

# dorsaVi and the future of wearables



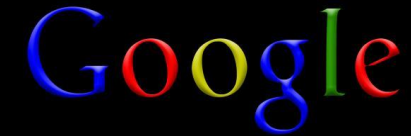
## Who owns the international shipping domain?

Maersk Group (135 countries and biggest since 1996)



## Who owns the search engine domain?

Google (revenue for the quarter rose 22% to \$16B)



## Who owns the sporting apparel domain?

Nike (revenue for the quarter rose 15% to \$8B)



## Who owns the fast food domain?

McDonalds (revenue of \$27.5B and profit of \$5.5B (2012))



Who owns the human movement domain?

**dorsaVi**  
Inspiring the world to move well

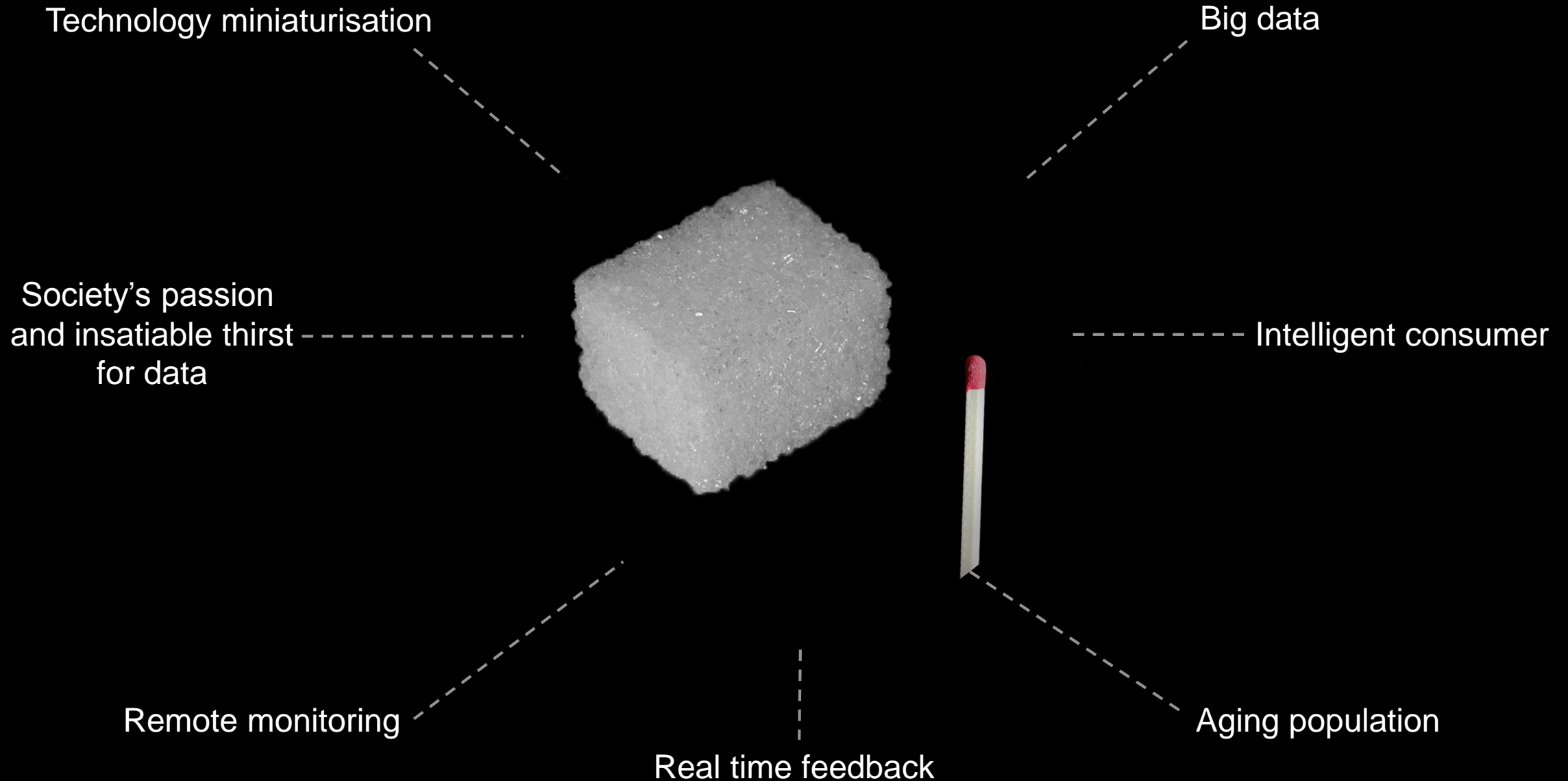


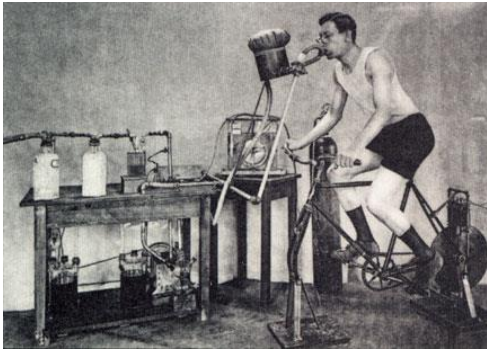
**Vi** Perform

**Vi** Move

**Vi** Safe

# Drivers for the human movement revolution





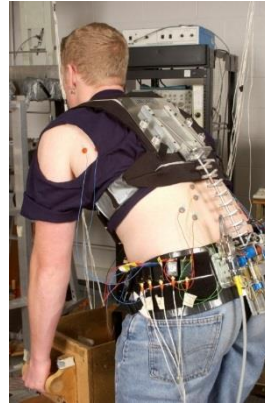
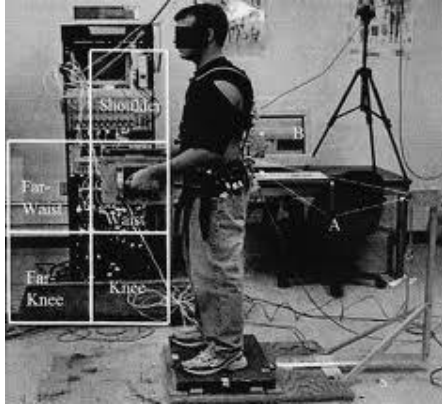
**Figure.** Jeff Holter with his original 38-kg radio-electrocardiograph recording device in 1947.



**40's**

**50's**

**60's**



1975  
PULSAR  
CALCULATOR  
WATCH



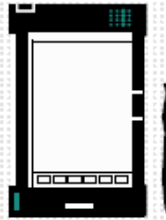
1979  
SONY WALKMAN



1984  
CASIO  
DATABANK CD-40



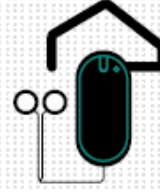
1987  
DIGITAL  
HEARING AID



1993  
APPLE  
NEWTON PDA



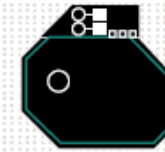
1999  
FIRST  
BLACKBERRY



2000  
FIRST BLUETOOTH  
HEADSET



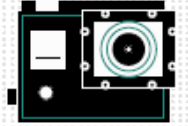
2001  
APPLE IPOD



2003  
VIATRON  
C-SERIES



2004  
MOTOROLA RAZR



2004  
GOPRO CAMERA

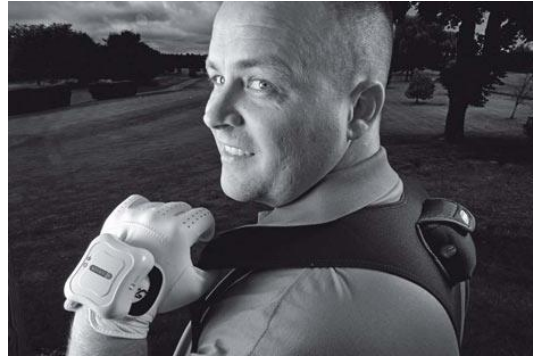


70's

80's

90's

2000 - 2005



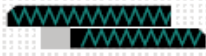
2006  
NIKE+iPOD KIT



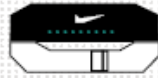
2007  
APPLE iPhone



2008  
FITBIT



2011  
JAWBONE UP



2012  
NIKE FUEL BAND



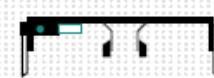
2012  
PEBBLE WATCH



2013  
NISSAN NISMO  
SMARTWATCH



2013  
MISFIT SHINE



2013  
GOOGLE GLASS



2013  
SAMSUNG  
GALAXY GEAR



2014  
APPLE WATCH

2005 - 2010

2011 - 2012

2013 - 2014

# It is not about how far or how fast!

It is about quality data, can I trust this data?

It is about the relevance of that data, does it measure what's important?

It is about early detection, does the data provide profound insights?

It is about the efficiency of the data, is it immediate and intuitive to the user?

It is about behaviour change, does the data engage me, can it change behaviour?

Does the data improve health, can it improve well being?



# What does everyone want?

To be healthy and active for longer (21 forever)

This translates into sports:

More game time

Longer career

This translates into the workplace (OHS):

Safer workplace

Longer career





Knee



In The Gym Assessment



Hamstring



Live Training

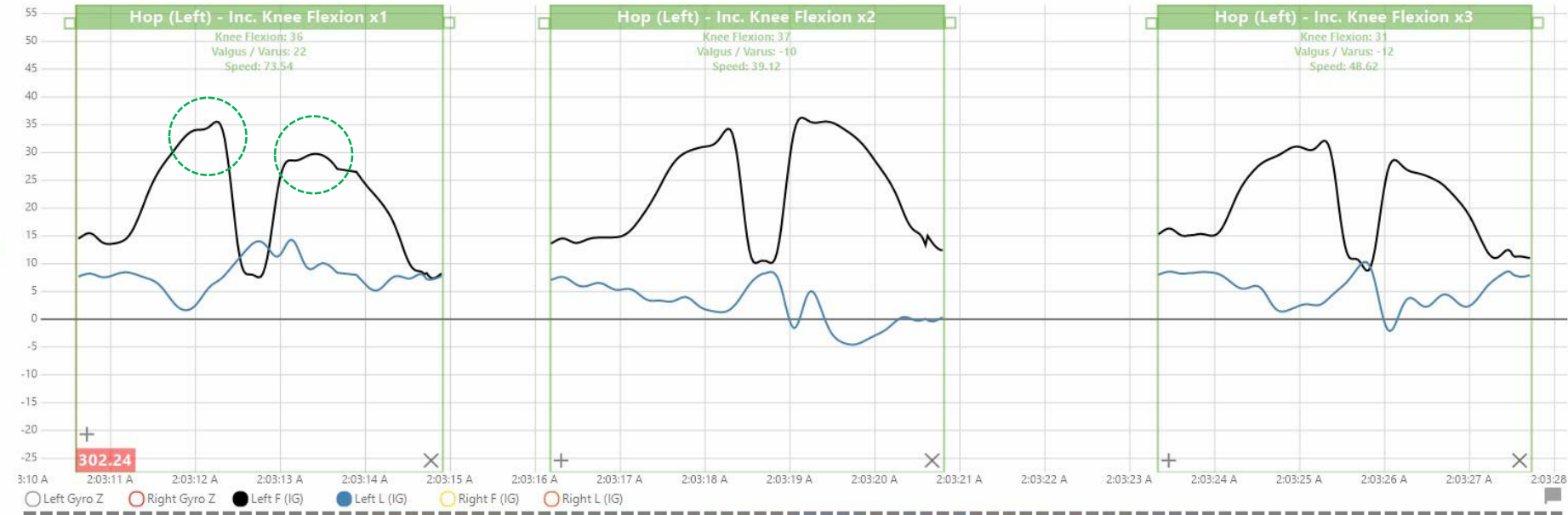
# Knee Control Test - Left leg



Vi Perform

## Assessment Results Knee Control

Squat (Left) - Inc. Knee Flexion x3	
Knee Flexion	33°
Valgus / Varus	-5°
Speed	1.24 deg/s
Squat (Right) - Inc. Knee Flexion x3	
Knee Flexion	29°
Valgus / Varus	-5°
Speed	1.43 deg/s
Hop (Left) - Inc. Knee Flexion x3	
Knee Flexion	35°
Valgus / Varus	0°
Speed	53.76 deg/s
Hop (Right) - Inc. Knee Flexion x3	
Knee Flexion	31°
Valgus / Varus	-4°
Speed	16.53 deg/s



Report

# Knee Control Test - Right leg



Vi Perform



## Assessment Results Knee Control

Squat (Left) - Inc. Knee Flexion x3	
Knee Flexion	33 °
Valgus / Varus	-5 °
Speed	1.24 deg/s
Squat (Right) - Inc. Knee Flexion x3	
Knee Flexion	29 °
Valgus / Varus	-5 °
Speed	1.43 deg/s
Hop (Left) - Inc. Knee Flexion x3	
Knee Flexion	35 °
Valgus / Varus	0 °
Speed	53.76 deg/s
Hop (Right) - Inc. Knee Flexion x3	
Knee Flexion	31 °
Valgus / Varus	-4 °
Speed	16.53 deg/s



Report



**A CURRENT AFFAIR**



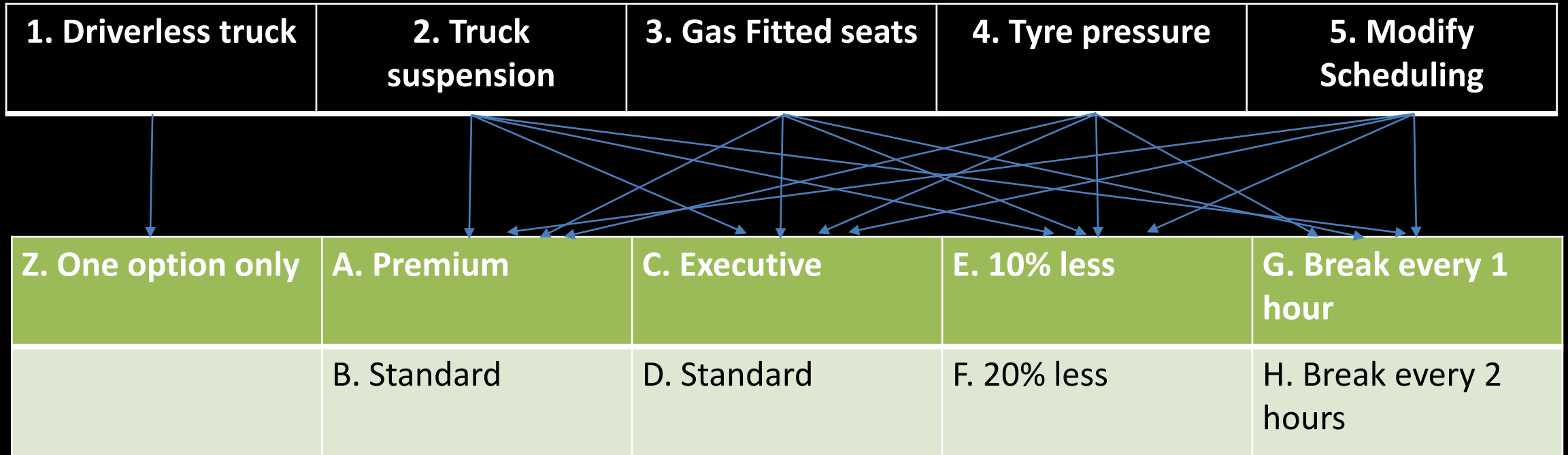


# Drivers having low back injuries – How do you reduce risk?

## Options:

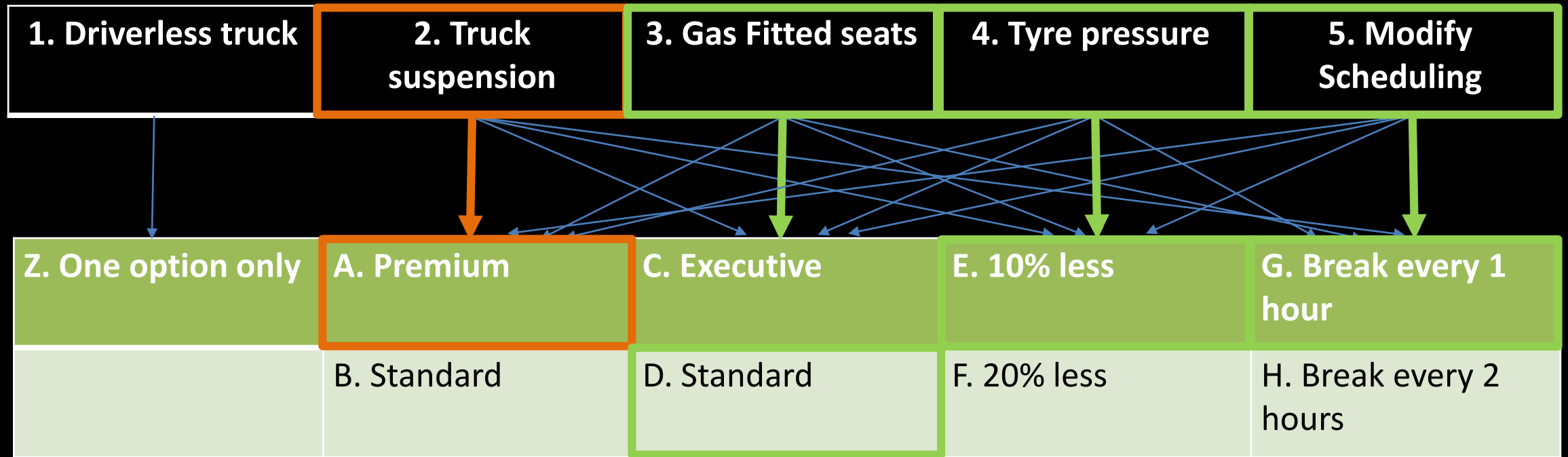
1. New driverless trucks (extra \$4.5M on a \$15M truck)
2. New Truck suspension (premium or standard) - \$75,000 per truck across 100 trucks (\$7.5M)
3. New gas fitted seats (executive or standard) - \$8,000 or \$5,000 each (\$500k - \$800k)
4. Modify tyre pressure – 10% less or 20% less pressure (labour costs only)
5. Scheduling (shift duration, number and length of breaks...)

# Drivers having low back injuries – How do you reduce risk?



- More than 30 scenarios to choose from
- Historically the “I reckon” rule has been used
- Objective data provides for better decisions

# Drivers having low back injuries – How do you reduce risk?



Option 1: **2A only at a cost of \$7.5M**

Option 2: **3D, 4E and 5G at a cost of \$0.5M**

(and improved safety culture because workers loved the new seats and the guaranteed breaks every hour)

# Who will win?

Identify patterns in big datasets (20,000 datasets of human movement)

Normal vs Abnormal vs Elite

Clinical trial evidence to show use of data changes behaviour

Those who capture IP (many areas of freedom)

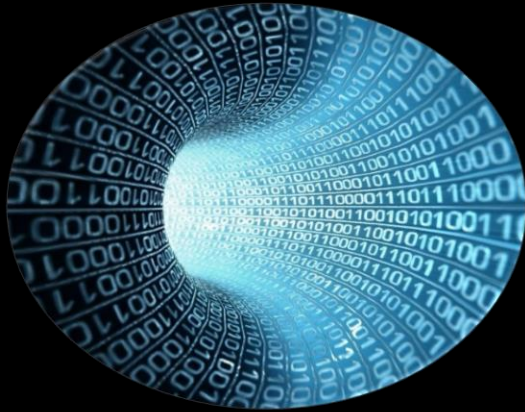
Those who have regulatory approval

Those who keep trade secrets close

And .....

.... those who can combine these skills

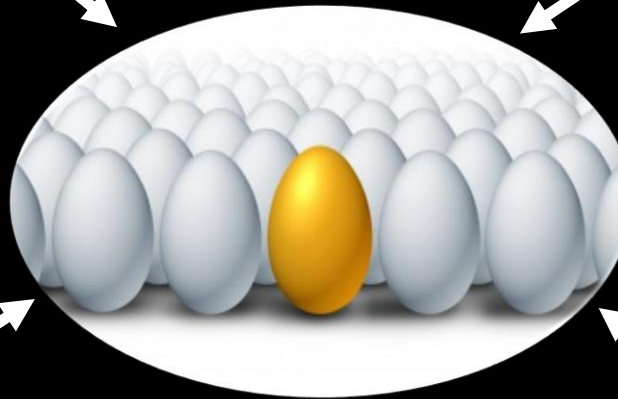
Big data to learn from



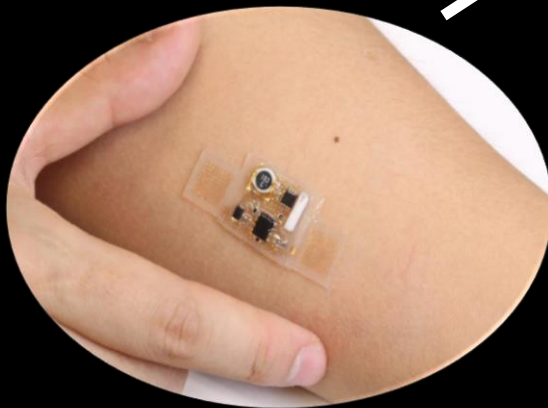
Clinical skills



Competitive Edge



Sensor expertise



Pattern recognition



# Business model and pricing

## Business Model for ViMove and ViPerform

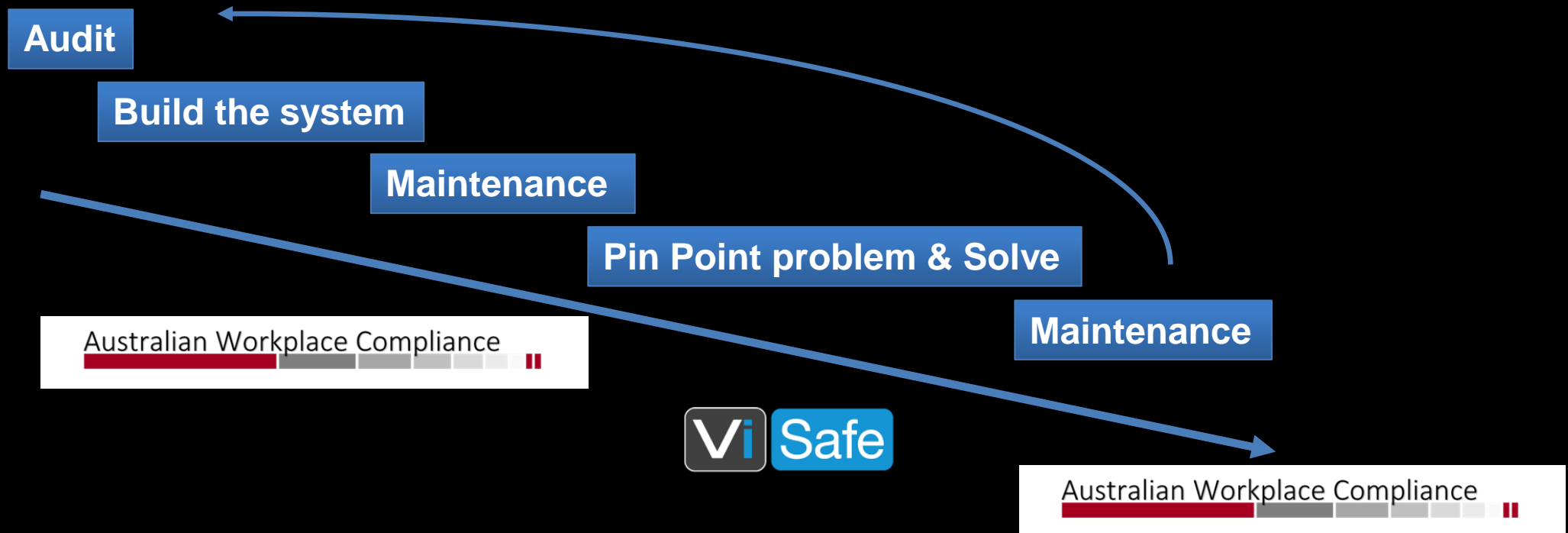
- Licence model \$5,000 – 7,500 p.a. per unit + consumables
- Value add with personalised web-based exercises
- Annuity based revenue
- Protocols for patient management are a highly sought after attribute



# Why this offering resonates with Large Corporates

## Business Model for ViSafe & AWC

- Project based fee and annuity for AWC work (\$5,000 – \$20,000 p.a.)
- Baseline assessment (Stage 1 & 2) \$20,000 - \$50,000
- Solution focused project (Stage 3, 4 & 5) \$50,000 - \$350,000



# Competitors in the Wearable Sensor Space



“If you want to bring reliability and objectivity to movement assessment, I don’t think there’s anything out there that can touch it.”

*Steve Wright, Leading Rehab Physiotherapist, English Premier League club*



“Finally, dorsaVi is giving us the information we need to help runners increase their performance and stay injury free. We’re looking forward to making a great impact on the running community in Denver.”

*Patty Pennell, Physical Therapist, Staying in Motion, Denver*



“Performance and injury prevention is measured in tenths and hundredths of seconds, dorsaVi helps me provide my athletes with the quality and accuracy that they will need to compete at the highest level.”

*Loren Landow, Elite Performance Manager, NFL Players, Denver*

# Market Update



- Approved for use in US, Australia, UK/Europe, Canada and New Zealand
- Submission for expanded claim with FDA
- >100 devices being used in Australia and Europe
- New applications being launched



- Key revenue driver
- Combined service offering with Australian Workplace Compliance providing a clear proposition
- Projects underway with Kennards Hire, Martin Bower, BP, Sodexo, Silver Chain
- Repeat customers
- Insurance market a key area of focus



- Cross code success: 8 AFL teams, 3 EPL teams signed
- Multiple Olympic athlete/teams
- 4 active sites across the US
- Professional sports advocacy continues to drive awareness globally

# Company Snapshot

World first technology using sensors to capture and assess human movement, enabling many aspects of detailed human movement and position to be accurately captured, quantified and assessed outside a biomechanics lab, in both real-time and real situations for up to 24 hours.

## Key milestones for 2015

- Increase marketing using high profile clients
- Publication of Clinical Trial Results
- OHS Australia and leverage into the US
- Europe – high calibre team with specific experience in required fields
- US – exceptional interest from early meetings
- Excellent progress into the consumer space



dorsaVi Limited ASX:dvl	
Share price (issue price 40 cents)	\$0.40
Shares on issue	121,250,000
Market capitalisation	\$48.5 million
Free float	41,250,000

	2011	2012	2013	2014	Qu1 2015
<b>Revenue</b>	65,368	244,471	398,607	767,031	359,117
<b>EBITDA</b>	(903,107)	(2,332,015)	(2,148,749)	(3,852,593)	(1,741,433)
<b>Loss from continuing operations</b>	(489,409)	(1,510,166)	(1,659,235)	(3,562,024)	(1,865,304)
<b>Cash position</b>				\$13.97M	\$11.74M

# A Highly Experienced Global Team

## Australia



Mark Heaysman  
OH&S Leader



Matthew May  
National Sales Manager



Tanya Reid  
Clinical & Sports Specialist



Darcie Callahan  
Product Specialist



Matt Middleton  
Product Specialist

## Europe



Zoe Whyatt  
COO Europe



Tom Doe  
Clinical & Sports Specialist



Paul Jones  
Senior Sports Specialist



Marie Butler  
Clinical Account Manager



Meagan Blackburn  
Global Clinical & Sports  
Innovation

## United States



John Kowalczyk  
President of dorsaVi US



Mike Skorup  
Sales Consultant



Shawna Jamison  
Sales Consultant



Joanna Goldin  
Clinical & Sports Specialist



John Knudsen  
Sales Consultant



Ashley Jones  
Operations Manager

# Chief Marketing Officer –driving global sales and marketing

- Chief Marketing Officer, Dave Wildermuth, commenced November
- More than 29 years of experience in medical device marketing, digital marketing and television
- Most recently, Senior Marketing director for Medtronic, the world's largest medical technology company, where he drove commercialization of many of the company's medical devices
- Already engaged in helping refine strategy and development concise value propositions for Global markets with primary focus on the US



Dave Wildermuth – Chief Marketing Officer

# The US Elite Sport Opportunity

Elite sport is the starting point

- There are over 600 elite sporting teams in the US
- In the major codes there are 32 in the NFL, 30 in the NBA, 30 in the MLB and 30 in the NHL
- In discussions with 10 elite teams in various stages across NFL, NBA, NHL and MLB
- Our proposition is clear and transferable across codes



# US Sport and ViPerform

The elite sporting sector is important (as it has been elsewhere globally).

- Validates the practical element of our data;
- Creates brand recognition and marketing opportunities;
- Opens up Collegiate programs;
- Establishes cash pay opportunities for every athlete at every level for assessments which drives sales to sports medicine clinics.

It's critical that we create long term engaged and well supported clients



# US Clinical Market Size

- 116m people have Chronic Pain which costs \$635 billion annually<sup>1</sup>
- 26 million Americans between 20 and 64 suffer from low back pain<sup>2</sup>
- It is the leading cause of disability for people under 45 years old<sup>3</sup>



# US Clinical Market Implementation Strategy

Medical / Clinical opportunity remains the golden ticket

- Extremely large market as it directly links to low back pain
- Low back and cervical spine are the two largest pain causing segments
- This market will significantly increase with the introduction of the cervical spine module
- FDA 510k clearance on Vi Move for low back
- Long term goal to extend claims to include low back therapy



# OH&S Market in the US

- Appetite for the dorsaVi OH&S offering is strong in the US
- OH&S model is quickly scalable for the US market
- OH&S generates revenue quickly with high margins
- Initial focus on working with insurers
- Clear value proposition:
  1. Understand source of injuries and reduce costs
  2. Improve productivity
  3. Build a positive safety culture



# US OH&S Market Size

- The national annual price tag of occupational injuries and illnesses at \$250 billion<sup>1</sup>
- This figure is \$31 billion more than the direct and indirect costs of all cancer, \$76 billion more than diabetes, and \$187 billion more than strokes<sup>2</sup>



<sup>1,2</sup>Leigh, JP 2011 'Economic Burden of Occupational Injury and Illness in the United States', The Milbank Quarterly, Vol. 89, No. 4, (pp. 728–772)

# US OH&S Market Implementation Strategy

- The proposition is clear:
  - Better decisions based on objective data
  - Outcomes are efficiently measured
- Developing network of consultants for on-site analysis
- We are working with PT programs who assess work related injury
- Centralized and proprietary data analysis
- Annuity stream through audit and compliance component

