

# PaceRunner

## Adaptive Runner's Training App



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## Introduction

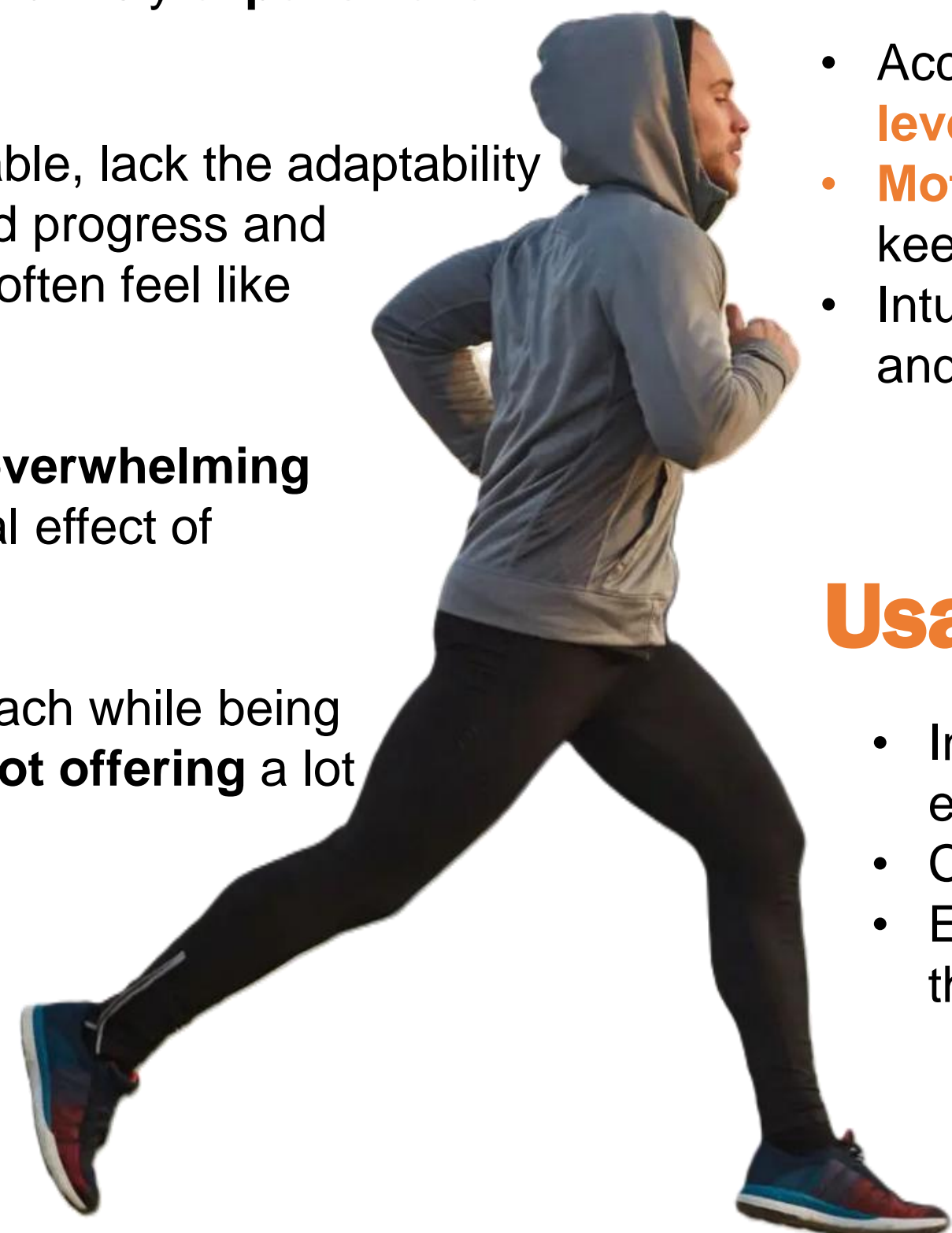
- Running has become a highly popular fitness activity in Ireland. It is estimated that 680,000 people in Ireland run regularly. Almost **25,000** took to streets for the **2023 Dublin Marathon**.
- Many applications and devices are being offered to runners to get them marathon ready however a lot of runners are still faced a similar problem....

## The Problem

- One of the persistent challenges faced by runners in Ireland and around the world is the journey from being an improver to the stage of successfully completing a full marathon.
- While the allure of conquering the 26.2-mile distance is undeniable. Many improver runners often find themselves navigating a **maze** of conflicting advice, **struggling to tailor their training plans** to their individual needs, and grappling with the fine balance between pushing their limits and avoiding injury.
- Leaving them in a state of **uncertainty** about how **to bridge the gap** between shorter distances and the marathon challenge.

## Existing solutions

- Traditional running coaches can be prohibitively **expensive** for many.
- **Static** training plans, while more affordable, lack the adaptability necessary to accommodate the nuanced progress and unique profiles of runners. These plans often feel like a **one-size-fits-all** approach.
- Lots of apps bombard runners with an **overwhelming** amount of data can have the paradoxical effect of creating **confusion**.
- Smart training apps such as Garmin Coach while being effective have also been described as **not offering** a lot personalized training [2].



**You do the running...  
We do the thinking!**

## Our Solution

- More than just a training app, PaceRunner is a **personalized** mentor, a data-driven coach, and a steadfast partner in achieving marathon goals.
- PaceRunner offers **dynamic training programs** based on famous marathon training plans [3], That adapt to the runner's performance, mimicking a running coach at no cost
- PaceRunner provides **clean and noise-free** data insights to keep the runner laser-focused on the goal.
- PaceRunner's cutting-edge algorithms, driven by data analytics and personalized insights, not only **estimate VO2 max** [1] but also translate this information into practical **pace recommendations** for every training session. Using **Jack Daniel's** T-pace (Threshold) running program [4].

## Features

- AI-Powered Training Plans: Tailored training programs that **evolve dynamically**, optimizing each runner's performance.
- Easy Adjustments to plans such as extra rest days or **unplanned breaks**
- Runner Profile Creation: **User-friendly** registration and profile setup to fine-tune training.

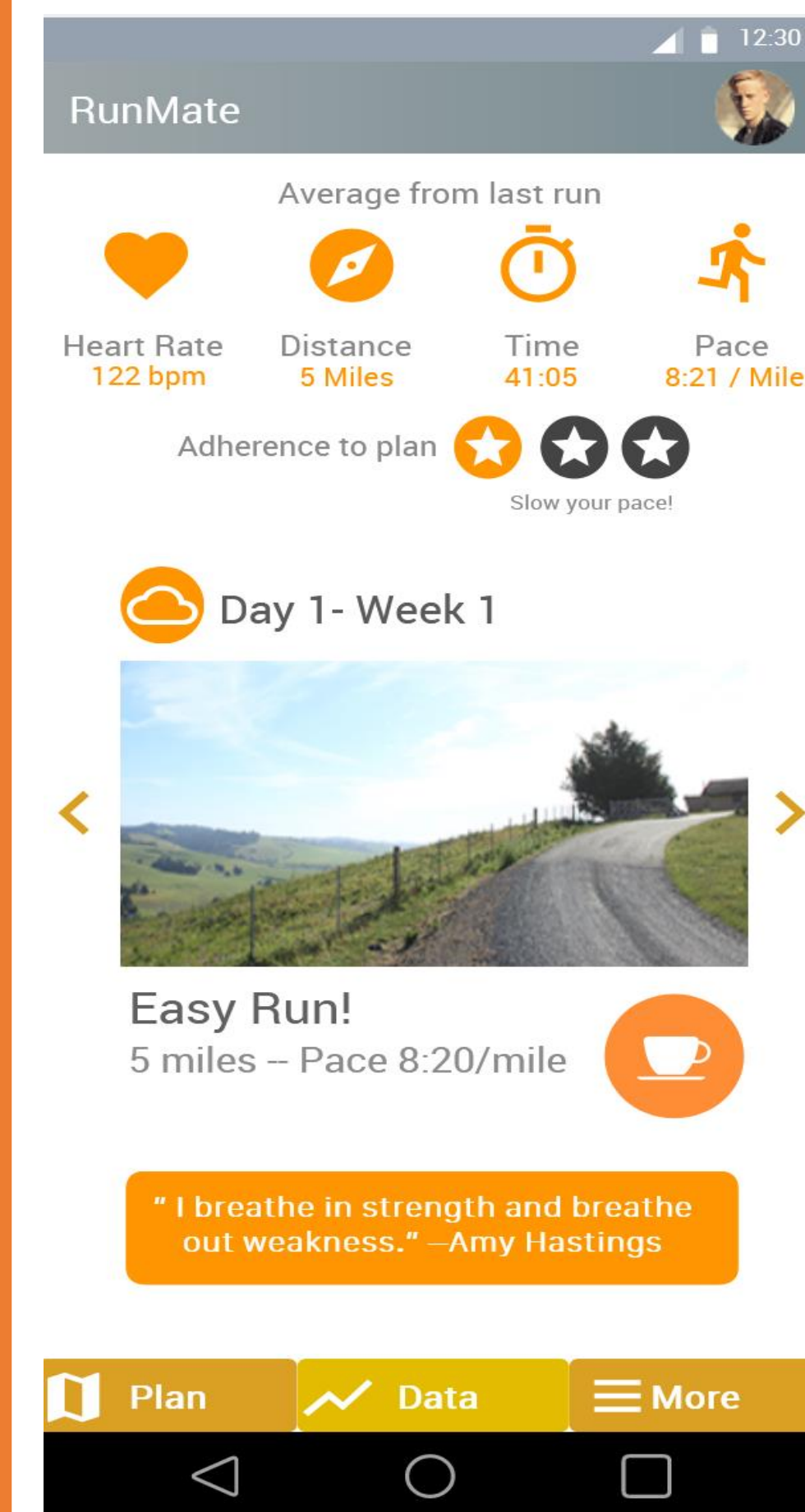
- Accessibility and Inclusivity: Suitable for runners of **all tech levels** with a straightforward onboarding process.
- **Motivation** at Every Step: Daily messages and running tips to keep runners engaged and motivated.
- Intuitive Interface: **Mobile-focused** design for easy navigation and a seamless user experience.

## Usability

- Intuitive Design: A runner-friendly **mobile interface** for effortless navigation.
- Clean UI: letting runners be **laser-focus** on the run.
- Effortless Onboarding: Set up your profile and understand the app within **10 seconds**.

## Link up with Strava

- Seamless Data Linkage: Connect your Strava account effortlessly to PaceRunner.
- Comprehensive Data Utilization: PaceRunner harnesses Strava data, including **pace**, **heart rate**, **elevation**, and more, to optimize your training plans.
- Personalized Insights: Leverage the power of Strava to fine-tune your runs, aligning them perfectly with your goals and performance.
- Data-Driven Progress: With Strava integration, your runs become a **data-driven journey**, offering invaluable insights to help you push your limits.



## References

- [1] Myrkos, A. (2021). Use VO2 max data to improve long-distance running. Science Training. Available at: <https://www.sciencetraining.io/2021/use-vo2-max-data-to-improve-long-distance-running/>
- [2] Rachel. (2023). What I Love About Garmin Coach (and Some Things I Don't). RunningDisneyTravel. Available at: <https://runningdisneytravel.com/what-i-love-about-garmin-coach-and-some-things-i-dont/>
- [3] Pfizinger, P., Douglas, S., & Huddle, M. (2019). *Advanced Marathoning*. Human Kinetics. Available at: <https://books.google.ie/books?id=rT6lDwAAQBAJ>
- [4] Daniels, J., Ph.D. (2022). What You Need to Know About Threshold Training. [Online]. Available at: <https://www.runnersworld.com/advanced/a20807282/threshold-training/>