

Real-World Strategies for ~~Big~~ Data

Professor Joe Peppard
Cranfield School of Management
j.peppard@cranfield.ac.uk

1985!

How Information Gives You Competitive Advantage

Most general managers know that the revolution is under way, and few dispute its importance. As more and more of their time and investment capital is absorbed by information technology and its effects, executives have a growing awareness that the technology can no longer be the exclusive territory of EDP or IS departments. As they see their rivals use information for competitive advantage, these executives recognize the need to become directly involved in the new technology. In the face of rapid change, however, they don't know how.

This article aims to help general managers respond to the challenges of the information revolution. How will advances in information technology affect competition and the sources of competitive advantage? What strategies should a company use to exploit the technology? What are the implications of actions that competitors may already have taken? Of the many opportunities for investment in information technology, which are the most urgent?

munications technologies, factory automation, and other hardware and services are involved.

The information revolution is affecting competition in three vital ways:

It changes industry structure and, in so doing, alters the rules of competition.

Mr. Porter is professor of business administration at the Harvard Business School. He is the author of the new best-seller Competitive Advantage (Free Press, 1985) and Competitive Strategy (Free Press, 1980), and he recently served on the Presidential Commission on Industrial Competitiveness.

Mr. Millar is the managing partner for practice of Arthur Andersen & Co. and is responsible for the professional practices of the firm worldwide. He has worked extensively with executives to increase their understanding of information in the management function.

Authors' note: We wish to thank Monitor Company and Arthur Andersen for their assistance in preparing this arti-

Information as a resource

- Application of IT
 - Operational and/or strategic
 - Process focused
 - Seeking information asymmetries
 - Take out costs and inefficiencies
 - Automation of tasks, activities and information flows
 - Competitive necessity and advantage



Managers give meaning to Information

- Use of information
 - Discovering new knowledge and insight from information
 - Supporting decision making

Two sides of the same coin...



1. Doing what we always do but better

- Using data generated as part of its operation to improve how it does things
- Collect better quality/new data



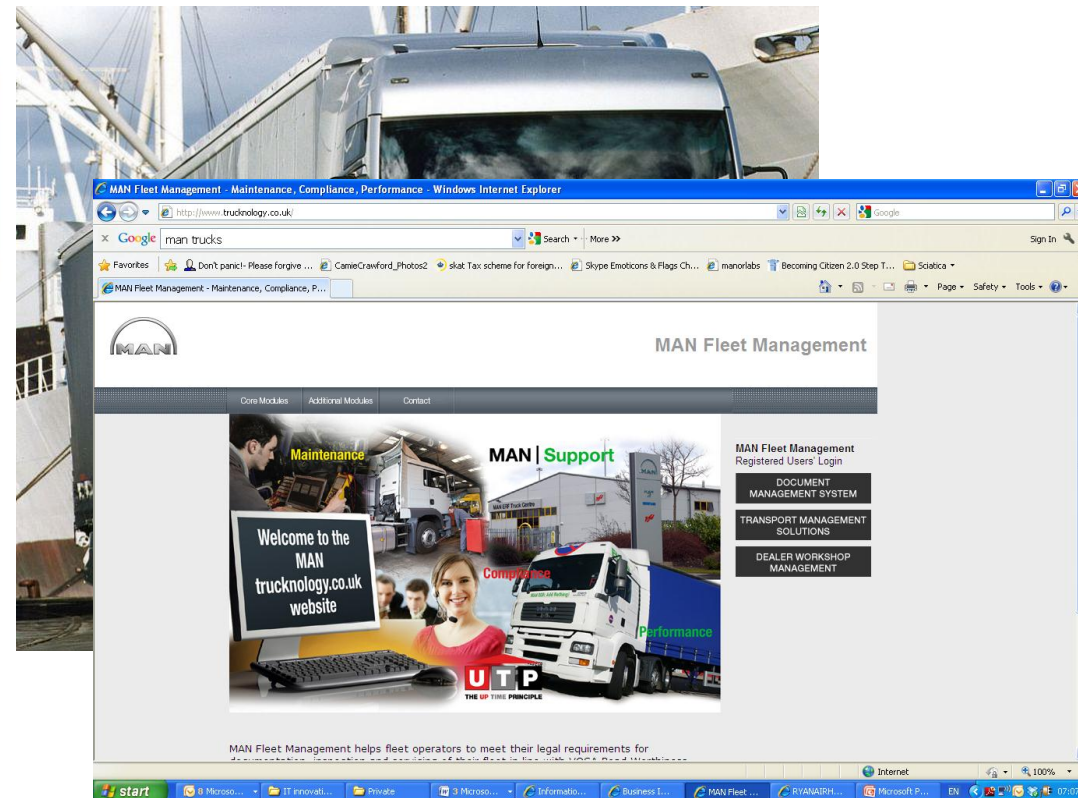


Automatic Detection

Report in Street view

Get Directions

- ## 2. Do something different by harnessing existing or new data
- Using data to shape a new business model (change the model not the business)







What looks like six marshmallows stuffed between the helmet's padding and the outside shell are actually foam-encased sensors that measure the acceleration of a player's head during a hit.

They determine magnitude, direction, location on the head, duration, and time of impact. (Some players can receive up to 2,000 head blows each season.)



Upon impact, the sensor immediately assesses the collision. A recent example featured a 180-pound "gunner" -- a defender who chases down the kickoff returner -- tangling with a 250-pound lineman.

The smaller player was knocked off his feet, his head accelerating at 158 Gs. Anything above 100 Gs is a sign to look for concussion.



As the player is still trying to get up, the impact data are transmitted to the sideline computer console.

Although most hits in football affect the top of the head, the gunner slammed into the turf on the back of his head.

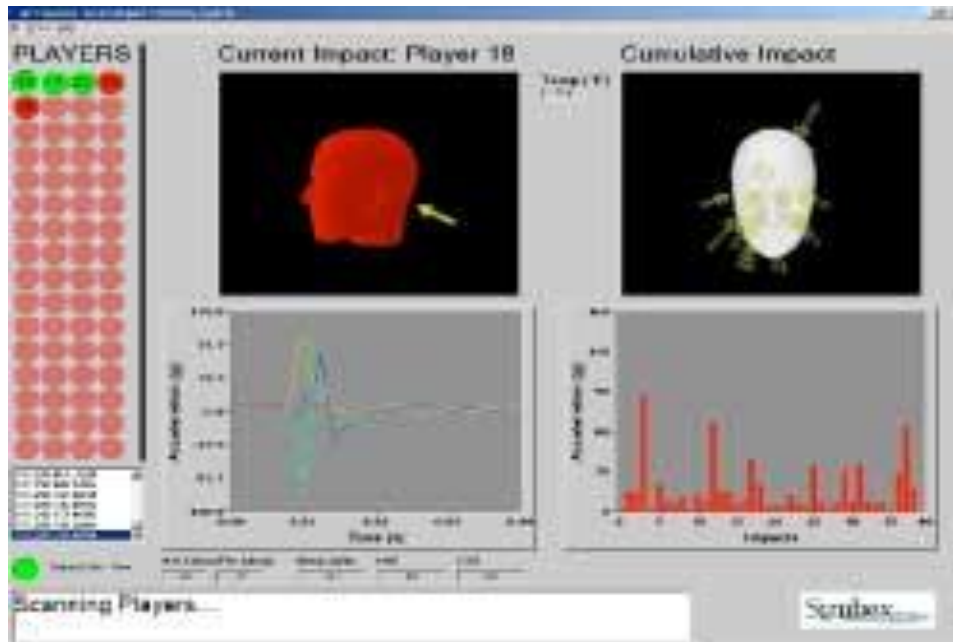


That's relatively good news: A player is five times more likely to get a concussion from a blow to the front than the back.



If the hit exceeds a certain threshold, as it did in the gunner impact, pagers held by sideline staff light up and the player's condition must be assessed.

New NFL rules state that if a player exhibits any signs of concussion -- such as disorientation or losing consciousness -- he must leave the field for the day (the gunner was sidelined).



Instantly the information goes into a database. Teams, doctors, and Simbex can later examine the data via a web-based service that helps them zero in on dangerous plays.

If it shows a rise in head impacts for a player or a team, coaches can look at whether practice tackles are being done correctly or an equipment change is causing problems.

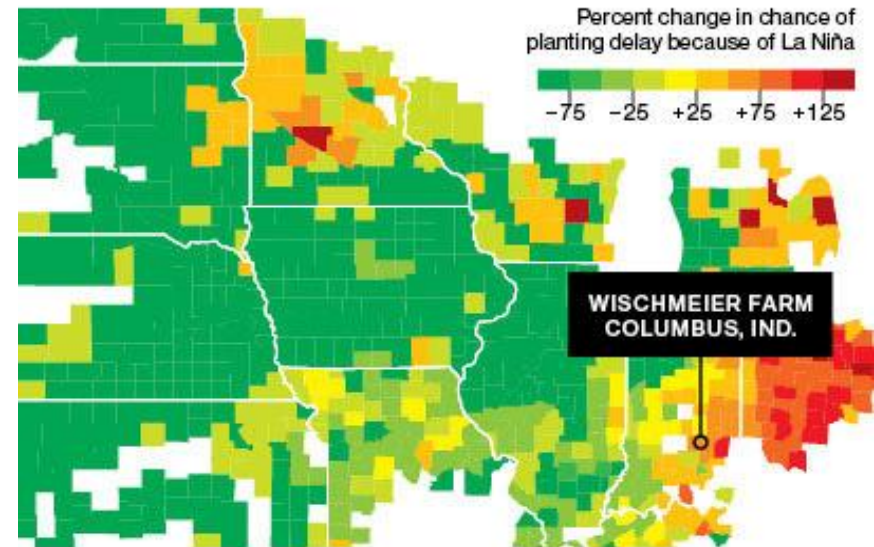
3. Do something new

- Using data to create an entirely new business



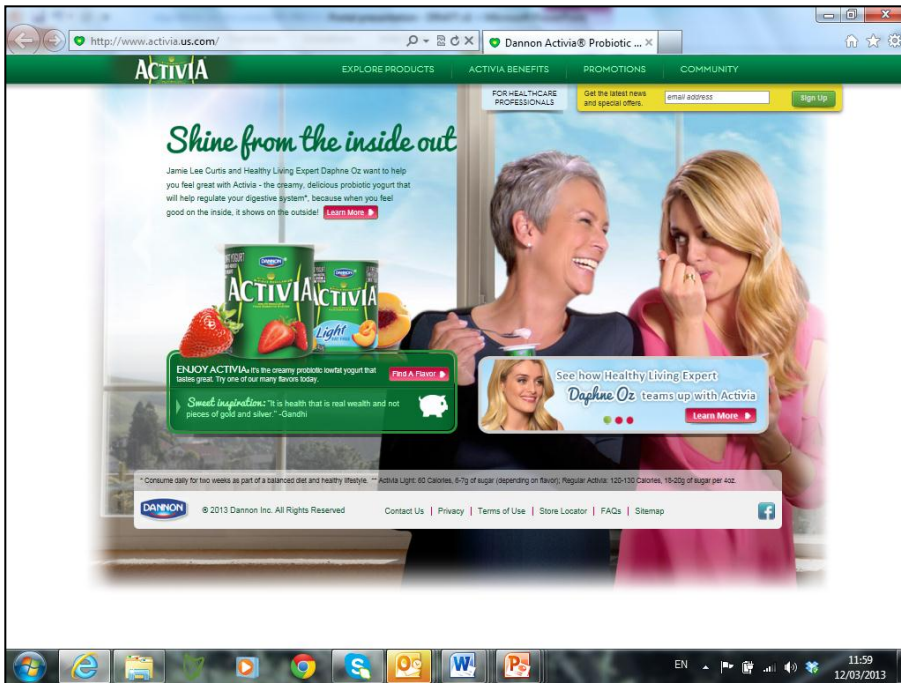
You Don't Need a Weatherman

Using decades of data, Climate Corp. predicts the impact of La Niña, a phenomenon caused by a cooler Pacific



GRAPHIC BY BLOOMBERG BUSINESSWEEK; DATA: CLIMATE CORP.

4. Co-create value with customers









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App my Ride - Volkswagen App Contest

Become a part of the Volkswagen App family and share your Apps (SWF files) and Ideas and thereby win great prizes! As contest member you can also discuss and evaluate the contributions of others. For your coded Apps you can use various CAN input data recorded from real highway and city trips. Download the [software development kit](#) and see how to get started. Get informed about the contest by clicking [here](#).



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Latest Members

	IS0004 2010-06-25 details
	k_holer 2010-06-25 details

[see all](#)

Latest Applications

	wagenPAL Necromod Popularity: 0 % details
	Taximeter Stealth Popularity: 100 % details

[see all](#)

Latest Ideas

	AvatarCar Jonathan Popularity: 100 % details
	No Traffic Jams Jonathan Popularity: 100 % details

[see all](#)

Contest Timeline

Contest Start	Contest End	Jury Meeting	Winners are announced
May 03, 2010	June 30, 2010	August 2010	August 2010

Jury

	Barbara Lamprecht Director Brand Management and Strategy China, Volkswagen AG
	Luca de Meo Executive Director Marketing of Volkswagen Passenger Cars

[more](#)

Current Info

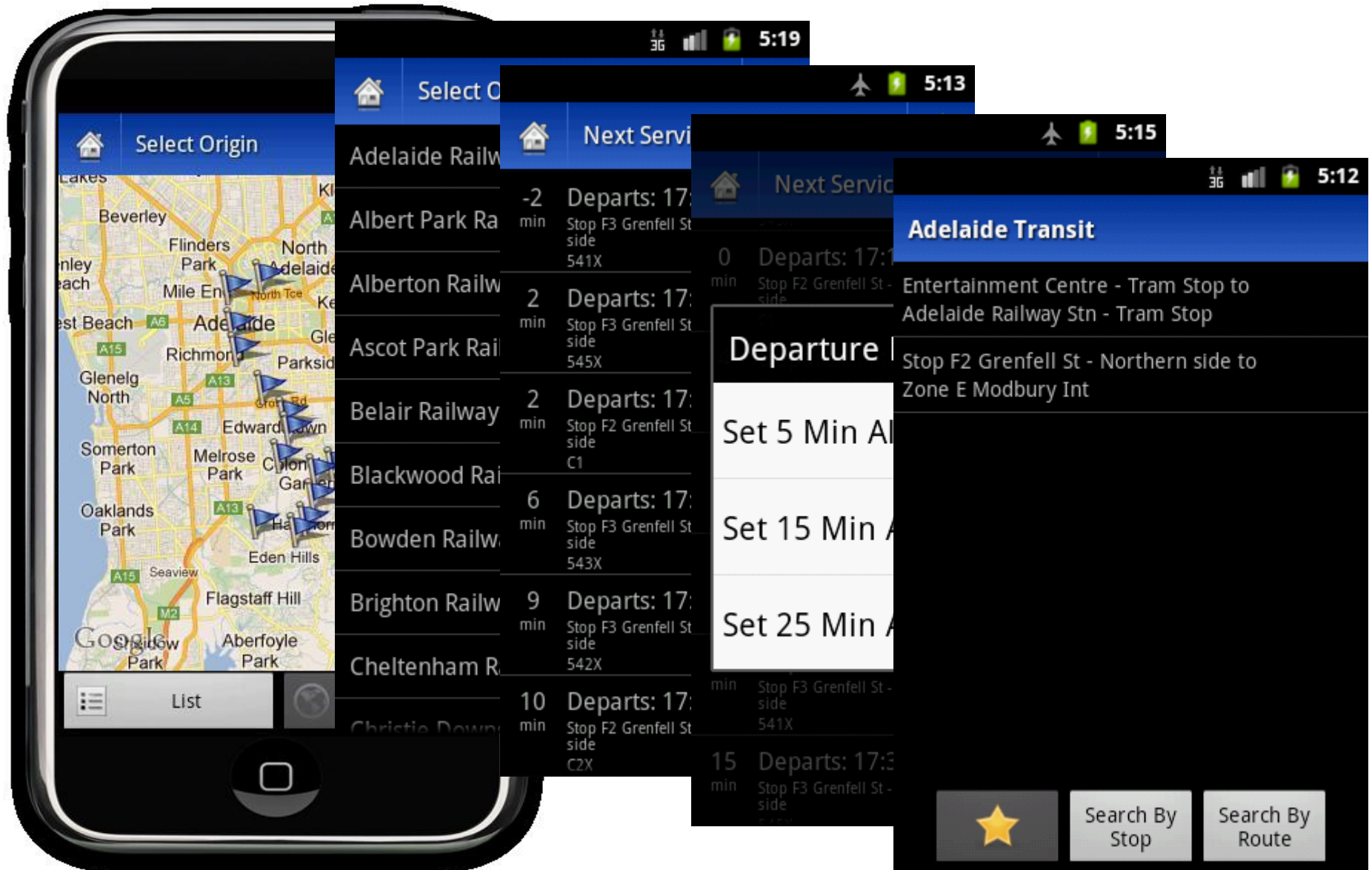
today	all	
2	326	Ideas
1	70	Apps
0	464	Members
4	1603	Evaluations
3	1188	Messages
3	1252	Comments

Contest News

10.06.24 @ 13:06
Wanna know how to shift gears according to ure driving style? Look here: <http://www.app-my-ride.com/profile/index/mode/app-details/appId/128>

10.06.24 @ 09:06
only 2 more days until the app my ride contest

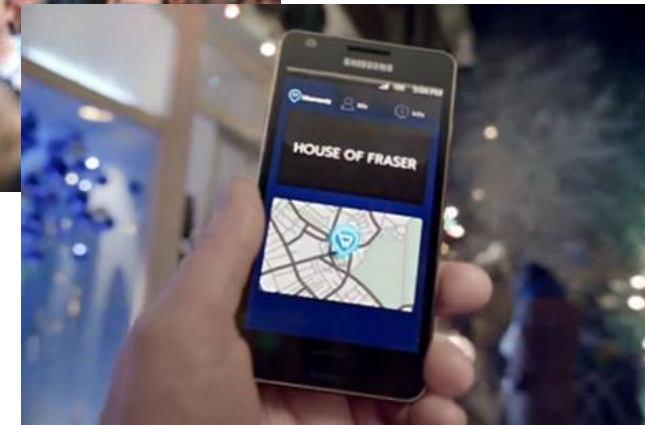
"Open data": Adelaide Transit App



5. Monetise data

- Using data to create an entirely new business

- Triangulating location
- Demographic information
- Profiles of people who visit your stores
- Do they compare prices or buy on line when in store?
- Where customers go after leaving your shop



- **The paradox:** Are that the technologies that were supposed to help manage data are now causing a massive deluge.
- **The big in "big data":** is a technology issue
- **The opportunity:** Exploration and exploitation

Identifying Opportunities is not a technology problem!

Harvard Business Review

Why IT Fumbles Analytics

Tech projects should focus less on technology and more on information. by Donald A. Marchand and Joe Peppard

WEBINAR

Big Data

CAN YOU SEIZE THE OPPORTUNITY?

featuring Donald A. Marchand and Joe Peppard

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Harnessing the Growth Potential of Big Data:

Why the CEO Must Take the Lead

By James Pettier, vice president and country manager for EMC, UK and Ireland, and Joe Peppard, Chair in Information Systems at Cranfield School of Management



How Paradigm Paralysis May be Choking Your IT Investments

Donald A. Marchand
Professor of Strategy Execution & Information Management
IMD
Chemin de Bellevue 23
CH-1001 Lausanne
Switzerland
Email: marchand@imd.org
Tel.: +41 21 618 0259
Fax: +41 21 618 0707

Joe Peppard
Professor of Information Systems
Cranfield School of Management
Cranfield, Bedford MK43 0AL
United Kingdom
Email: j.peppard@cranfield.ac.uk
Tel.: +44 1234 754 421
Fax: +44 1234 751 806

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Email: j.peppard@cranfield.ac.uk
Twitter: Joe_Peppard