Athlete Information Systems – A White Paper

1 Introduction

Elite athletes have increasing numbers of people responsible for their development, including: coaches; strength and conditioning coaches; medical staff; nutritionists; psychologists and others. If they exist in a club/regional system they may have an extra set of staff from the national set up. Collaboration and communication between all these staff, and particularly between local and national staff, is likely to be an issue. One step towards aiding the collaboration, and to allow overseeing by central Performance Directors, is to adopt an Athlete Information system. This should allow all those involved with an athlete to access all relevant information, whenever necessary.

This sounds very easy, but implementing such systems appears to be very difficult. The difficulties normally sited are:

- Lack of accessibility "I can't get on to the system where I need to"
- Lack of functionality "It doesn't do exactly what I want it to"
- Time pressure "I can do this quicker on paper"
- Computer illiteracy "I can't type"

Even if all these aspects are addressed, it is still difficult to get such systems working properly. The real problem appears to be the unwillingness of many staff to vary from their current working practice – "This is how we've always done it" and "You're not a coach/physio/doctor what do you know?".

This paper addresses the issues of what the ultimate system should be, what the sticking points might be and suggests some methods for reaching the goal.

2 The Gold standard

The perfect Athlete Information System has to quickly and securely provide all the coaching, management and support staff with all the relevant information regarding an athlete, whenever and wherever they are.

There is certainly some sport specificity, but it is possible to group most of the information required under the following headings:

- Athlete demographics (name, address, e-mail, date of birth, etc.)
- Communications (e-mails, letters, notes on conversations, etc. with athletes)
- Performance analyses (competition results, fitness assessments, skills analysis, etc.)
- Technical information (equipment used, settings, etc.)
- Training diary
- Performance lifestyle
- Nutritional information
- Medical records

Getting access to this information is not easy, without placing some practical constraints on the users. For example, they may have to be on-line, or may have to download information about an athlete before working off-line.

The best solution is a web-enabled system that is partnered by relevant off-line modules.

3 Starting the project

The drive for an Athlete Information System usually comes from one of the following:

- An ambitious Performance Director
- A National Funding body imposing the requirement
- Occasionally, a group of Coaches, Medics or Conditioners

Performance Directors normally do not have the backgrounds or time to manage complex IT systems, and Athlete Information Systems are **very** complex. This usually means relying on either a member of their staff or their IT Manager to manage the project. Both of these cause problems. The member of staff will not have the IT understanding, or the status, to successfully push through the project. The IT Manager will not understand the intricacies of how the Performance Department works, so is likely to underestimate the scale of the potential problems.

Coaches, Medics and support staff will come with a huge range of expectations and skills. There will be groups that are naturally comfortable with using IT systems and will welcome such developments. Strength and Conditioning coaches and Administrative staff are often enthusiastic about such systems, as are some Physios and Medics. Coaches are often reluctant to change the way they work and cannot see the need to communicate with others regarding their athletes. They also often come from environments, such as education, where business systems are not widely used.

For any system to be successful ALL of these groups must buy into using the system, or the risk is that everyone will say "well, no-one else is using it, so why should I?"

4 The Step by Step approach

It is now possible to buy a system that covers many of the basic requirements for an Athlete Information system. This would allow the NGB to make a start towards the final system. However, it is very unlikely that such a system will meet all the detailed, sport specific requirements without some bespoke work. Introducing the basic system leaves users wondering what benefit the system really gives them without allowing them to enter their own performance analyses, fitness results, etc.

A better approach is to start by identifying common requirements across a specific set of users and then developing prototypes that can be actively used for some time. Once these prototypes have been in use by individuals for some time, if they are successful, it is possible to build them into the basic system prior to its first release to users. This gives users both a wide range of basic functions and their specific requirements. It also allows doubters to be brought on board.

5 Managing for success

No matter what, there will be reluctant or refusing users. In business it is often the case that staff simply cannot do their jobs without using the business system. In sport this is not true. A coach can still coach athletes without recording information for others to view. These coaches often see themselves as irreplaceable, and therefore immune to censure, so they are free to ignore new systems. They can also see their way of working as better than everyone else's, so cannot see the point of sharing information with others.

So, the senior manager has to use a range of techniques to ensure everyone uses the system. The first thing to do is to make very clear the vision of sharing information and collaborating

about athletes. Next, implement an education programme for users about the potential benefits for them and their athletes. Alongside this, canvas users for how they work and what information they normally use and what information they can't easily access. Do this with as many users as possible, believers and unbelievers alike. Prioritise areas of need, define prototype requirements and get the prototypes out into the field. Address all potential technical stumbling blocks, e.g. internet access, computer keyboard skills, support issues. Bear in mind that these issues must be visibly addressed so that no-one can cite them as reasons for not using the system.

Once all of these steps have been taken, and the prototypes have proved successful, integrate the prototypes into the overall system and roll this out to all users. Remember that all the users will need training and proper support at this critical stage.

Finally, be prepared to use some direct management techniques, i.e. "you will use the system, it is part of your contract to do so". One innovative Chief Exec, successfully, removed all the coaches' paper player files so that they would be forced to look to the system for information.

6 Conclusion

An Athlete Information System can transform the management of an elite athlete. It can provide a superb platform for collaboration and communication between all of those tasked with an athlete's development.

To get such a system right needs very careful planning before even choosing a software supplier. Take advice from people who have successfully developed and implemented such systems. Give thought to: who will use the system; what they will use it for and where they will use it. Ensure there is a clear vision of why they should use it, i.e. for the benefit of the athletes. This must be set down clearly by the Performance Director. Use prototypes to allow a staged approach to changing the users working practices. Include any successful prototypes into the base system before first roll out. Then be determined about getting complete uptake amongst all staff.

About the Author.

Richard Lecky-Thompson is the Senior Consultant with Coolgreen Ltd. He has significant experience in working with Athlete Information Systems with a range of sports. He worked as IT Manager for the English Institute of Sport, spending much of his time working on plans for a cross-sport system, working closely with a number of NGBs. He has spent over four years advising the England RFU and RFUW on their world leading Player information system, ePAS

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