



CONFERENCE 2019

*Coaching Better Every Day:
Shaping the Future*

Presentation Title: Enhancing Coaching using Technological Tools and Data

Presenter: Woo Mei Teng, Republic Polytechnic



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Introduction

Wearable Technology

Global Positioning System (GPS)

Heart rate monitor

Video-based Technology

Video Analysis Software

Mobile Applications

Data Science

Database – Big Data Analysis

Statistic / Prediction

← Sports Excellence →

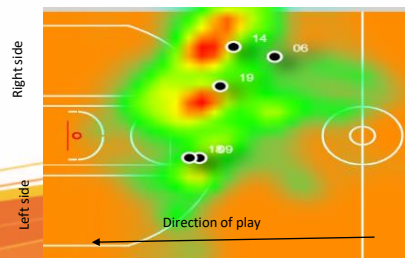
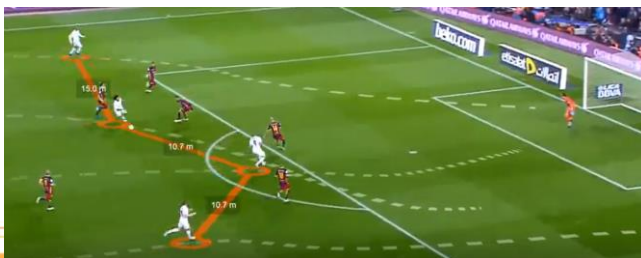
Benefits to Coaches

- ✓ It benefits coaches, team managers, athletes, and trainers by providing objective feedback and competition insights aimed at enhancing the athletes' performance.
- ✓ Accurate profiling of how individual athletes and/or teams perform throughout the seasons/years.
- ✓ Coaches can evaluate the strengths and weaknesses of one's opponents based on video clips and statistics.

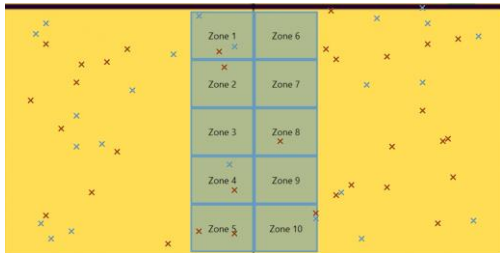
Benefits to Coaches

- ✓ With a statistic database, all the major competition results can be analysed to help coaches on:
 - ✓ Athlete selection
 - ✓ Prediction of team performance
- ✓ The match report and video clips help coaches to facilitate discussion with the team and athletes.

Types of Data



Types of Data



	Lose 发球 China	Lose 发球 USA	Win 发球 China	Win 发球 USA	Grand Total	Lose 发球 Brazil	Lose 发球 China	Win 发球 Brazil	Win 发球 China	Grand Total
Block (挡)	9.38%	4.55%	11.76%	13.04%	9.57%	12.5%		5.26%	18.18%	7.69%
Drop (放球)	31.25%	4.55%	5.88%		12.77%	12.5%	25%	10.53%	9.09%	15.38%
Soft Spike 轻网扣球	6.25%	18.18%		13.04%	9.57%	12.5%	20.83%	10.53%		12.82%
Spike 扣球	51.13%	72.73%	23.53%	21.74%	44.68%	62.5%	54.17%	31.58%	8.18%	46.15%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

	Tot Dist (m)	High Intensity Running Dist (>18km/h) (m)	% High Intensity Running Dist (>18km/h) (m)	Max HR	Avg HR
DSC 03	1242	13	1.05	186	128
DSC 10	1123	26	2.33	179	124
DSC 19	1202	5	0.42	172	115
Average	1189	15	1.27	179	122

Conclusion

- ✓ Technological tools and Data could help coaches to have a full end-to-end understanding of athletes/teams' performance during training and on the court.
- ✓ It enhances augmented feedback to athletes, and it mines new insights from all the data collected.
- ✓ It enhances the process and the quality of coaching/management in sports.



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In support of Coaching Development



Supporting Partner



Education Partner



Partner in Sport

