CYCLING TRAINING SOFTWARE USER SURVEY

Used software and hardware, reasons for software choice, important features and common usage.

ABOUT THIS REPORT

Basis for this report is an online survey conducted between 21.12.2016 and 05.01.2027. The participants were recruited via Facebook, Twitter, the „Wattage“ Google Group and the dcrainmaker.com blog.

424 users of training software participated in the survey, which was conducted as a closed questionaire with the ability to comment on specific questions.

The purpose of the survey was to get a better understanding how users incorporate software into their everyday training. Specifically, which software (or combination of software tools) they use, and why. It tries to answer the question which features are important, and in which areas the currently available tools are found lacking.

The ultimate goal is to help the development of a new user experience for the Open Source training software GoldenCheetah (www.goldencheetah.org) , but we hope that the results are found to be helpful beyond this scope.

The focus of this document is cycling training. Although the majority of users track more than one sport with it, other sports were not part of the survey.

If you have any questions or comments about this report, please contact Peter Riegersperger <peter@lerouleurlent.net>.

For questions about GoldenCheetah, please contact Mark Liversedge <liversedge@gmail.com>.

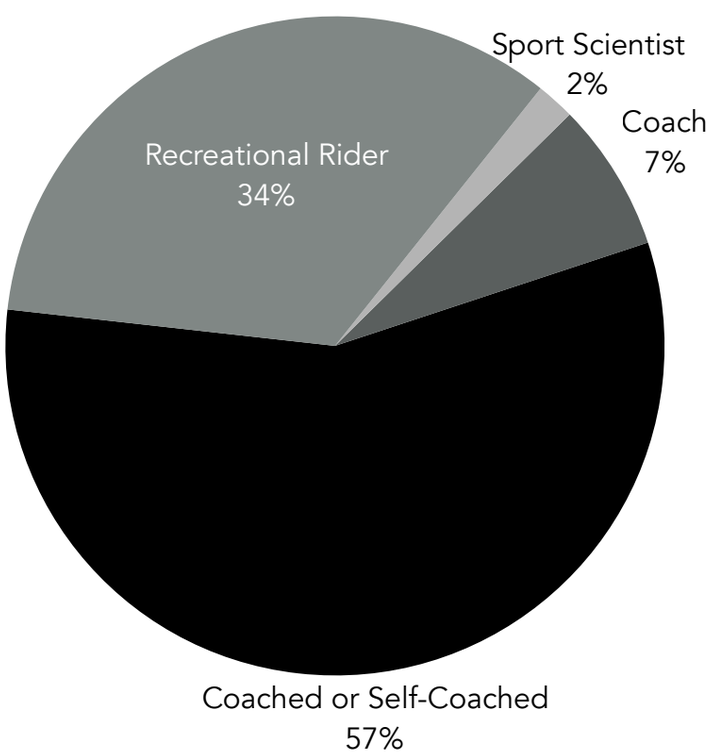
Vienna, 14.01.2017

BASIC DESCRIPTION OF USERS

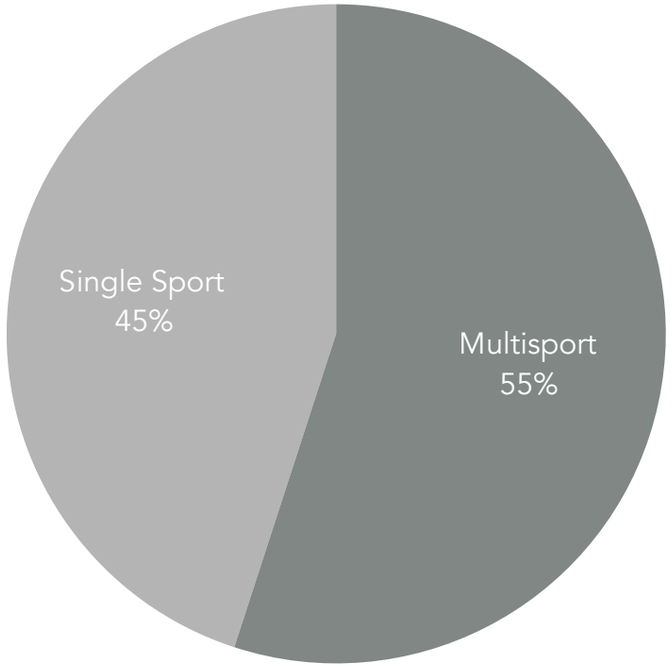
USER SELF-CLASSIFICATION

91% of respondends are athletes, 9% are coaches or scientists. 55% track more than one sport with their software.

What would best describe you as a cyclist and your usage of cycling training software?



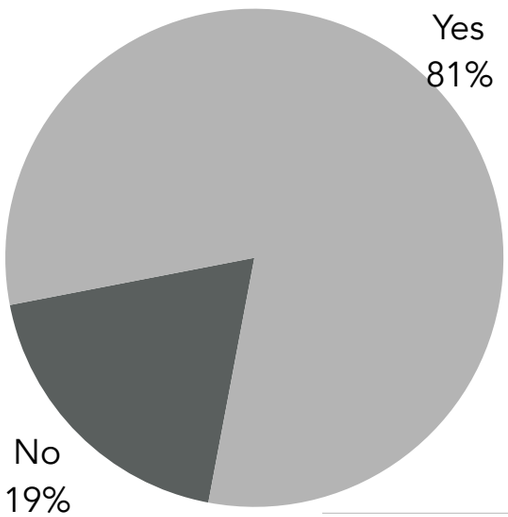
Multisport Tracking



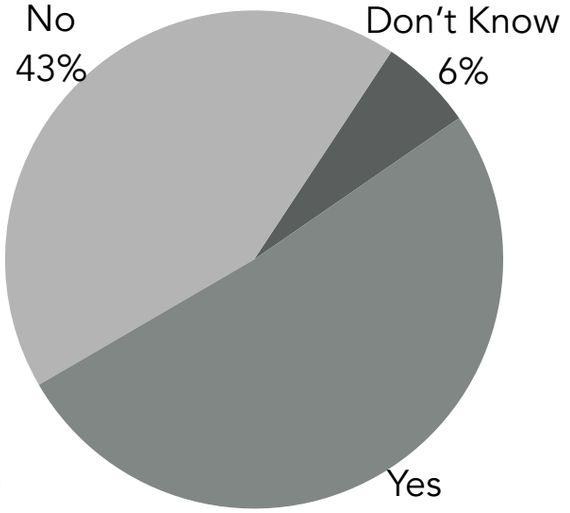
TRAINING WITH POWER

Most users are training with a PowerMeter, and have used them for more than one season.

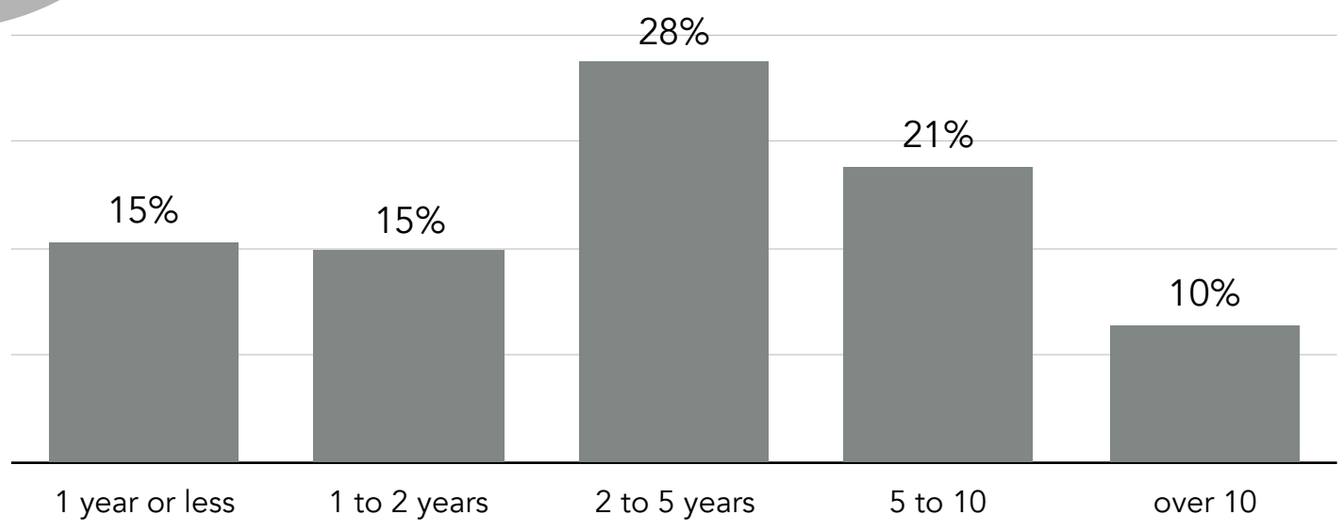
Are you training with a powermeter?



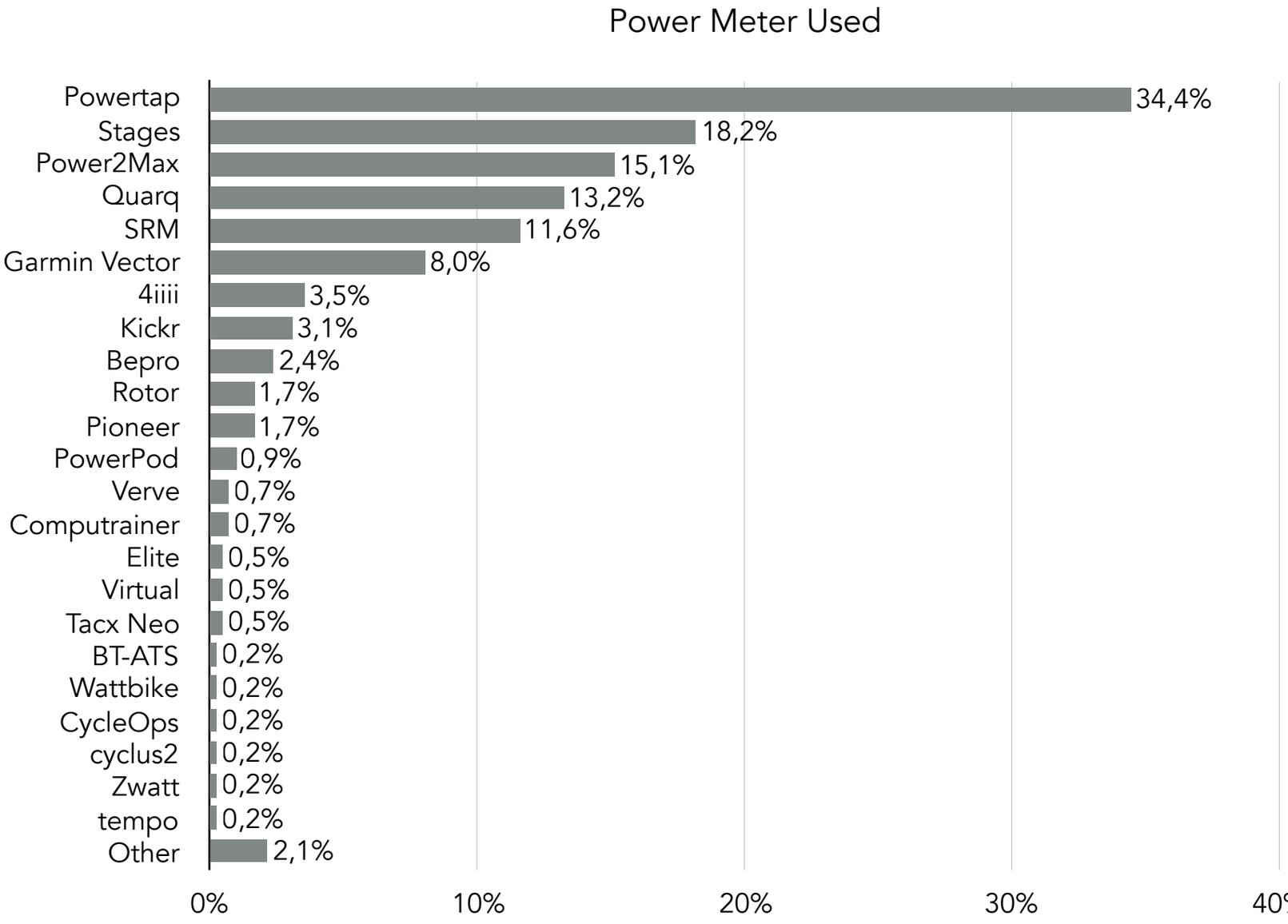
Do you use power estimations provided by your training software?



Years training with Powermeter



TRAINING HARDWARE



Most people use power meters attached to their bikes (or wheels). Only 5% use a stationary solution with power measurement (Wahoo Kickr etc.).

INSIGHTS

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1. Powermeters make no difference in user needs, but in software preference.
2. Multisport and single-sport athletes have the same needs, and use the same software.
3. There is no single tool that does it all.
4. People mix and match software to fit their needs.
5. Software selection differs for athletes and non-athletes.
6. The time users train with a power meter is not important for software selection.
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MOST IMPORTANT SOFTWARE FEATURES - USERS WITH/WITHOUT POWERMETERS

- Users consider the same features important, regardless wether they have a power meter or not.

With Powermeter

	Important Feature
Track Progress over time	97%
Get a visual representation of my ride data	93%
Compare two rides or intervals	70%

Without Powermeter

	Important Feature
Get a visual representation of my ride data	93%
Track Progress over time	90%
Compare two rides or intervals	76%

USED SOFTWARE - USERS WITH/ WITHOUT POWERMETERS

- While there is little difference in the usage of Strava and Garmin Connect, users without powermeter use GoldenCheeta, TrainingPeaks, TrainerRoad and WKO significantly less than users with powermeter.

	Powermeter	No Powermeter
Strava	67%	78%
Garmin Connect	54%	59%
Golden Cheetah	**57%**	**17%**
TrainingPeaks	**41%**	**12%**
TrainerRoad	**25%**	**12%**
WKO+	**25%**	**0%**

- Software geared torwards powermeter users appear to underserve users without methods to measure power.

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MOST IMPORTANT SOFTWARE FEATURES - MULTISPORT VS. SINGLE-SPORT ATHLETES

- Single-Sport and Multisport-Athletes consider the same features important.

Multisport Athletes

	Important Feature
Track Progress over time	97%
Get a visual representation of my ride data	91%
Compare two rides or intervals	74%

Single-Sport Athletes

	Important Feature
Get a visual representation of my ride data	95%
Track Progress over time	95%
Compare two rides or intervals	68%

USED SOFTWARE - MULTISPORT VS. SINGLE-SPORT ATHLETES

- The six most commonly used tools are the same for both single- and multisport athletes, only the ranking differs.

	Multisport
Strava	72%
Garmin Connect	67%
Golden Cheetah	39%
TrainingPeaks	41%
TrainerRoad	24%
WKO+	16%

	Single-Sport
Strava	66%
Golden Cheetah	61%
Garmin Connect	40%
TrainingPeaks	29%
WKO+	25%
TrainerRoad	21%

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THERE IS NO SINGLE TOOL THAT DOES IT ALL

- 421 out of 424 respondents use at least one software tool to manage their training.

- 32 tools were mentioned.

- People find the software bundled with their powermeter wanting. Only 5% of powermeter owners use the software that comes with it, and only 1 respondent uses it exclusively (and he isn't particulary happy with it)

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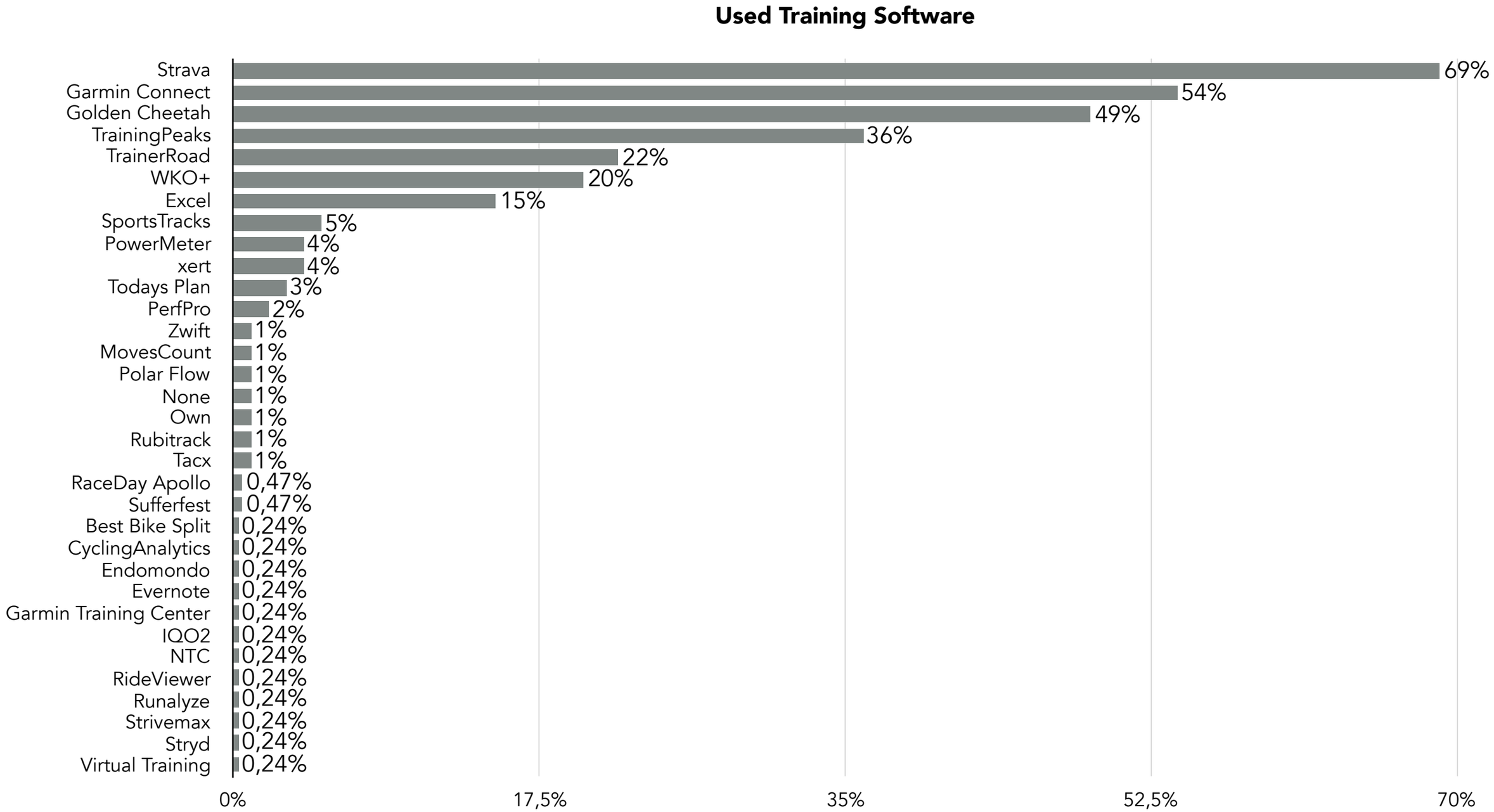
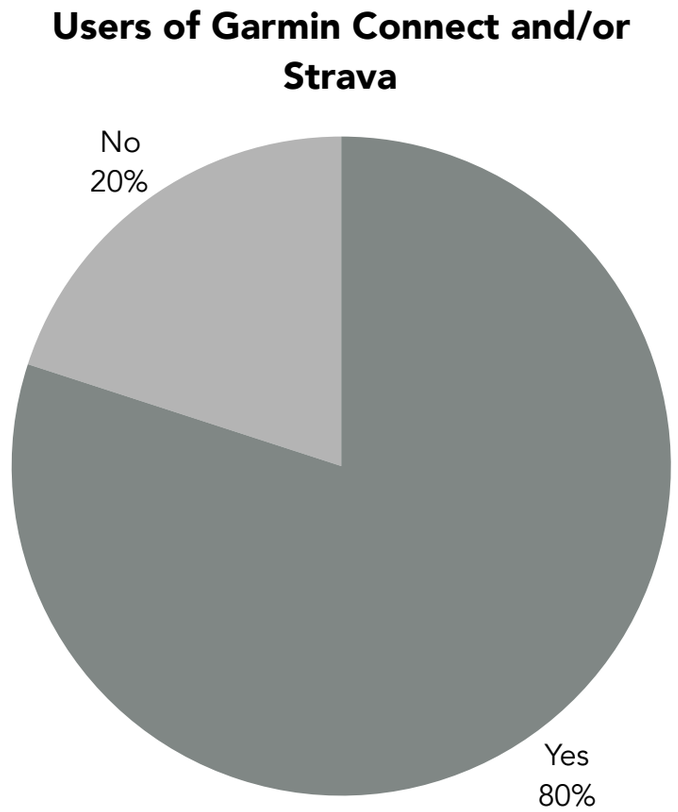


THERE IS NO SINGLE TOOL THAT DOES IT ALL

- Although Strava and Garmin Connect together have a market share of 80%, there isn't a tool that works for everyone.



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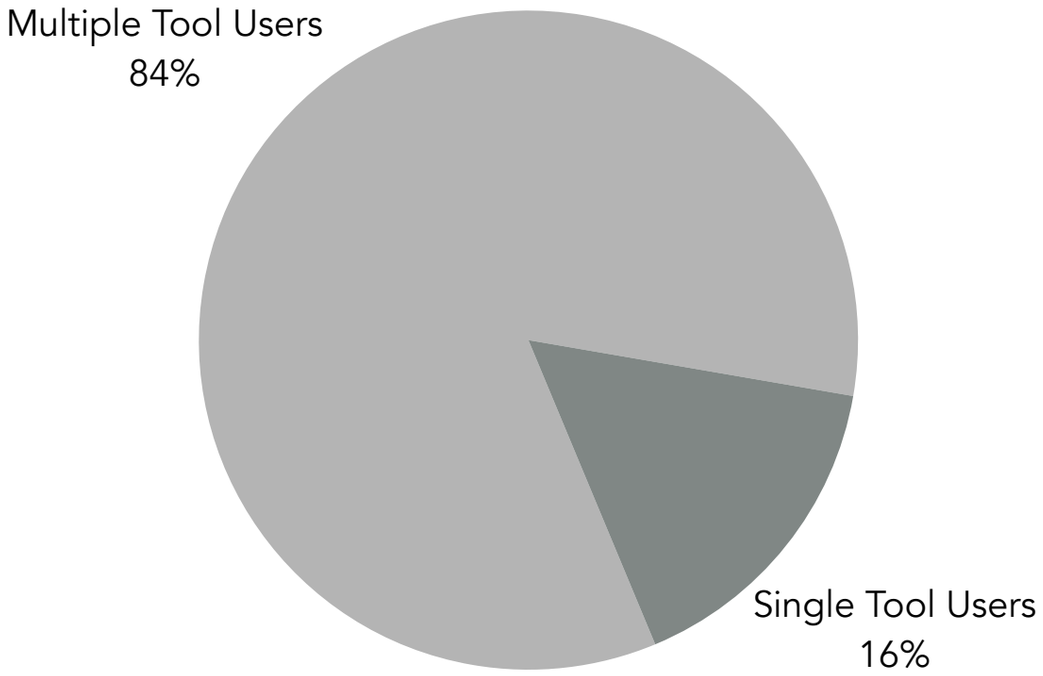
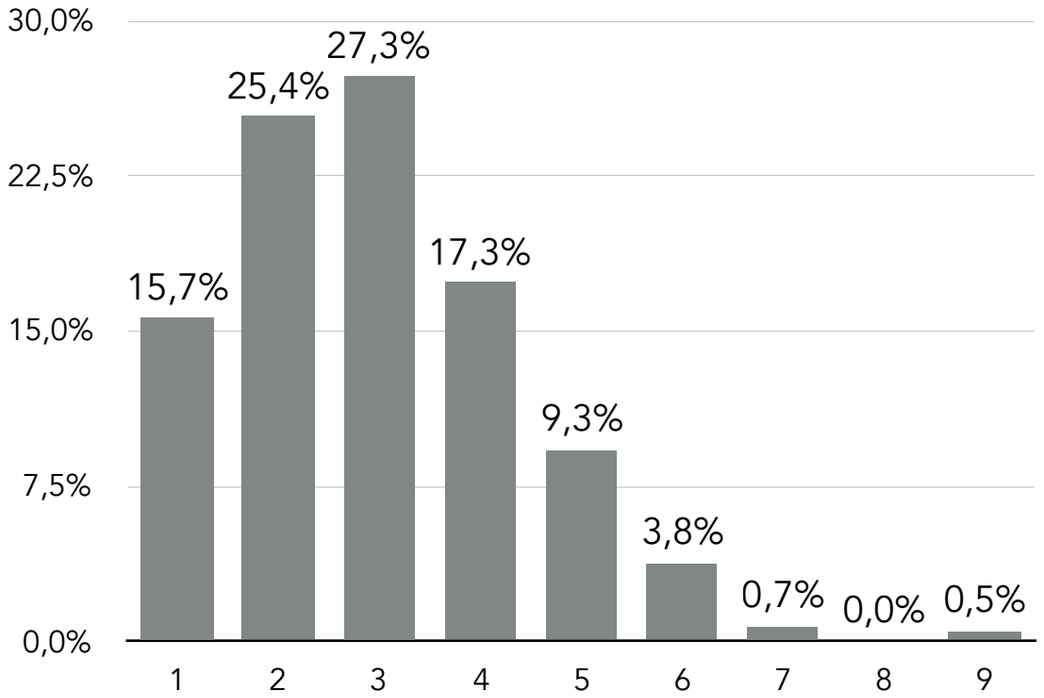
PEOPLE MIX AND MATCH SOFTWARE TO FIT THEIR NEEDS

- 84% of respondents use more than one software tool.
- 70% of all respondents use between 2 to 4 tools.

Single-Tool Users vs. Multitool Users



Number of tools used



PEOPLE MIX AND MATCH SOFTWARE TO FIT THEIR NEEDS

- People organize their tools into software ecosystems according to their needs.

- There are 164 different combinations of software used together mentioned.

- There are a few „common tools“ nearly everyone is using (80% of respondents use either Strava or Garmin Connect), and they are supplemented by whatever is available, affordable or does satisfy the needs.

MOST COMMON ECOSYSTEMS

- The most commonly used tools or tool combinations are
  Garmin Connect, Strava
  Golden Cheetah exlusively
  Strava exclusively
  Garmin Connect, Golden Cheetah, Strava, TrainingPeaks
  Garmin Connect, Golden Cheetah, Strava

- but these just have between 8% to 4% overall share.
  Together, they make up just 25% of all answers.

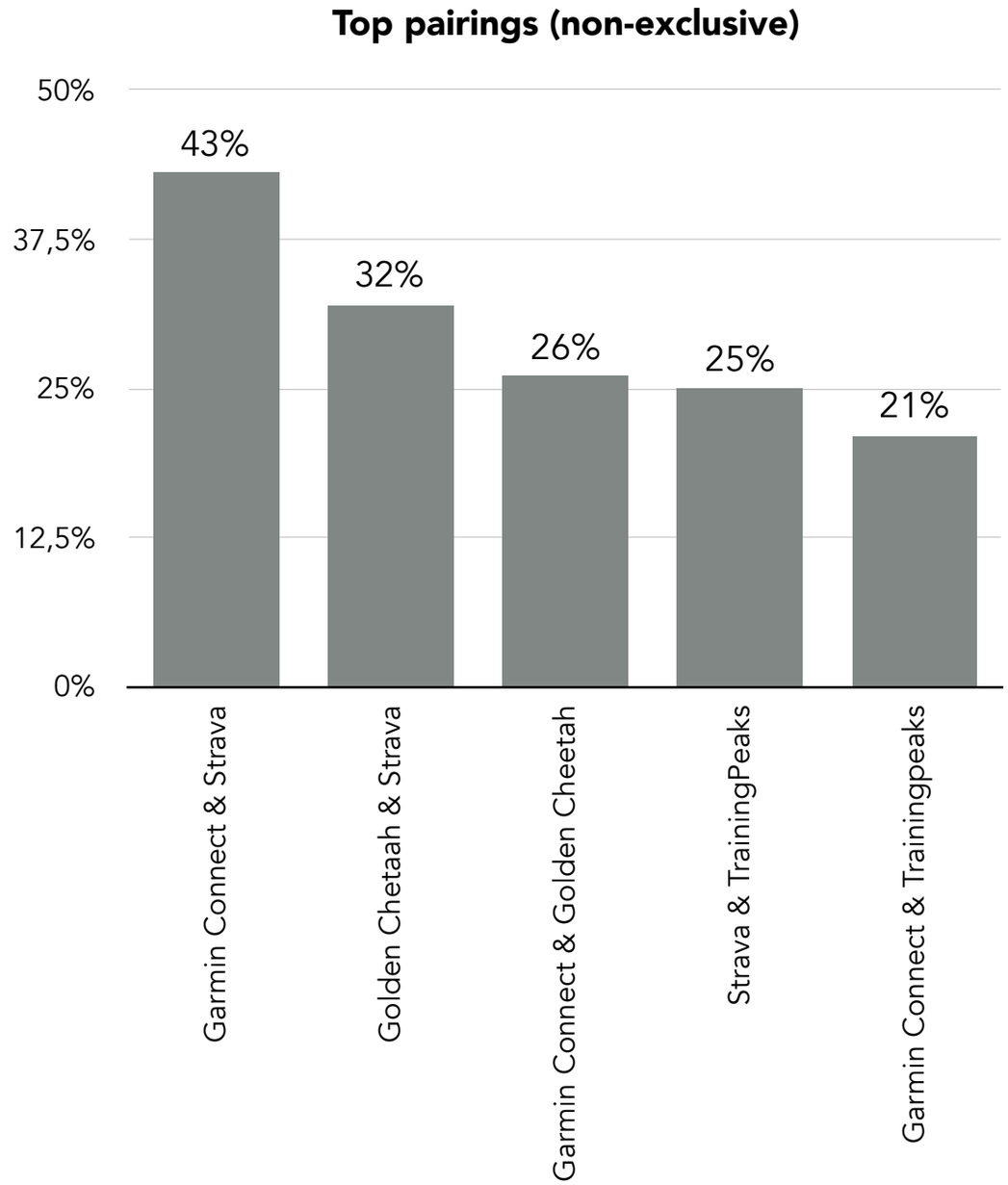
NON-EXCLUSIVE SOFTWARE PARINGS

- When looking for non-exclusive pairings of software (which tools go well together), things get a little bit clearer.

- Strava & Garmin Connect go well together.

- GoldenCheetah and TrainingPeaks are combined with Strava and Garmin Connect.

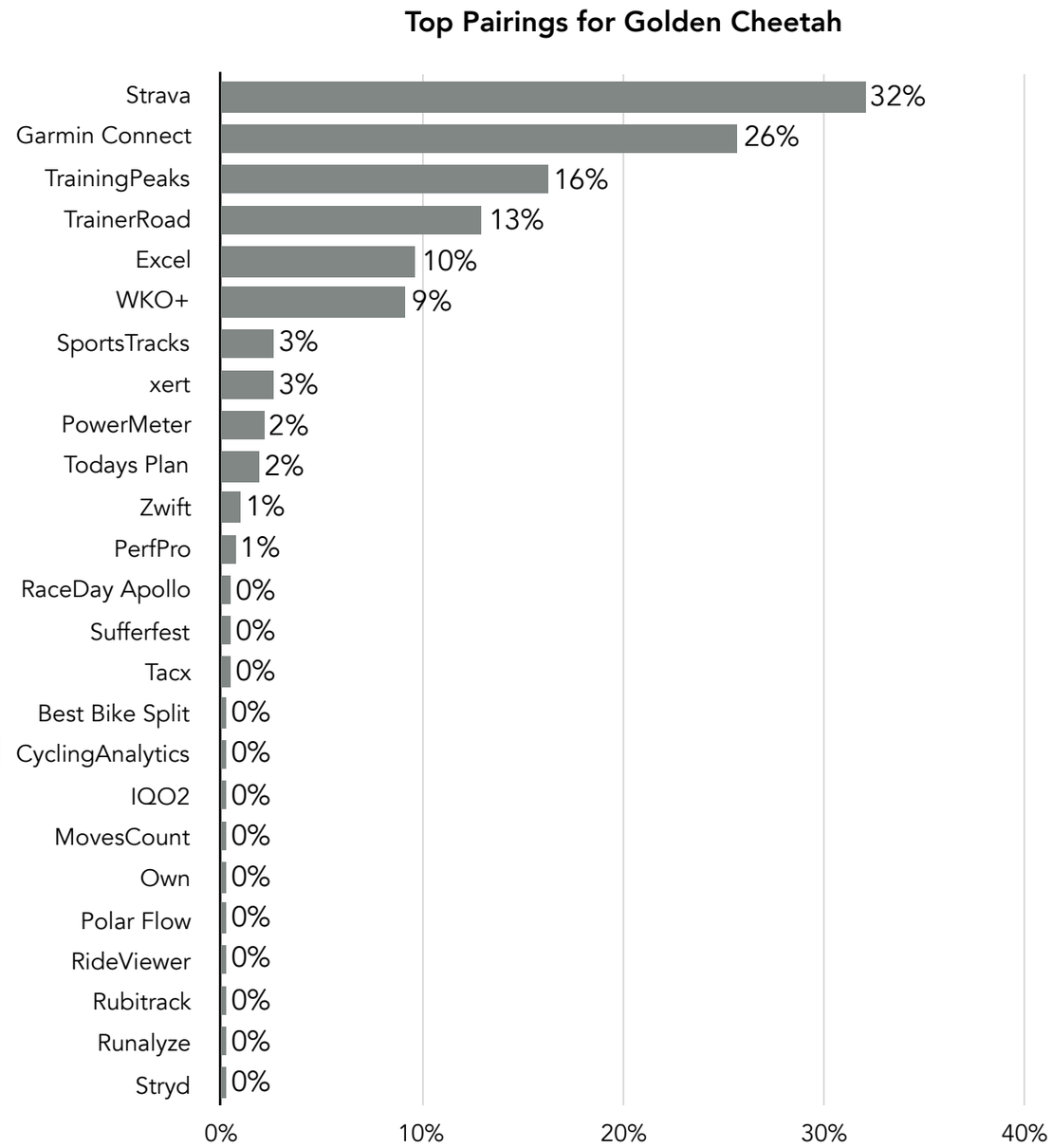
- (How to read this graphic: 43% of all respondents use Garmin Connect, Strava and maybe additional software, 25% use Strava, TP and maybe additional software, etc.)



PAIRINGS FOR GOLDEN CHEETAH

- The software pairings for Golden Cheetah are consistent with the ranking according to mentions.

- Golden Cheetah apparently does not have a „special companion tool" that is commonly used only by GC users.



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COACHES CHOOSE OTHER SOFTWARE THAN ATHLETES

- Coaches use WKO/TP more often than athletes.
- Training load monitoring is one of the Top-3-Featurs for coaches, but not for athletes.

Top 5 Software used by athletes

Strava	71%
Garmin Connect	57%
Golden Cheetah	49%
TrainingPeaks	34%
TrainerRoad	24%

Top 3 Software usage for athletes

Ride Data Analysis
Ride Logging and Training Diary
Performance Tracking

Top 5 Software used by coaches

WKO+	55%
TrainingPeaks	52%
Golden Cheetah	48%
Strava	48%
Garmin Connect	29%

Top 3 Software usage for coaches

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TIME OF TRAINING WITH POWERMETER AND SOFTWARE SELECTION

- How long someone trains with a power meter is not very important when it comes to software selection.
- Notably WKO consistently improves its ranking from 9, to 6, 7, 4 and 1 through the different segments.

Training with power meter less than 1 year

Software	User Share
Strava	77%
Garmin Connect	68%
Golden Cheetah	55%
TrainingPeaks	36%
TrainerRoad	34%

Training with power meter 1 to 2 years

Software	User Share
Strava	69%
Garmin Connect	59%
Golden Cheetah	55%
TrainingPeaks	43%
TrainerRoad	29%

Training with power meter 2 to 5 years

Software	User Share
Strava	71%
Golden Cheetah	57%
Garmin Connect	54%
TrainingPeaks	39%
TrainerRoad	26%

Training with power meter 5 to 10 years

Software	User Share
Strava	65%
Golden Cheetah	65%
TrainingPeaks	46%
WKO+	**46%**
Garmin Connect	39%

Training with power meter 10 years and more

Software	User Share
WKO+	**58%**
Golden Cheetah	48%
Strava	42%
Garmin Connect	39%
TrainingPeaks	36%

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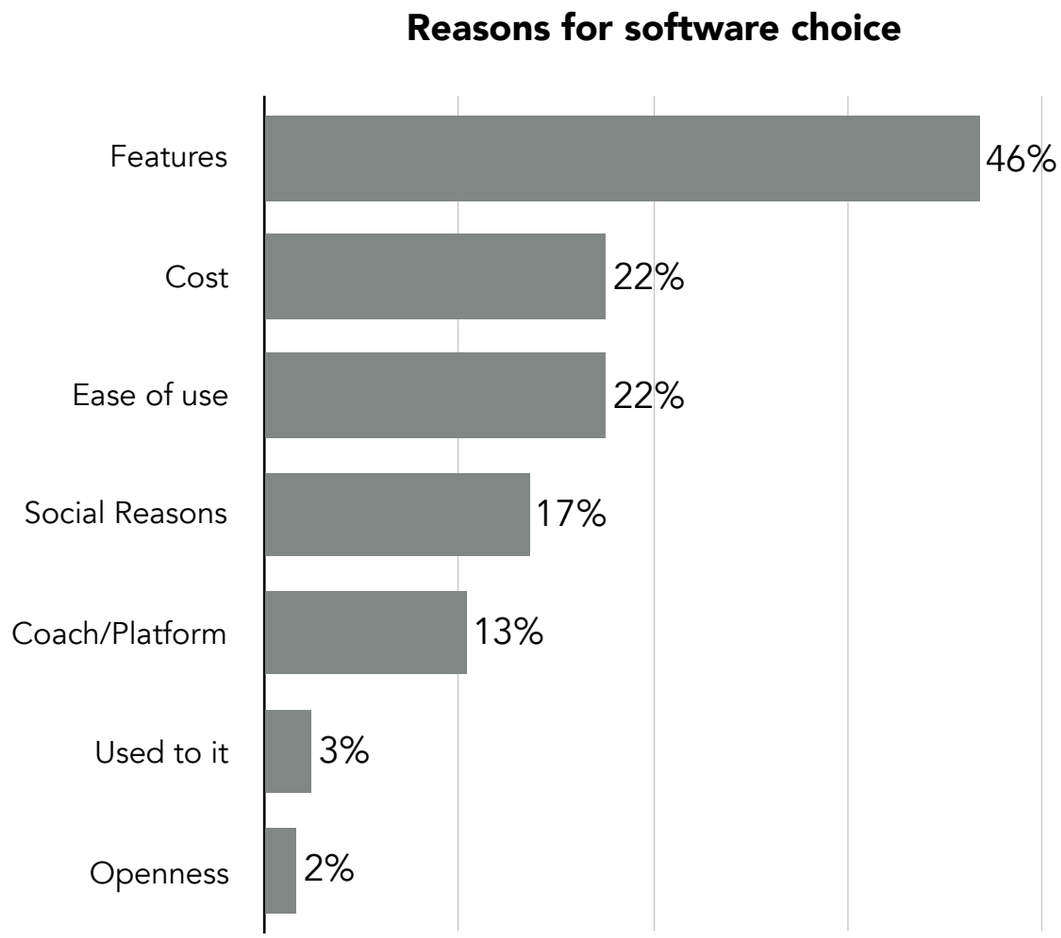
USERS CHOOSE SOFTWARE FOR ITS FEATURES

- Nearly half of all users who answered this question said they chose their software based on features.
- 17% said social reasons (social media, team mates, team that uses the software, …) were important
- 13% use their software either because it makes their coaching business easier or because their coach asks them to use it.
- Careful about the importance of ease of use: It is a requirement these days, if people say "I use this because it is easy to use", they usually mean "it is easier than I expected it to be/it is easier than everything else out there that would otherwise fit my needs as well."



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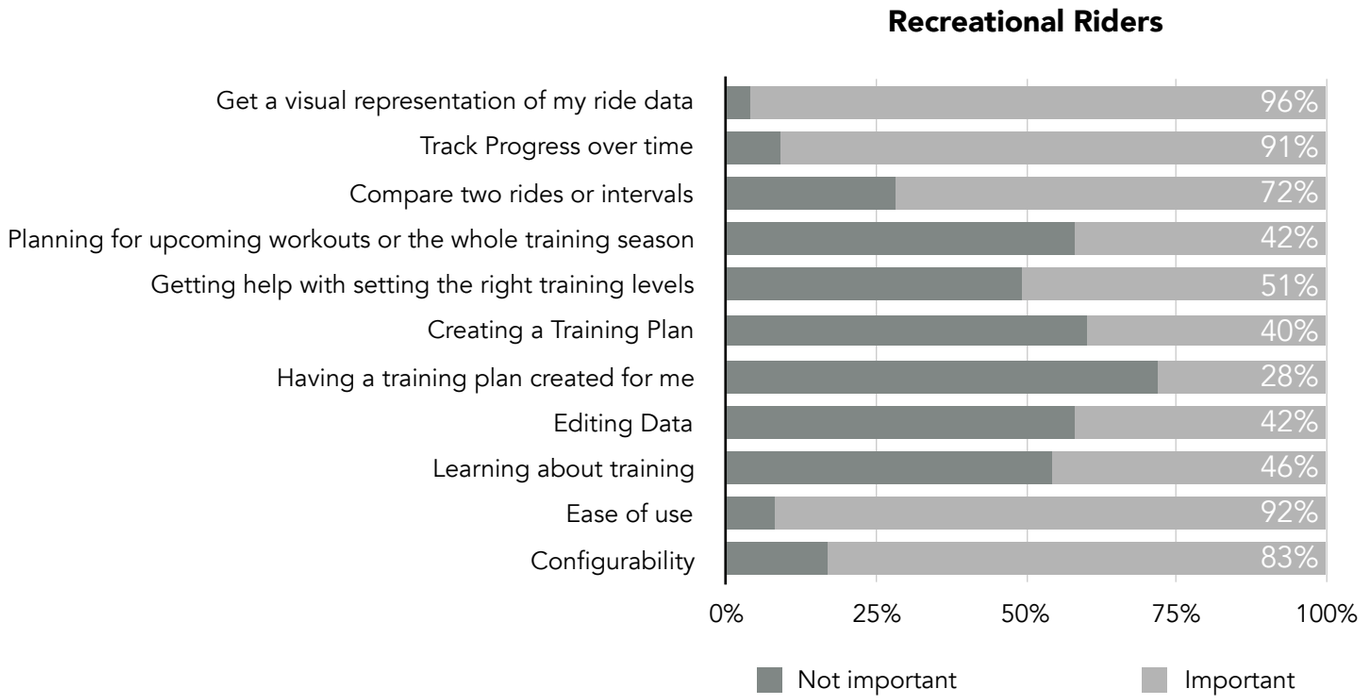
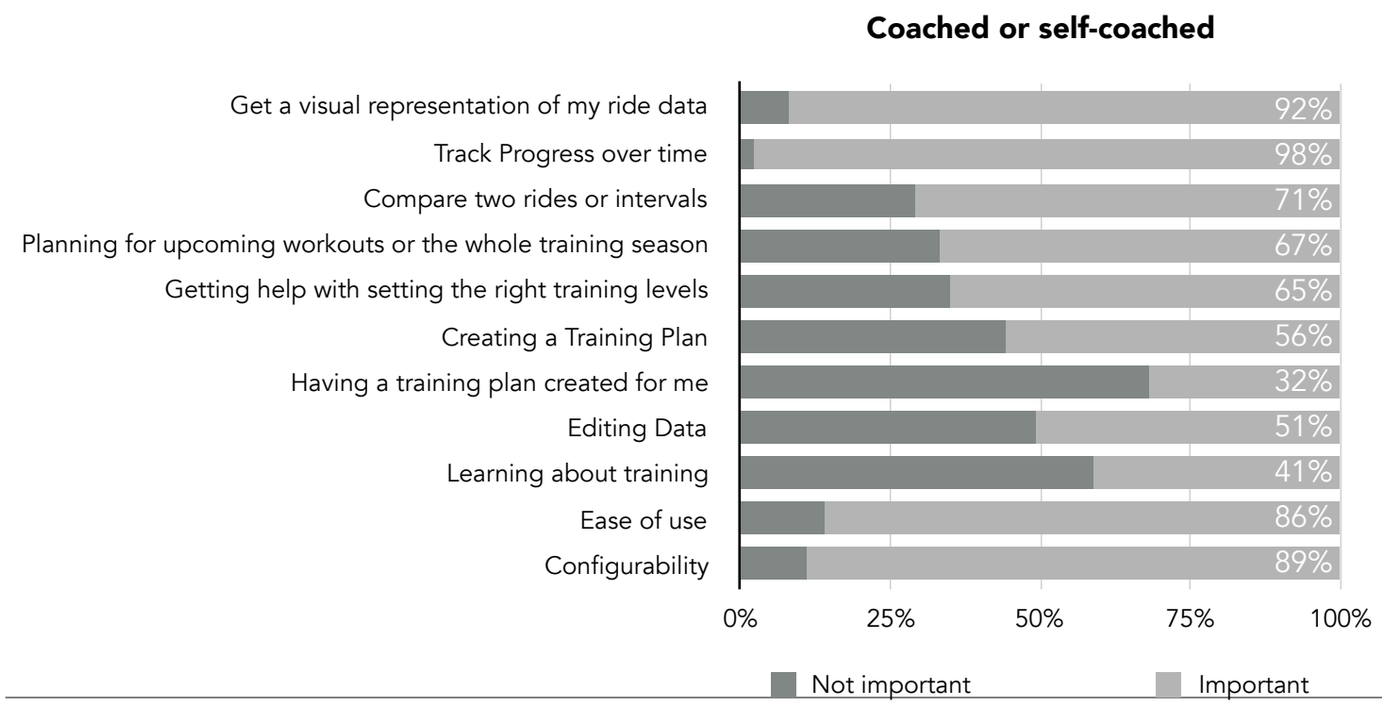


- Planning is not a big issue for recreational riders
- Focus on ride-based features and tracking progress over time
- Setting training levels or creating training plans not very important



- Coached or self-coached athletes want more training features, but still not top priority
- Do plan ahead

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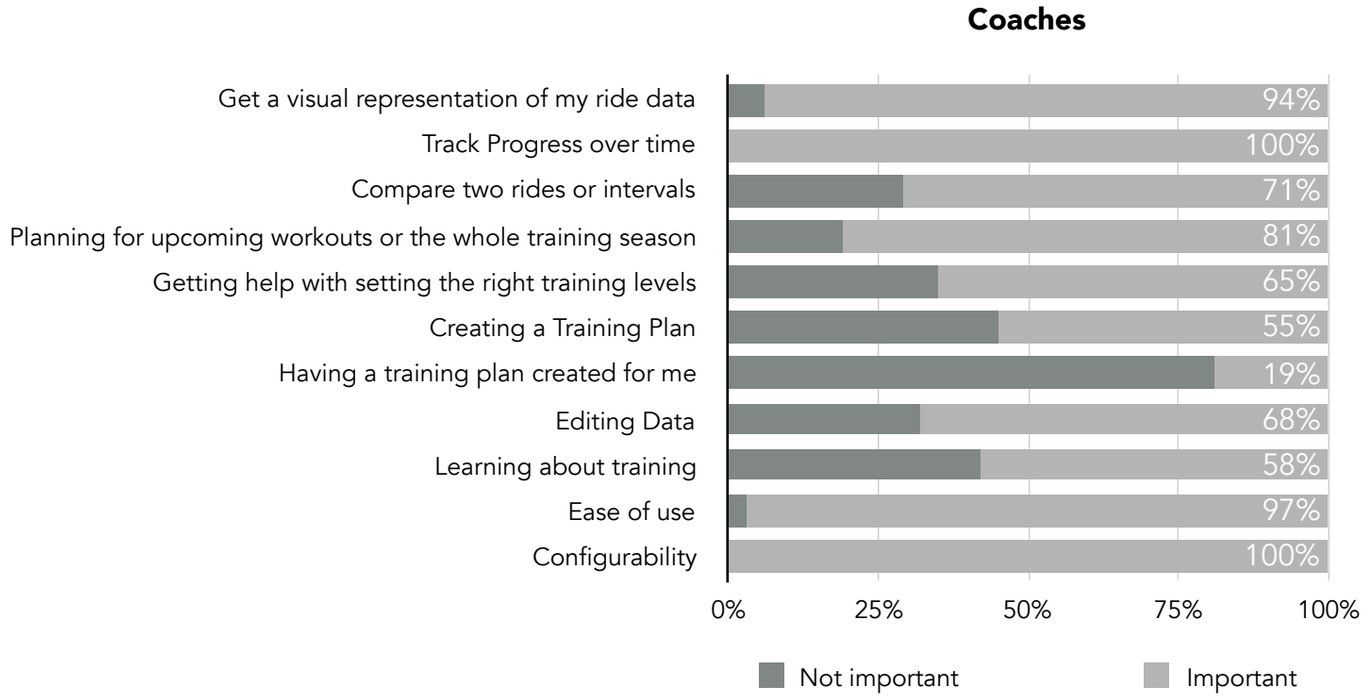
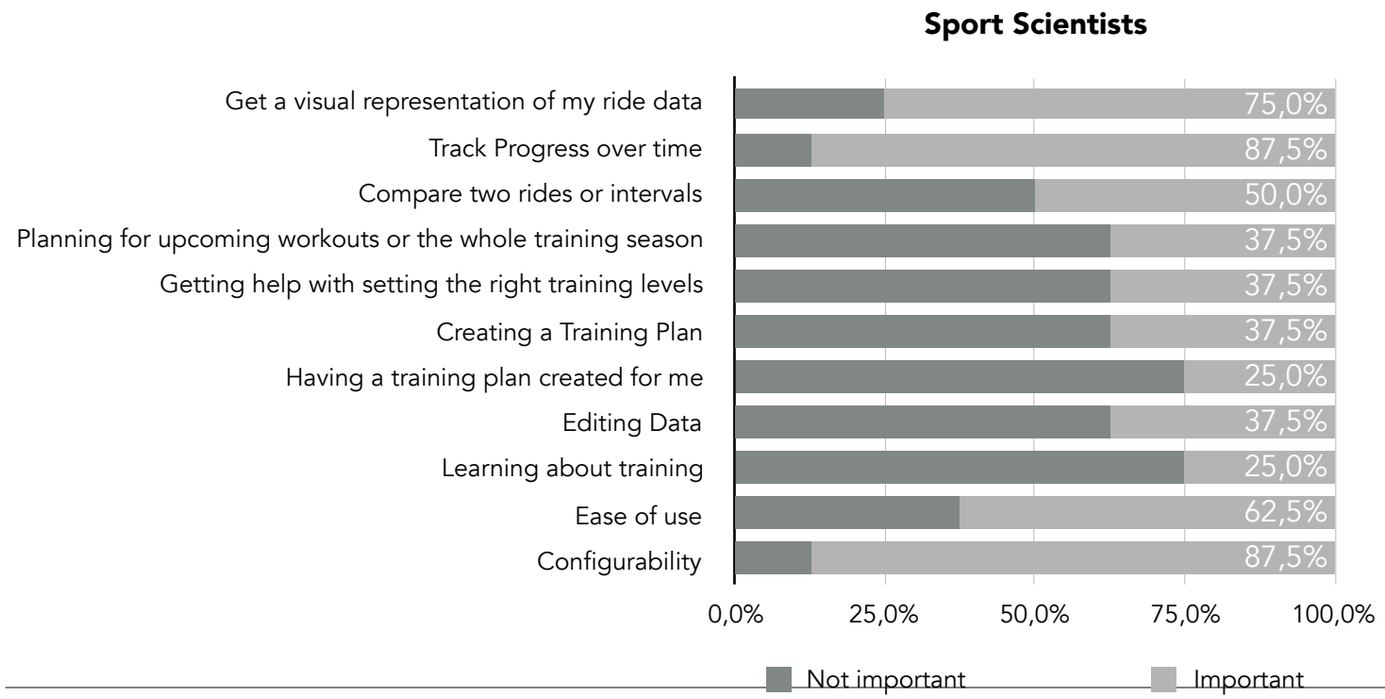


- Planning and tracking fitness are important to coaches
- Configurability is a big concern



- Caution: Only 8 answers from sport scientists, at least one is probably bogous.

MOST IMPORTANT USE CASE

- Overall, tracking progress over time is the most important use case.

- The more „serious“ users, the more importance it gets.

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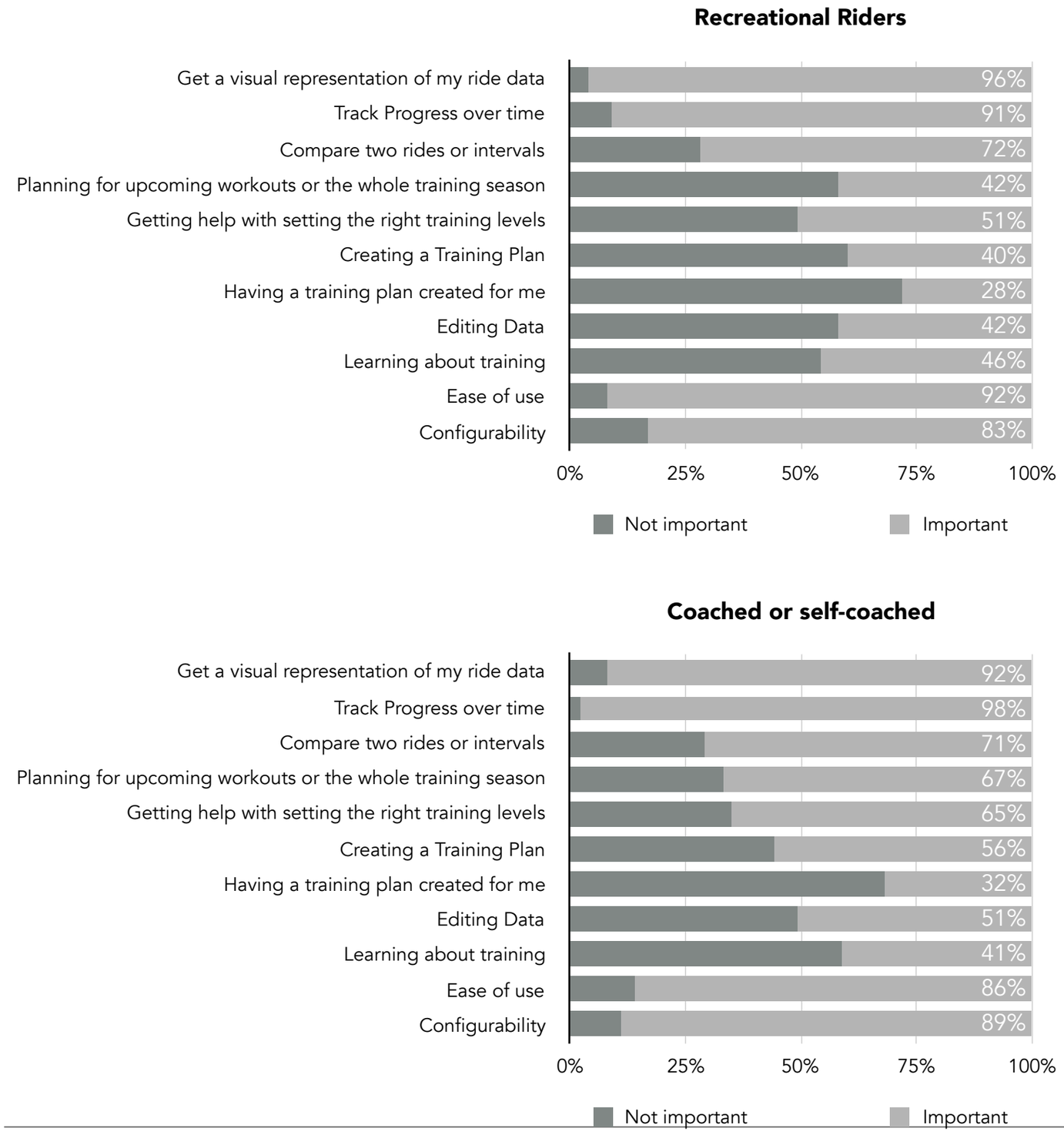
SIMPLICITY FOR RECREATIONAL RIDERS



- Recreational riders focus on features that gravitate towards single rides/ workouts.
- Ease of use is more important than configurability of software.
- They are less interested in tracking progress over time then coached or self-coached athletes, creating training plans or planning workouts.
- They look more often for personal bests than coached or self-coached athletes (66% vs. 62%)

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ATHLETES USE SOFTWARE RETROACTIVELY

- The top used software features focus on analysis after a workout.
- A minority of athletes use their software tools to plan ahead (being it routes for workouts or upcoming competitions or planning the next training sessions)

Recreational Riders

Use Case	Respondents
Ride Data Analysis	89%
Ride Logging and Training Diary	78%
Performance Tracking	72%
Looking for Personal Bests	66%
Training Load Monitoring	52%
Route scouting and planning	44%
Planning future workouts / rides	33%

Coached or Self-coached athletes

Use Case	Respondents
Ride Data Analysis	93%
Performance Tracking	88%
Ride Logging and Training Diary	83%
Training Load Monitoring	80%
Looking for Personal Bests	62%
Planning future workouts / rides	44%
Route scouting and planning	30%

BUT THEY DO THINK THAT PLANNING IS IMPORTANT

- 46% of respondents that say planning ahead is important or very important do not actually use any planning features in their software.

	Percentage of users saying it is important but not using it
Get a visual representation of my ride data	8%
Track Progress over time	15%
Planning for upcoming workouts or the whole training season	46%

CONCLUSIONS

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1. Software makers must look at ecosystems, not single applications

2. The difference in software choice and usage is wether people use power meters or not, not which sport they do

3. The software landscape is fragmented and users have a questionable overall experience

4. Planning features are insufficient, but are not the highest priority of most users

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SOFTWARE ECOSYSTEMS DEFINE THE USER EXPERIENCE

- 84% of respondents use more than one software tool for their training management.

- Different software gets used for different reasons, and each software tool has its place and role in the overall ecosystem according to its weaknesses and strengths.

- Software makers must identify this role to correctly assess important or missing functionality in their applications.

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POWER MEASUREMENT IS KEY TO USER CHOICE

- Wether a user tracks more than one sport or not does not have any impact on software choice.

- Having a power meter or not is important for software choice.

- Some software tools appear to serve users without power meter better than others.

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FRAGMENTED LANDSCAPES

- 70% of all users have to use 2 to 4 tools to satisfy their needs, 31% use more than three.

- Overall, 32 tools were mentioned, and 164 different combinations of tools are used by the respondents of the survey.

- Single tools might excel, but compatibility and cooperation are issues affecting overall user experience.

WHAT USERS MISS

"None of them does everything."

"Better integration between applications. I still spend a lot of time uploading, downloading, syncing, and switching applications. Notes in one app not available in others… "

"One platform that can do all above."

"Sync data ability across platforms to GC from TP, Garmin, Strava"

"better (training stress) implementation of multisport, ease of use. There is no one ideal software, that is why I use so many."

"Integration is missing"

"Direct transfer of workouts from TP to GC"

"I miss everything in one place (I need to use several programmes/sites to get all I need)"

"The complete package. Each platform is missing certain elements, the ease of use of strava, the analytics of GC and the season planner from Training Peaks. "

FEATURE OVERLAP AND COMPATIBILITY

- Software with distinct usage domains (for example Strava for social connections and TP for training and working with coach) do not cause problems as long as maintenance work like software upload is not duplicated.

- Software tools with overlapping features do cause difficulties. When two tools are needed to realize one goal, compatibility and data exchange become extremely important.

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USERS WISHING FOR BETTER PLANNING FACILITIES AND GUIDANCE

"Yes, the analytics in current software tell you what you did... but there is no "what should you adapt in your plan". Coaching is insanely expensive ($300 / mo) and I have been very unhappy with the few that I hired. I want a simple - easy and adaptable way to analyze the reams of data that I collect"

"Save the training plan files to reuse them in the future"

"Easy session long planning"

"More advanced planning features "

"Yes - there ability to overlay (e.g., training phase, ftp change, etc) onto my overall training load"

"All the software is 'dumb'. No software looks at my ride and says ''you were meant to do 2hrs easy, but you did 3hrs hard, so we're going to change tomorrows ride from intervals to a recovery ride''. The software/sites have ALL the data, and really don't do anything meaningful with it beyond pretty pictures. I want a virtual coach!"

CURRENT SOFTWARE DOESN'T HELP (A LOT)

- Software falls short: Nearly half of all users who agree that planning is important do not use any planning functionality of their software. Considering the used software, it is fair to say that the most commonly used software packages actually lack any significant planning features.

- Only 50% of users think it is important to have a training plan created with the help of their software tools.

- Most users focus on the single-workout level. Planning facilities that add too much complexity might be rejected.

FINAL THOUGHTS

The current cycling software market is very fragmented, with a multitude of tools offering different combinations of features.

For users, the decision which software to use is difficult, and often results in a complex software environment which requires constant management and maintenance (data syncing, up- and downloading, …).

Software makers have been focusing on specific aspects of the large field of cycling (or general: sports) training for a multitude of reasons. Most notably the need for differentiation for commercial offerings, but also the need for reduction of the complexity of the software itself.

This in itself is not a problem, as highly specialized tools provide high value to their users, but if these tools do not work well together (because of technical or conceptual differences or limitations), the overall user experience suffers.

Software tools must ensure that they either can maintain a high compatibility with other tools, or be able to implement all commonly sought features and use cases.