TSA Advisory Board</li> </ul>
Process	<b>Lagging indicators:</b> <ul style="list-style-type: none"> <li>▷ Olympic limits, Euros raised</li> </ul> <b>Leading indicators:</b> <ul style="list-style-type: none"> <li>▷ scores in physical health tests, # injuries, length of sponsor longlist</li> </ul>	Key processes in TSA: <ul style="list-style-type: none"> <li>▷ Training</li> <li>▷ Communication</li> <li>▷ Fundraising</li> </ul>	<ul style="list-style-type: none"> <li>▷ Key processes managed by a structure of process teams and process owners</li> </ul>
Resource	<ul style="list-style-type: none"> <li>▷ Individual performance goals</li> </ul>	<ul style="list-style-type: none"> <li>▷ Individual training/studying programs</li> </ul>	<ul style="list-style-type: none"> <li>▷ Athlete Performance Management (EXACT)</li> </ul>

**Figure 3. TopSwimming Amsterdam Performance Design.**



**Figure 4. TopSwimming Amsterdam Performance System.**

who would develop to a level of Olympic contenders. Though it sounds simple, this proved to be a very strong guiding principle in the development and management of TSA. “Program above team above athlete” was not meant as a rigid principle where no modifications could be made. It was just the opposite. Performance measurements (i.e., active drag, technique, training intensity, lactic acid testing) inspired, changed, adapted, and modified the input of the program as we were guided by results and the mission to keep tinkering with the swimming performance system (see Figure 4).

Dreaming of Olympic finals will not allow any compromises. On one hand, we knew from the start that this principle would not make our life easier, as we started with virtually nothing. On the other hand, we felt that this would get the best out of each team member. Improvising is not the same as compromising! It became immediately clear to us that we implicitly had set standards on all levels. Athletes had to live in Amsterdam to meet the tight training schedules; a coach should be available for athletes 24 hours a day; training schedules should not be guided by budget limitations. Standing on the starting block in Athens in August 2004, TSA swimmers must be able without any doubt to look back to the past four years and say, “I have done all the work I could in order to make use of the necessary TSA facilities necessary to perform as an Olympic swimmer” (Jackson & Csiskzentmihalyi, 1999).

### TSA Plan

So we had a dream (what to achieve), a design (what to develop), and a set of guiding principles (how to get the best out of athletes). What we finally needed before approaching sponsors was a program that answered the question of how

to deliver the results. To anticipate that question, we developed and articulated a program around five I’s as follows:

- Integral
- International
- Interdisciplinary
- Innovative
- Individual

The five-I program consists of an integration of sport technical training and competition; organizational support (facilities, coach, stages); educational support (combination sport and university); an international orientation in competition/swim expertise and training camps; interdisciplinary programming apart from the sport technical training that

improves performance like mental training, physiology, sport scientific research, nutrition, lactic acid measurement and medical support; innovative training methods like aerobics, measurements, track start skills, and cross-sport coaching approaches; and individual coaching based on SWOT analysis making a tailor-made program for each athlete, in addition to the common water and weight training each TSA swimmer had to fulfill in the basic workout.

### The First Moment of Truth: Justification of the Effort

Ideas, knowledge, and experience are not easily transferable outside the heads of TSA management. That inspired us to design a booklet (Figure 5) comprising our dream, the TSA Performance Design, the guiding principles, and the five-I program. In addition, a budget was presented in combination with the advantages TSA could offer to at least three potential sponsors, including the city of Amsterdam, which became the swimmers’ home base, with the new Sloterparkbad swimming pool, the Dutch Olympic Committee, and a private business sponsor. In this way, we didn’t have to depend on any one sponsor and could act independently.

The title of the booklet was *From 51 to 48...Realising Olympic Ambitions*. Insiders knew the world record for the 100-meter men’s freestyle was 47.84 seconds and that the time for Dutch swimmers swimming this distance was 51 seconds. So the slogan for TSA was born: “From 51 to 48...achieving Olympic ambitions.” It expressed the highest Olympic standards and thus was symbolic for the ambitions of TSA. From 51 to 48 became symbolic for closing the gap—i.e., the current national club level performance and the Olympic qualification and swim finals in Athens 2004 (Bloem, 1987).



**Figure 5. TopSwimming Amsterdam Ambition Booklet.**

Optimistically, we prepared ourselves for one big sponsor meeting where we could unfold our ambitions and plans. It went slightly differently. Sixteen meetings later we found our three partners and made a calculated risk to start launching TSA while we had just 60% of the budget (i.e., the City Amsterdam, the Dutch Olympic committee, and a well-known private telecom company).

### Building the TSA Outfit

The TSA outfit had to be built to include the following:

- an office for the administration and the coach
- meeting structures (coach, management, and a coach for the team around the team—i.e., all the trainers)
- a staffing plan with job functions and process descriptions (coach, team manager, swimmers, and management)

Resources had to be recruited:

- a coach (with a vital role in the design of the training and competition plan)
- a team to support the swim team, with various specialists
- a team manager and successful swimmers

As TSA management we took the initiative to approach two of the best young swimming coaches and choose the best. The technical TSA director recruited the specialists: medical, physiotherapy, nutrition, mental coach, physiologist, aerobic coach, and sport scientist. Half of these specialists turned out to be former elite athletes. Is that coincidence? A knowledge-management supplier was found with a newly developed software program named e-Synergy: gathering athletes' various performance data as well as data on the coach and the organization. And last, but certainly not least, pools to train following "healthy" schedules (from 7:00 a.m. to 9:00 a.m. and 3:00 p.m. to 5:00 p.m.), and possibilities for weight training.

Creating a financial base for four years was a challenging activity. We had to organize and support this at the executive

level. In that respect TSA management introduced an advisory board to establish workable relationships and a network that could bridge the worlds of business and sport. In addition, a yearly event, called Amsterdam Swim Cup, was introduced as a performance platform and a fundraiser.

The next step was interviews in newspapers and presentations on television spreading the news that a remarkable swim initiative and Amsterdam Swim Cup was to start in Amsterdam. As predicted, swimmers took the initiative to call us and asked to swim for TSA. Using the elite swim criteria, TSA's technical director chose seven (out of 15) swimmers. The media labelled TSA as a professional, well-positioned, and independent elite sport organization in the world of swimming in the Netherlands. TSA was on the air on September 1, 2001.

### Deliver Results Focused on Running the Training Process

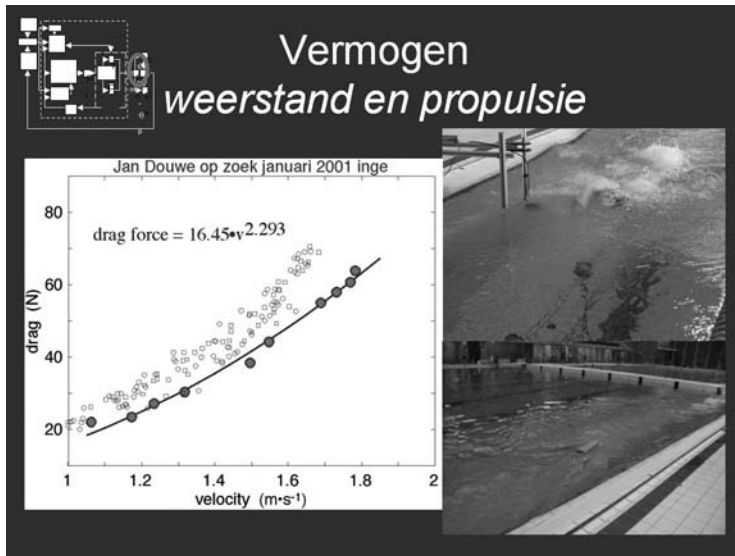
Even an ambitious and well-designed program doesn't run by itself. Good strategy and organization were the foundation and processes, and people were the crucial factors in achieving the desired results (i.e., Olympic swim finals in Athens 2004 and medals in Beijing 2008). These organizational TSA goals constantly led TSA people.

#### Running the Training Process

TSA swimmers train for 30–35 hours a week. The process owner of the training and championship program was the coach and he started working with the team on—

- Water training (11 sessions a week, 2 hours per session)
- Aerobics (2 sessions)
- Weight training (2 sessions)
- Testing activities (once every 12 weeks on the measuring active drag (MAD) system, see Figure 6)
- Lactic acid measurements

In the training process, the coach writes the individual training programs for each swimmer based on discipline, training background, and experience. The coach then measures performances and techniques constantly (see Figure 7). In Hamburg, the TSA swim team was tested in a research lab, where the coach could analyze underwater techniques as well as movement patterns of the legs, body, elbows, arms, and hands in order to optimize how athletes could swim with less resistance and more power. This approach, called the performance cycle—Perform, Measure, and Improve— informed swimmers of the performance gains they could achieve if they placed their hands more horizontally in the water. Another athlete needed to use her leg function much more. All the swimmers used the old-fashioned start technique, leaving the effectiveness of new techniques unexplored, even though a new more effective technique already existed. In the swim literature the new start was analyzed. In 2003 the US start trainer came over to TSA to introduce and



**Figure 6. MAD System: A Ladder in the Water Measuring Active Drag.**

train on this new method. The coach measured the effects using video images. Lactic acid testing took place in a consistent manner to indicate the fitness of the swimmers (fatigue during/after training work). Every six weeks testing on the MAD system occurred, indicating the percentage of water resistance and the power of a swimmer.

All individual measurements were gathered in TSA's e-synergy knowledge-management system. What did the coach do with all these measurements? Nothing in the first year, but from April 2003 each six weeks a team-around-the-team meeting was conducted, in which the physiologist, doctor, physiotherapist, nutritionist, and the coach discussed the test results and the performances of each individual. The cry for a sport psychologist became louder. TSA assigned a sport psychologist to individuals to address such issues as psychological blocks, negative self-image and its nutritional implications, among other topics. Most athletes chose to pursue this type of coaching voluntarily to the end. In that respect, the team-around-the-team meetings became very fruitful. Finally, given the Dutch Olympic Committee's warnings about Athens' hot weather in 2004, drinking patterns in Athens were measured and addressed during training, thus providing the swimmers with an opportunity to fill up and become aware of their drinking pattern.

A crucial measurement occurred in August 2002, just after the European championships in Berlin. Observing the activities and motivation level of the TSA athletes, TSA management asked, "Where is the athletes' burning Olympic desire?"

Testing Protocol	Lactic Acid	Video	MAD
What It Measures	Aerobic power	Swim technique	Active drag in relation to speed
Test Frequency	Every 6-8 weeks	Ongoing	Every 12 weeks

**Figure 7. Testing Overview.**

We had asked the swimmers and coach before about this aspect, but they assumed everything was fine; they had qualified for the European championships. In our view they just did their job in training and in swim events. But excelling at Olympic games asks a whole lot extra.

Based on the performance cycle we decided to grant an interview with the largest newspaper in the Netherlands; our chair criticized the attitude of the swimmers ("They make no choice for swimming" and "They lack the blind passion"). Athletes were angry, but we took the decision to make a management intervention and organized a goal-setting session. In this session management raised the bar on the process and resource level: fourth place in the world championship is the time to beat and to take swimmers to the Olympic finals in 2004. As a result, two of the seven swimmers quit; the other five became convinced and made their personal performance cards (see

Figure 8), focused on their distance and discipline and with their benchmark or "time to beat." And one swimmer joined the team.

Results in the 2003 World Championships in Barcelona indicated we were on the right track. One athlete was fourth in his 50-meter freestyle and another took seventh place in the 100-meter freestyle. In the relay, however, we saw disappointing results; there was barely any willingness to perform together.

To qualify for the Olympics, coaches chose challenging meets consciously: Open American Championships in December 2003. The sooner athletes qualified, the better the preparation for the Olympics was. And this mission was accomplished: four athletes qualified for the Olympics in their events. The performance cards did their work and helped raise the bar to Olympic levels.

## Olympic Performance

TSA started in 2000 with "zero" and a dream. In 2001 seven swimmers, a professional coach, and a team of specialists managed by TSA management started improving their swimming performances. "From 51 to 48" became the slogan symbolizing what it would take to close the gap between current and desired performance. Each swimmer chose his or her own distance and discipline and challenged himself or herself using performance cards. The swim team changed during the road to Athens: Originally we started with seven athletes; two quit and one joined in 2002. In previous Olympic years the team consisted of six athletes.

Eventually four TSA swimmers qualified for the Athens 2004 Olympic games and became a "substantial subset" of the Dutch swim team. All four swimmers started in their individual swim events, and three of them started in the relays.



Figure 8. Sample Performance Cards (Source: Bloem, 1987).

## Lessons Learned

- Start working from ambition (have the guts to dream without compromises).
- Make your white space visible (work on the processes).
- 5% inspiration 95% transpiration (this is hard work).
- Use your own and others' strengths (establish partnerships).

TSA managers learned some lessons also:

- Challenge the Olympic ambitions of the athletes and coaches regularly.
- In coaching, letting athletes be the “master of own destiny” is not the same as the “athlete decides.”
- At the Olympic games too much still “just happened”—our athletes were not fully psychologically prepared for this huge elite sports event.
- Mentally and physically be 110% prepared for the Olympic games: it is impossible to pilot the Olympic games, but you can come pretty close.
- Evaluate the training process every month; never assume!
- Think and act forward in work; your performances and pride will improve dramatically. 🍓

## References

Bloem, M. (1987). *The brain: A weapon in the battle*. Thesis, Human Movement Sciences (Het brein, een wapen in de strijd, afstudeerscriptie Sportpsychologie, Faculteit der Bewegingswetenschappen). Faculty of Human Movement Sciences, Amsterdam, The Netherlands.

Jackson, S. & Csikszentmihalyi, M. (1999). *Flow in sports*. Champaign, IL: Human Kinetics.

Rummler, G. (2004). *Serious performance consulting according to Rummler*. Silver Spring, MD: International Society for Performance Improvement.

Rummler, G. & Brache, A. (1995). *Improving performance: How to manage the white space on the organization chart*. San Francisco: Jossey-Bass.

**Michiel Bloem** holds a degree in Human Movement Sciences, was Managing Director of TSA, and is an associate of WEB Performance. For more than a decade Michiel has been fascinated by human performance, specializing in developing and implementing integral performance systems. In his consulting career he has held leading positions in large improvement projects in the automotive, ICT, and manufacturing industries. In this past Olympic year, Michiel presented the TSA case once a week to press, business, and governmental audiences. Besides, he's one of the few Europeans having run the New York 2004 Marathon and “pushed” to the finish line in front of 2 million American spectators! Michiel may be reached at [michiel@tza.info](mailto:michiel@tza.info) or [michiel.bloem@wxs.nl](mailto:michiel.bloem@wxs.nl).

**Arnoud Vermei** leads WEB Performance, one of the first consulting firms concentrating on integral performance improvement in The Netherlands. Founded in 1993, WEB focuses on the interfaces of organizational, process, and human performance, helping clients create and maintain systems that drive continuous and sustainable performance improvement. He holds a degree in Business Economics and has fulfilled consulting assignments for almost every large multinational in The Netherlands. He is a former presenter to numerous European conferences. Arnoud may be reached at [info@webperformance.info](mailto:info@webperformance.info).



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