“Data on every shot” will be the new normal
Have an open mind towards innovation and its impact …

"I think there is a world market for maybe five computers." — Thomas Watson, president of IBM (1943).

“There’s no chance that the iPhone is going to get any significant market share.” — Steve Ballmer, Microsoft CEO (2007).

“There is no reason anyone would want a computer in their home.” — Ken Olson, president Digital Equipment Corp (1977).

“There’s just not that many videos I want to watch.” — Steve Chen, CTO and co-founder of YouTube expressing concerns about his company’s long term viability (2005).
New opportunities through technology
Attracting new and retaining existing customers

Agenda:

1. TrackMan – a driver behind innovation in golf technology.
2. Turning green fairways into blue oceans.
3. Technology innovations that will provide new value propositions to golf courses and driving ranges.
Established in Denmark in 2003, privately owned

250+ passionate employees (60 new hires in 2018, 70 planned for 2019)

40% of workforce employed in R&D, ~ 15% of revenue spent on R&D

New Computer Vision excellence center established in 2015

Multiple product launches per year

Performing business worldwide (60+ countries)

Offices in Copenhagen (HQ), New York, Phoenix, Wroclaw, Tokyo & Seoul (soon)

Control of entire value chain
CUSTOMERS
OUR MARKET POSITIONING

ATHLETES
COACHES

ORGANIZATIONS

Callaway  Nike  PING  Titleist  USGA  R&A  Rules of Golf

Major League Baseball  Boston Red Sox  New York Yankees  Golf Channel  NBC  ABC  Fox Sports  Stanford University  Harvard University
Industry context

Golf clubs - strategy canvas

Industry context

Golf clubs - strategy canvas

New Entertainment Facilities vs. Golf Clubs

Industry context

Golf clubs - strategy canvas

Technology Innovation 1: TrackMan Range
A technology solution inspired by TrackMan Baseball
TrackMan Range Live at The Masters.

TrackMan Range Live on air during tournaments at your facility for additional revenue!
The new range experience
Tour technology FOR EVERYONE

Phones: full flexibility
iPad: Enhanced game experience
Virtual Golf (coming soon)

Tee off
Albany
Launched October 2018
Holzhäusern
Switzerland
Golf Lounge Hamburg
Germany
Safety borders

... and start to follow the incidents

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Download PDF
Technology Innovation 2: Indoor Golf
Finally feeling real ...

CASE: THE ULTIMATE INDOOR FACILITY

In 2017 Eagle Club opened an ambitious indoor golf facility with TrackMan Simulators and fitting barn few kilometers from the First Man Handique for its Danish.

This facility gives Danish TrackMan the ability to test new features, get an immediate response from both the owners and keep track of the increasing engagement from the players and pro using the facility.

"We decided to build the ultimate indoor golf facility in Scandinavia, with both practice facilities and simulator golf, without compromising on quality and technical performance."

Jon Christiansen, Founder & Co-owner, Eagle Club, Randers, Denmark
ON-COURSE PRACTICE
Drop the ball anywhere on any course
Practice the same shot continuously
FLEXCAGE SIMULATOR
Set it up anywhere
Industry context
Golf clubs - strategy canvas

There are many things to be learned
And golf clubs and driving ranges can position them differently

Golf Entertainment Facilities vs. Golf Clubs

There are many things to be learned
And golf clubs and driving ranges can position them differently
The implications
The only constant is change!

Based on the technology innovations presented:

A) Which implications do you see for golf course and driving range designs?
B) How will the role of the golf course architect evolve?
Thank you!
Questions?
Appendix
Blue ocean golf club

Key value propositions for a golf club following a blue ocean strategy

• Feedback on every shot
• Customer relationship management
• Range as customer acquisition tool
  • Ease of use
  • Reduced land requirements (170m ball flight)
• Professional sales and customer experience teams
  • Outbound sales team
  • Changing role of the academy and teaching pro’s
• Games and tournaments across all segments and offerings
  • On the course
  • On the range
  • Indoors

• New offering
  • Membership levels (range, indoor, GC)
  • Price differentiation
• Extended value proposition attracting non-customers
  • Cultural events
  • Corporate events
  • Public fitness
  • Children playground
Dashboard example
Golf Lounge Hamburg

Key takeaways:

- Monitor how the facility evolves
- Set-up competitions (coming soon)
- Gain key-insights in usage and trends
- Manage bays, targets and sponsors’ areas
- Manage range sponsor (logo shown in the app)
- Manage available courses for Virtual Golf (coming soon)
Driving range with entertainment bays

Attracting new customer groups
✓ Outstanding environments

✓ Hyper-realistic graphics

✓ Tour proven technology
TrackMan Range provides several revenue drivers
Success depends on the ability to leverage on or more of these!

1. Price (members vs green fee)
2. New, innovative teaching plans (TM Range included)
3. Company Days & Events (“off-sites” etc.)
4. New members attracted (Technology enabled)
5. Existing members spend more time (shot analysis + games)
6. Key Sponsor (intro screen in app)
7. Price of Membership
8. Data understanding (fitting + normal sales)
9. Existing members spend more time (shot analysis + games)

- Revenue type
- Revenue source
- Revenue driver
- Unique revenue driver
TrackMan Strategy
Down the pyramid and multi-sports

- **GOLF**
  - TrackMan Simulator
  - TrackMan Range
  - TrackMan X

- **BASEBALL**
  - Practice Radar
  - Colleges & Universities
  - Amateur Baseball

- **OTHER SPORTS**
  - Football
  - Soccer
  - Tennis
  - Cricket
  - Track and Field
TrackMan R&D
Significant growth and investment

- R&D team doubled in size in 1.5 years.
  - ~17% of revenue invested in R&D (2018).
  - ~40% of TrackMan staff work in R&D.
  - HQ: 150 people with 23 nationalities
- Aggressively adding capabilities and skills:
  - Data engineering;
  - Neural network;
  - Machine learning;
  - Artificial Intelligence.
- Application of those technologies:
  - Tracking (more data, more accurate, higher pickup rate);
  - Automation/tagging;
  - Data insights;
  - ...and more.
Innovation Example 1: OERT
Optically Enhanced Radar Tracking

Technical principles:
• Combining best of two worlds: Radar and vision tracking.
• Radar for 3D: speed, spin, long-range tracking.
• Vision for 2D: pixel accurate positions.
• Both technologies synced in time and space.

Applications
• Baseball
• Golf: impact location, putting, club data on short shots
Innovation Example 3: American football

A number of speculation – in the past

Accurate datapoints and tracer on field-goals
Innovation – Work in Progress
Leveraging TrackMan’s reach for new business models

TrackMan network
Reach of 600,000+ users

Simulators
300,000+ users
Commercial, private, golf clubs

TrackMan Range
300,000+ users

New offers with industry partners

Online tournaments
• Globally or regional.
• Sponsorship opportunities.
• Significant prices.
• E.g. BMW TrackMan Open.

Data insights
• Provide insights to golfer from their TM data (player KPI’s).
• Leverage AI and machine learning to develop those insights.
• Sponsorship opportunities.
• E.g. personalized club and training advice.
Why are market leaders often not capable of seeing those big and disruptive changes in their industry?

Example:
Camera vs. smartphones;
Navigation vs. Google maps;
Video rental vs. Netflix.

Why is it difficult to catch disruptive technologies:
1) Disruptive technologies promise lower margins (not higher ones).
2) They are often first commercialized in emerging or insignificant markets.
3) A leading firms’ most profitable customers generally don’t want it.