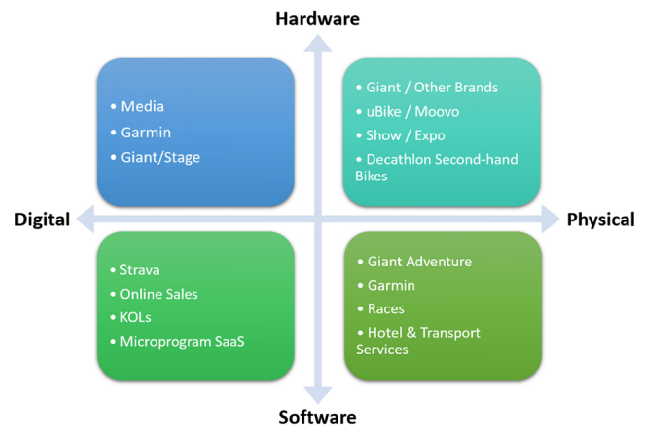




## Explaining the Four-Quadrant Business Model in the Cycling Industry (Physical vs. Digital, Hardware vs. Software)

### First Quadrant: Physical × Hardware (Traditional Manufacturing and Brand Marketing)

- ◆ Representative Companies: Giant, uBike/Moovo, Show/Expo, Decathlon (second-hand bikes)
- ◆ Model Analysis: This quadrant focuses on complete bicycle manufacturing and large-scale brand management, emphasizing the integration of physical products with brand credibility. For example, Giant's longstanding brand image and extensive retail network are among its most valuable assets. Meanwhile, public bike-sharing systems such as uBike provide cities with essential cycling infrastructure for urban mobility. This quadrant also includes exhibitions (Shows/Expos) and retail distribution channels (e.g., second-hand bikes from Decathlon), extending traditional physical business models into new commercial applications.



### Second Quadrant (Top Left): Virtual × Hardware (Media Content Integrated with Device Products)

- ◆ Representative Companies: Garmin, Giant/Stage, Canyon, and media platforms
- ◆ Model Analysis: This quadrant is defined by the integration of digital hardware and content platforms. Garmin, for instance, offers smart devices that integrate sensors with mobile applications. Giant's Stage platform operates as a digital community for sports and cycling. Canyon combines media production, direct-to-consumer online sales, and content marketing to create a new kind of digital hardware-driven retail experience. The focus is on user engagement and data connectivity, leveraging hardware as a medium for content, interaction, and value-added services.

### Third Quadrant (Bottom Left): Virtual × Software (Digital Services and Platform Economy)

- ◆ Representative Companies: Strava, Online Sales, KOLs, Microprogram SaaS
- ◆ Model Analysis: This quadrant revolves around low-asset but scalable business





models. Strava serves as a key example, monetizing through subscriptions and value-added data services. Influencers and content creators—such as KOLs and YouTubers—engage in product marketing, online tutorials, and brand collaborations. Companies like Microprogram develop SaaS-based cloud platforms, CRM systems, and rental platforms, forming the digital infrastructure of the industry. The core strengths of this quadrant lie in data control, community engagement, and platform-driven tools, with growth fueled by network effects and software scalability.

#### **Fourth Quadrant (Bottom Right): Physical × Software (Experience-Based and Tourism-Oriented Services)**

- ◆ Representative Companies: Giant Adventure, Garmin Events, and hotels / transportation providers
- ◆ Model Analysis: This quadrant combines physical infrastructure with immersive service experiences, creating cross-industry business models that integrate cycling with tourism, sports events, and transportation services. For example, Giant offers integrated travel packages that include cycling tours and accommodations. Garmin organizes cycling competitions, and collaborates with hotels and transportation companies to create "bike-friendly cities" experiences. This is a highly customized, immersive, and localized expansion strategy that prioritizes usage over ownership, aligning with evolving consumer behaviors.

Reference: <https://www.tba-cycling.org/>

