# MANAGEMENT SYSTEM FOR QUALITY COACHING IN TEAM GAMES

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#### INTRODUCTION

The purpose of this presentation is to introduce a Computer Aided Coaching (CAC) system called TEAN MANAGER (TM). The system covers almost the whole field of data processing related to coaching. Different versions have been developed for football, ice hockey, basketball and volleyball with assistance of experts. The management system includes all aspects of coaching.

TN has a graphical user-interface making the program very user friendly. All commands are given with a mouse. The keyboard is needed to use only for information input.

- With TN used one can handle, follow-up and analyze
- \* basic information about each player
- \* the objectives for the year
- \* the training program
- \* the structure of the drills
- \* the objectives that the drill is to accomplish
- \* how much time has been spent on each objective during the year and
- \* measurement of the performance of each player in a game situation.

#### SYSTEM REQUIREMENTS

To run TN the hardware is needed as follows:

- \* IBM AT , PS/2 Series or a 100% compatible computer
- \* EGA or WGA (or true compatible) graphics adapter and display
- \* 640 KB RAM
- \* Microsoft Mouse, or a compatible pointing device
- \* Hard disk at least 10 MB free space and
- \* Printer (rather Laser).
  - The software requirements are as follows:
  - \* MS-DOS or PC-DOS operating system, version 2.1 or later and
  - \* The MOUSE driver program.

### TEAM MANAGER FUNCTIONS

The TM program has several pull-down menus on the main screen. Nost options activate a sub-program, which contains more pull-down menus. It is possible to return to previous menu screen. On each TM screen several windows can be seen. A window can have different characteristics, like text editor, browsing arrows, free hand drawings etc. The chosen screen can be activated by a mouse.

The main sub-programs are as follows:	Planning has been divided into four parts
* Planning	* Goal
* Pollow-up	* Season
* Analysis	* Practises and
* Databank and	* Games

Prague 1990

Figure 1 shows an example on the season planning.

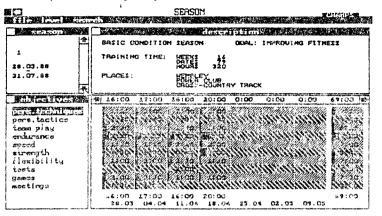


Figure 1: Planning of selected season dates, objectives, daily times and times divided into objectives in football.

Follow-up includes

- \* Team game info and
- Player game info

Analysis menu includes as follows:

- + Objectives
- \* Drills
- Tests
- \* Material
- \* Team analysis
- \* Game analysis and
- \* Player analysis.

This function allows and to measure the time spent on specific skills during practice down to the exact minute.

After each skill shown in the Figure 2, there is a number which shows the exact amount of time spent on the skill in football. In football the highest level includes eight separate skills.

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Figure 2: Analysis of the skill objectives in football.

These skills are then broken down further into ten subskills and these skills are subdivided further into the lowest level.

Databank includes as follows :

- \* Players
- \* Drills
- \* Objectives and
- \* Tests.

All planned drills, tests and test results can be saved in a databank and printed with drill drawings for separate practice sessions. Figure 3 explains an output of a shooting drill in football. The description and objects of the drill will be printed simultaneously.

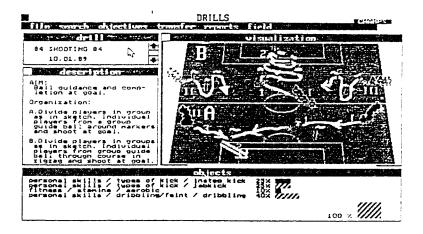


Figure 3: A visualised drill with descriptions and objects from the drill databank in football.

The Test screen contains information about tests that the players have performed and tracks the player's results. Objects window shows what the test is measuring.

Goal window shows the goal values for the test.

The Draw function allows the coach to visualise drills on the screen as well as using it as an instruction tool for individual players. The user can make a choice, a half view or full view of the practice area. Any mistakes made while drawing can be quickly erased. The Draw screen is divided into four different functions as follows:

\* Draw functions

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- \* Sports functions
- \* Color functions and
- \* Pattern functions

The Specialist function allows to evaluate the psychological make up of the team. There are three types of multi choice tests that can be performed:

- \* Argument test
- \* Opinion test and
- \* Estimation test.

All of the tests have a different function in the measurement of the players. The graphical display will represent the player's characteristics in bars or numbers.

In each version for different bell games there is an unlimited capacity for the coach to apply his or ber own ideas in the planning, follow-up, analysis and databank of the players, toass, drills and games.

## REFERENCES

ESTFLIMEN, J.& MADSEN, D. (1989) Tean Manager, Oser's Manual. SportSoft. Joenson, Finland.

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