

IOWN INTEGRAL

NTT R&D FORUM 2024

RESEARCH

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Improving proprioceptive feel of golf shots using the Internet of Things (IoT)

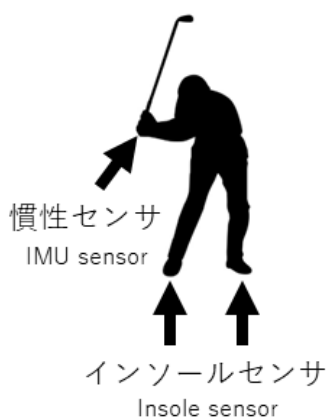
Interference-free sensors and a smartphone helps
getting the hang of efficient swing
Customer Experience Value Creation

リリースの力感の
習得を支援します

Assistance for acquiring
the proprioceptive feel
of the release

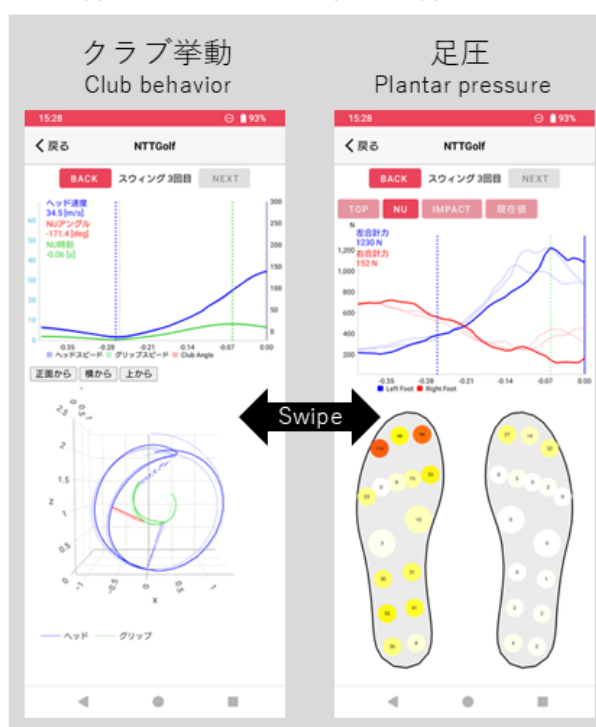
スイングダイナミクス
の非拘束センシング

Interference-free sensing
of swing dynamics



スマホアプリ画面

Appearance of the smartphone application



リリースに関わる動的特性を一打ごとに即時フィードバック
Dynamic features behind the release are displayed immediately after each shot

///Technical Issue

Analysis of visually observable motions
fails to represent dynamic features related
to force control, resulting in a mismatch
with users' subjective feel of their own
swings.

///Research Goal

Feedback of invisible dynamic features
behind the swing supports self-training
and assists communication between
learners and trainers.

---Technology

Interference-free extraction and instant feedback of the
swing dynamics contributing to the performance
improvements.

---Novelty

Most conventional techniques have aimed at improving
the swing form and posture by visualizing the movements
of the body segments and the club. Our technique assists
users to improve the proprioceptive feel of swing by
extracting the dynamic features affecting the swing
efficiency and providing the instant feedback.

---Applicable Business

Self-training tool for general consumers (in 2027)