Technology Tools for Coaches

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Technology Tools for Coaches

- Wearables

- Real time communication

- Equipment

- Performance Forecasting

- Training Management

- Technique

Technology Tools for Coaches

<u>Wearables:</u>

- AI Glasses
  - [Meta](#) – integrates smart features into a pair of traditional glasses, a camera, microphones, open-ear speakers, Bluetooth and Meta AI.
- Smart Goggles and watches
  - [FORM](#) – heads up display of real time metrics – pace, splits, stroke rate. Swim straight technology.

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Wearables:

- Sensor Based Analysis
    - EO Lab— handheld device to measure stroke path, force and efficiency
        https://youtube.com/clip/UgkxaZVW3TyAOKHIIvX0Tt_jBOBAdklmD5du?si=M7UCDQr9xvSgWk4i
    - SmartPaddle by Trainesense — measures the force created during the pull phase in three directions

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Real Time Communication:

- Bone conducting headsets
  - Zygo – live one way communication or streaming from your phone
  - SONR Coach – transmits audio providing instant feedback
    - Both work underwater and at an average distance of 50 meters
    - Suitable for open water swimming
- Wireless voice amplifier
  - SHIDU - waterproof and Bluetooth voice amplification device

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<u>Equipment:</u>

- [Lightning X](#) — measures time and distance for starts, pushoffs, reaction times and underwaters.

  https://youtu.be/MJUNtVy3KoE

- [GMX7](#) — resistance training device

  https://youtu.be/HMyGLpqXmcA

  https://gmx7training.com/pages/videos?_pos=1&_psq=video&_ss=e&_v=1.0

- [Swimnerd](#) — Bluetooth enabled pace clock programmable from your mobile phone

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Performance Forecasting:

- Athlete Analyzer – uses data to project a swimmer's performance at a future event. Coaches can plan for peak performance at specific events like USMS nationals.

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Training Management:

- Platforms like Commit Swimming, Phlex and TritonWear provide tools to plan workouts, organize training cycles, and analyze data for individual swimmers.

- AI for workouts. ChatGPT and Gemini AI can produce workouts when given parameters such as time, pace, distance, type of workout and type of swimmer. The more input, the better the result.
    - Digital labor-AI tools that carry out tasks with guidance from a coach

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Breakout Session: (12 minutes)

Use AI to write a 75 minute workout

- Group 1: Distance workout
- Group 2: Stroke and IM workout
- Group 3: Triathlete and open water workout
- Group 4: Sprint workout

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Technique:

- AI human modeling
  - Aspiricx - full dimensional scientific model developed with the concept of modeling human potential using AI.
- Video analysis
  - OnForm and Dartfish software allows the coach to upload swimmers above and below water videos for analysis. Coaches can add annotations and verbal feedback to the videos and share the results with the swimmer.

Questions

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