

CUSTOMER LED INNOVATION

Dr Emma Macdonald and Professor Hugh Wilson

Istanbul Technical University

Air Transportation Management, M.Sc. Program

Airline Marketing

Module 15

31 January 2014

Agenda

- Innovation with business partners
- Innovation with end customers
- Unmet needs: focusing on value-in-use

Customer led innovation

"No Lego Designers took part in the creation of this product" Mark William Hansen, Director of Lego Group



A white LEGO Playon truck is shown with the text "WHAT WILL YOU MAKE?" and the LEGO logo on its side. The truck is surrounded by several floating LEGO bricks in red, green, and grey. Below the truck, two custom-built LEGO models are displayed: a robot on the left and a bird-like creature on the right.

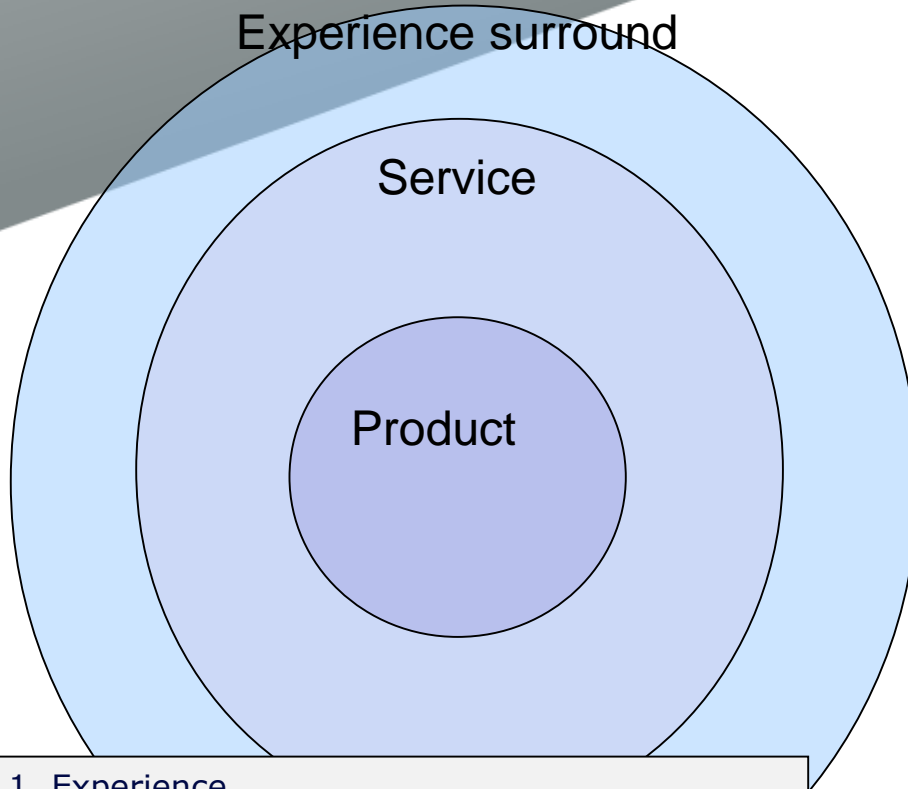
Item#: LFH001
Ages: N/A
Total Pieces: 540
(Pieces used in set: 77)
Price: USD 28.74

Available Now

 Add to Cart

Recap: experience and value-in-use

Experience surround



USE PROCESS

Value-in-use

1. Experience

What do your customers say they want from:

- a) Your core product (tangible or intangible, e.g. engine, bank account)?
- b) Any surrounding service (e.g. call centre, field service)?
- c) Any wider 'experience surround' (e.g. relationship, peer-to-peer interactions, making use of your network of contacts etc)?

-
-
-

3. Use process

What does the *customer* have to do when using your products/services, in order to achieve the goals you have listed in step 2?

2. Value-in-use

What are the *goals* that customers are really trying to achieve when they ask for the things that you have listed in step 1?

Innovation in value proposition: Bugs Burger Bug Killer

“You don’t owe a penny until all the pests on your premises have been eradicated.

If you are ever dissatisfied with BBBK’s service you will receive a refund for up to 12 months’ services, plus fees for another exterminator of your choice for the next year.


If a guest spots a pest on your premises, BBBK will pay for the guest’s meal or room, send a letter of apology and pay for a future meal or stay.

If your facility is closed due to pests, BBBK will pay any fines, as well as all lost profits, plus \$5000.”

Innovation in usage processes: RS Components

13 Sep 2010


Hello all,



I'm working on a PCB with LVDS pairs, and I'm trying to match the track lengths, when I select all segments of the track and second button click on the net in question and choose the NET tab, the net length is given, and I can then close the window and do the same with the corresponding track pair net, is there any way i can see these track lengths in a table side by side? or just in another format? I've looked in the design technology window under the Nets tab and this seems to be the perfect place to put the extra column header of "Net Length" or adding it to the status bar at the bottom right of the screen?

Thanks in advance for any tips!

1 week ago



Hi Dave,






It is not possible to just log these lengths at the moment. I have a list of suggestions for updates - the one you mention specifying net lengths in the design technology is logged.






By right clicking on a given track segment, you can see the length of the net that this track is on. If you right click on the whole net. Also, you will go straight into the net properties. I've done this so you can get the info with one click each time - should save you some time. Alt+Enter also works if you have clicked on a track segment of the net you wish to measure.

Cheers,

Martin

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DesignSpark PCB Close
The World's Most Powerful Free Schematic and PCB Layout Tool.
[Click here](#) for full details in the Design Centre.
[Read more](#)
[> More Spark Store tools](#)

6 Degrees of Freedom – 'Outrace' lands in Trafalgar Square

17 Sep 2010



2 tweets
[retweet](#)

If you like LED's, robots, Audi, and pioneering new interaction between people and technology, then Trafalgar square, London is a place you should have on your list of places to visit in the next few days.



DesignSpark PCB

DesignSpark PCB Wired by RS DesignSpar ...
[Read more about DesignSpark PCB](#)
125490 views | 101 comments |
○○○○○

FINALISTS GALLERY TIPS & TRICKS **CRASH THE SUPER BOWL** TAKE THE TOP THREE TOOLKIT FORUM CONTEST INFO

YOU SAW THEM IN THE BIG GAME, NOW SEE THEM AGAIN HERE.
CONGRATULATIONS TO ALL OUR CRASH WINNERS!

WINNER
Doritos

WINNER
Doritos

WINNER
Doritos

WINNER
Doritos

WINNER
Doritos

WINNER
Pepsi MAX

WINNER
Pepsi MAX

WINNER
Pepsi MAX

WINNER
Pepsi MAX

WINNER
Pepsi MAX

SHARE:  

Focusing on value-in-use....

Or not...

Nokia


1 Move the sliders to
select your ideal set up


2 Ensure you get the
perfect mix of specs


3 Hit the submit button,
you're all done.

Display and user

Screen size	Screen type	Keypad	Secondary buttons	Screen ratio
5-inch	Capacitive	QWERTY	Hot key + one touch	21:9
4.5-inch	Resistive	Standard keypad	Hot key only	16:9
4-inch				
3.5-inch				
3-inch	Non-touch	Touchscreen keyboard	On/Off switch	4:3



 Great

 Keep tweaking

Its June where are the design sketches promised for _May_? At least give a blog post talking about the progress or something. Come on did you guys forget or something!?

"What a disappointment, this page is too technical (screen ratio is?)."

"Until the design choices are less guided, this is a total sham"

3 Hit the submit button, you're all done.

ad Secondary buttons Screen ratio

5-inch	Capacitive	QWERTY	Hot key + one touch	21:9		<input type="radio"/> Great <input type="radio"/> Keep tweaking
4.5-inch	Resistive	Standard keypad	Hot key only	16:9		
4-inch						
3.5-inch	Non-touch	Touchscreen keyboard	On/Off switch	4:3		
3-inch						

This is useless as long as Nokia only allows you to submit suggestions that are just like today's average phone.

"let the people actually vote for the winner. DON'T BETHE JUDGE FOR US. What is more important don't only steal our ideas which might make you a fortune. Award the winner with a job, a all included cruise etc"

Building the Dream - 787



After 9/11...



Sonic Cruiser - Customer involvement informed the desire for twin isle 200-300 seat, fuel efficient, long range designs

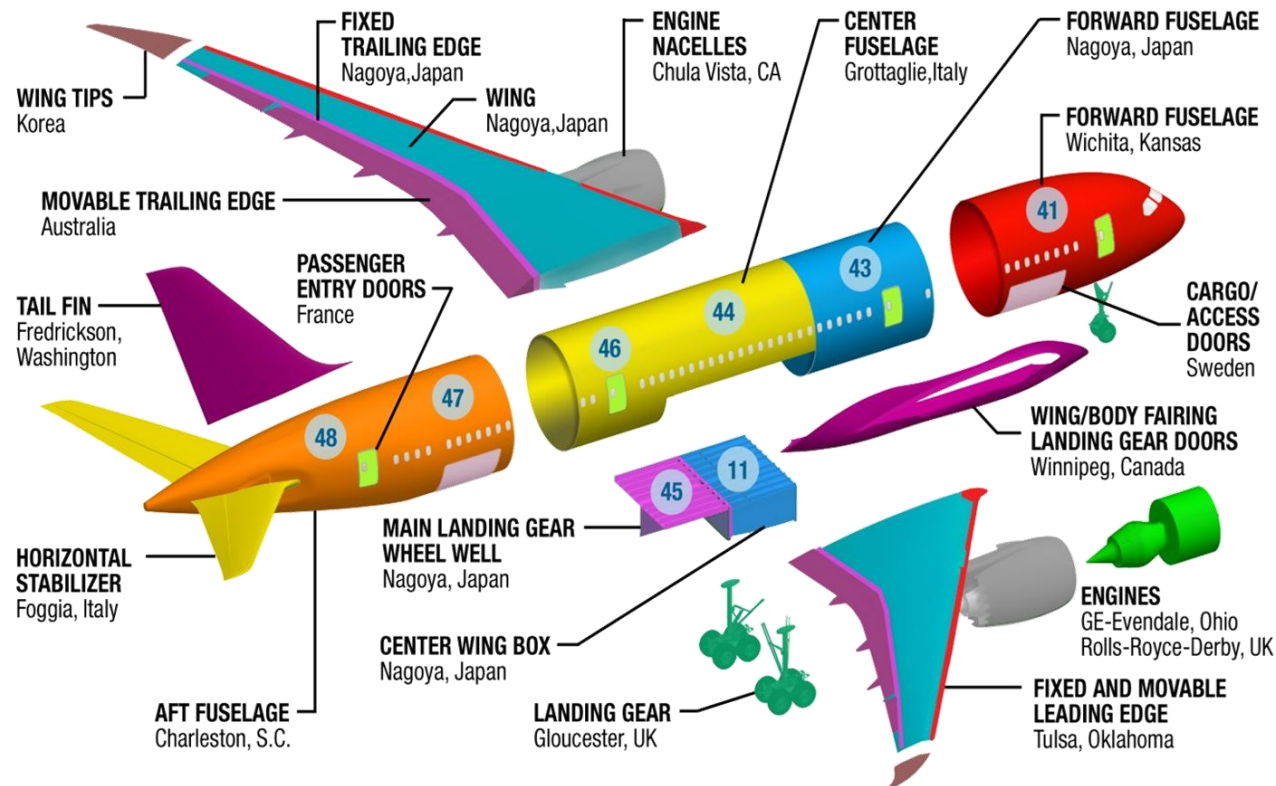


Design Team for New 787 **Dreamliner** drawn from Engineers, Sales, Marketing, New prod. Dev., Pilots, Management, and Crew

40 best in class global suppliers

THE COMPANIES

U.S.	CANADA	AUSTRALIA	JAPAN	KOREA	EUROPE
Boeing	Boeing	Boeing	Kawasaki	KAL-ASD	Messier-Dowty
Spirit	Messier-Dowty		Mitsubishi		Rolls-Royce
Vought			Fuji		Latecoere
GE					Alenia
Goodrich					Saab



Dreamlifter



Customers

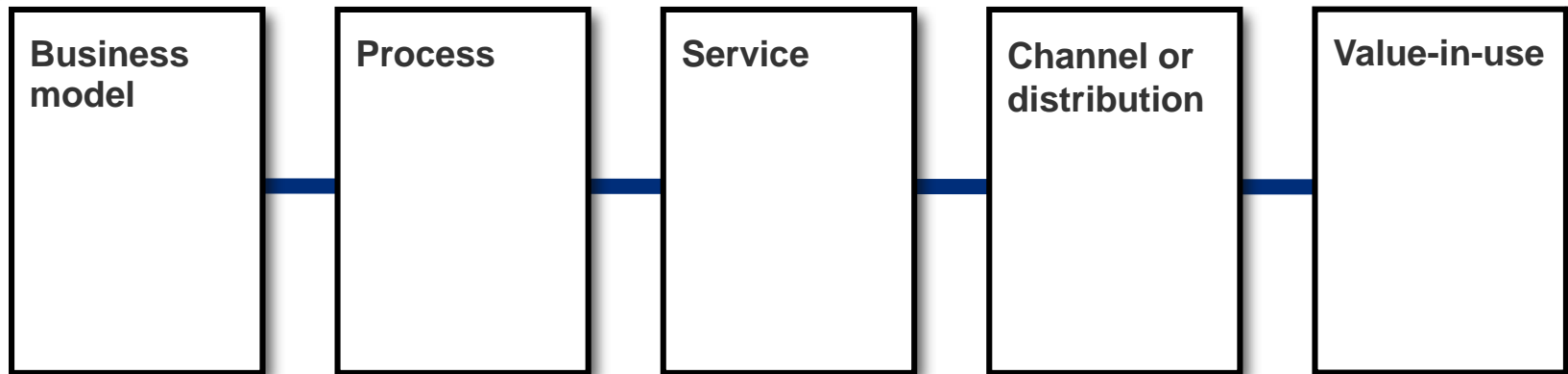


After key suppliers,
Customers were next with
interior design spec.
almost entirely customer
designed

What were the advantages and disadvantages of this approach?

Advantages	Disadvantages

Customer-led innovation is not just for products



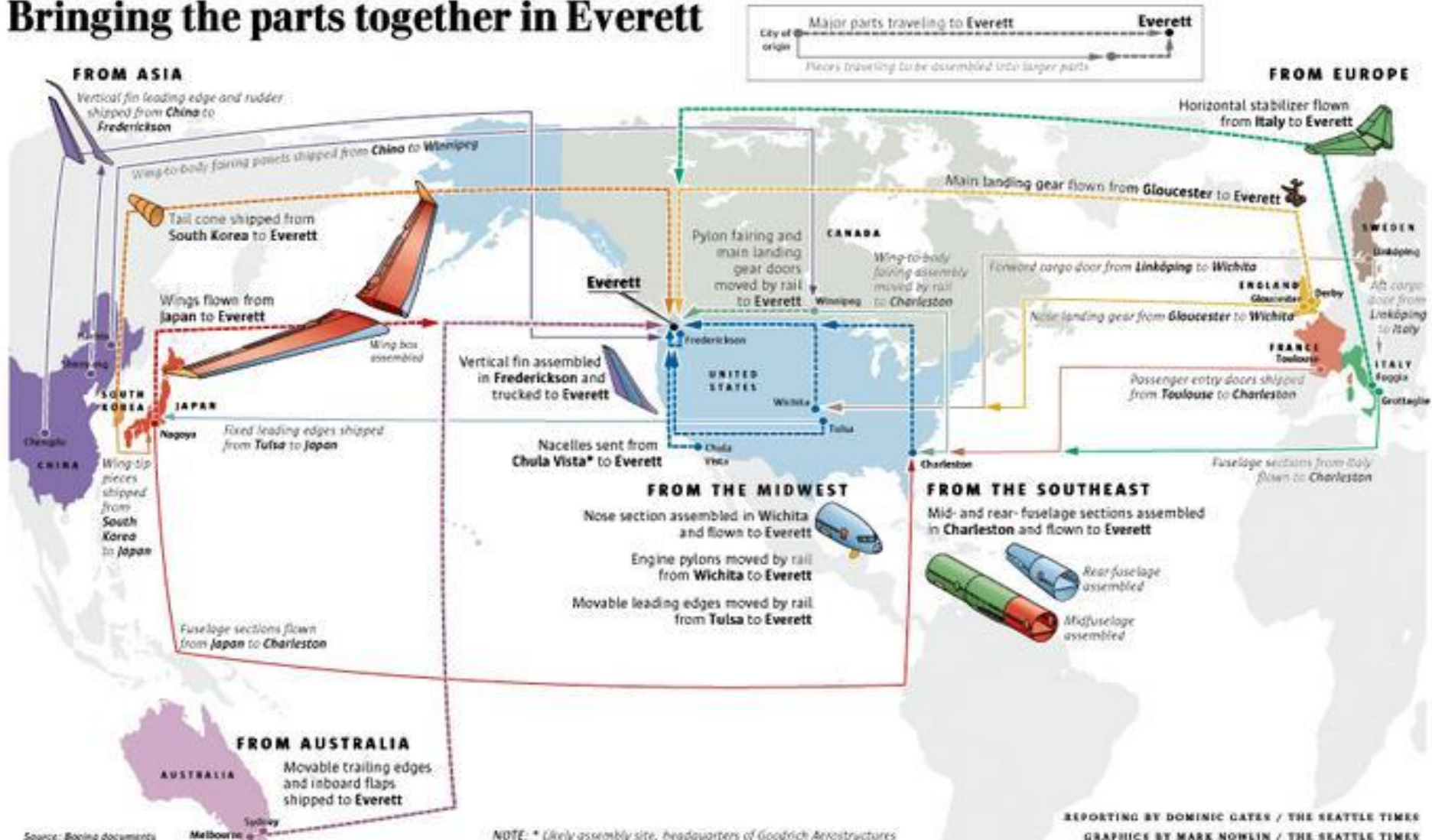
Business model: From manufacturer to systems integrator



- Concept to prototype in about 5 years...but delays afterwards
- A decade ago, about 20% of Boeing manufacturing was built outside the USA with <50% outsourced.
- Today, Boeing itself is responsible for making only about 10% of the aircraft by value – tail fin and final assembly. The rest has been co-created with partners
- Boeing relied on risk-sharing partners to develop key aspects of technology, such as the carbon composite fuselage

Process: new supply chain model

Bringing the parts together in Everett



Value-in-use: My Dreamliner



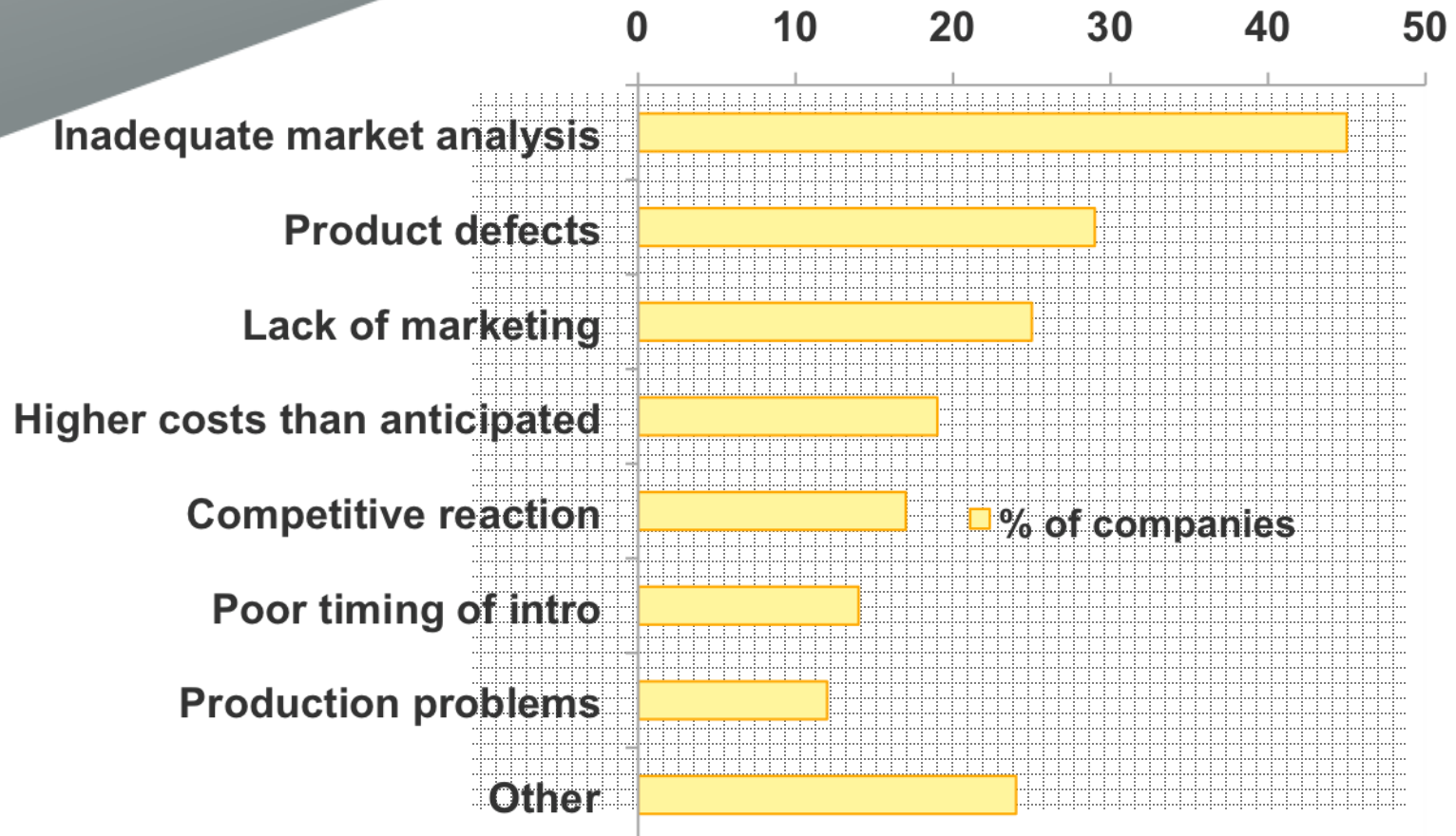
- Help us get a tailored plane that's right for us
- Lower our fuel bills
- Generate demand from travellers
- Give us all this faster than the competition
- Take hassle away from me



Service: GoldCare
(modelled on R-R TotalCare)

Competition to name the Dreamliner

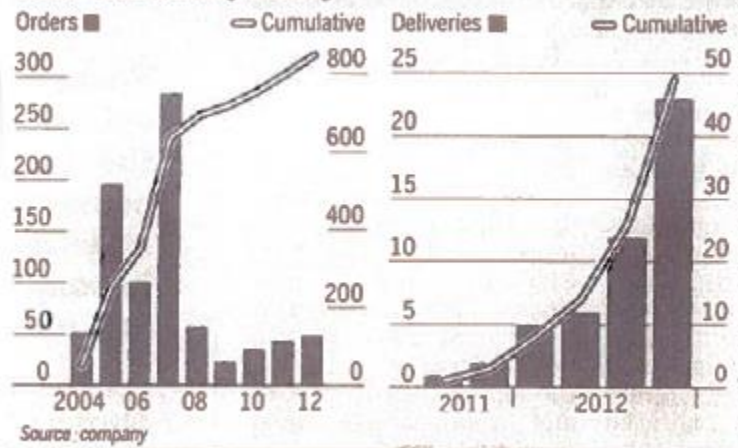
Why new products fail... Dominantly insight.



Source: Cooper

Record levels of pre-orders

Order and delivery history



Deliveries to Dec 2012



Financial Times, January 17, 2013

Dreamliner fleet is grounded by biggest customer

In the
news:
JAN 2013

Boeing shares hit after Japanese airlines ground Dreamliner fleets

By Andrew Parker in London,
Robert Wright in Detroit and
Michiyo Nakamoto in Tokyo

Shares in Boeing fell sharply yesterday after All Nippon Airways and Japan Airlines became the first carriers to ground their 787 Dreamliners because of concerns about the safety of the passenger jet.

The airlines made their move after a 787 operated by ANA had to make an emergency landing.

The groundings are a setback for Boeing, and its newest and most sophisticated jet, and the US manufacturer's shares fell more than 3 per cent to close at \$74.34 in New York.

Boeing risks losing public confidence in the 787 after a spate

of incidents have raised questions about the jet's safety and the reliability of its electrical power system.

Regulatory investigations could result in Boeing having to make design changes to the 787, which might prompt claims for compensation from airlines.

ANA grounded all 17 of its Dreamliners, while JAL suspended operating its seven 787s. The groundings will last at least until the end of today.

The ANA incident was the 787's second serious safety scare in just over a week. The pilots received an "emergency" warning on their instruments, followed by a message about smoke in an electrical compartment housing a lithium-ion bat-

tery used to start the engines. There was also a burning smell.

Boeing said: "We will be working with our customer and the appropriate regulatory agencies."

Japan's transport safety board yesterday launched an investigation. Meanwhile, the 787 already faces a safety review from the US Federal Aviation Administration after fire broke out on a JAL 787 on January 7.

United Airlines, the only US airline operating the jet, said it had conducted inspections of all its Dreamliners "and they are flying as scheduled".

Lex, Page 14
Backlash fears, Page 17
Video: www.ft.com/dreamliner

Financial Times, January 16, 2013

Airlines' show of faith

Airlines operating the Boeing 787 Dreamliner outside Japan have closed ranks behind the passenger jet, ruling out suspension of the aircraft, writes Mark Wembridge.

Furthermore, airlines that have placed orders for the Dreamliner have similarly declined to cancel or delay their purchases, in spite of the troubled aircraft's recent spate of incidents.

Poland's LOT airline – the only European-based airline to operate the Dreamliner – yesterday reiterated its faith in the aircraft, and said that it would continue to operate its two Boeing 787s on the Warsaw to Chicago route.

"We conducted a series of reviews of all systems in both Boeing 787s in our fleet. All the tests were completed positively – the systems are efficient and work well," said LOT.

There are more than 20 Dreamliners in operation outside Japan, with United Airlines of the US, Qatar Airways and Air India each having five or six 787s.

Other airlines operating the 787 include LAN, the Chilean carrier, and Ethiopian Airlines.

More than 50 airlines have placed orders for more than 300 Dreamliners, and all of those that responded to inquiries from the Financial Times confirmed that they would not be altering or cancelling their purchases.

their purchases.

Thomson, a subsidiary of package holiday company Tui Travel, said it was due to take delivery of the first of four Dreamliners at the end of February, and confirmed that the aircraft's safety woes would not affect its order.

"Boeing has reassured us that they are reviewing all the issues highlighted to them and are taking action to rectify them as quickly as possible," Tui said.

British Airways, which later this year is due to take delivery of the first of 24 Boeing 787s it has on order, said: "We are confident that any safety concerns will be fully addressed by Boeing and the FAA as part of their recently announced review into the aircraft."

Air France was equally sanguine about the Dreamliner's safety concerns, noting: "The fact that we haven't modified our purchase is a reflection of our confidence in the aircraft."

Similarly, Virgin Atlantic, Etihad and Air Canada all shrugged off concerns over the Dreamliner.

In the
news:
JAN 2013

Deep commitment of customers

- Provides resilience

Financial Times, January 17, 2013

Drawback of high profile

In the
consumer
news:
MARCH 2013



Grounded: the Japanese carrier is the 787's biggest customer and is expected to reject cheaper deals

Boeing Dreamliner crisis gets worse as ANA insists on cash

Lucy Tobin

THE airline which suffered the most disruption from Boeing's Dreamliner crisis wants compensation in cash, not cut-price deals, which may see the planemaker's costs for the fiasco soar.

Negotiations between plane manufacturers and airlines often see the parties agree to get cheaper prices for future orders, allowing Boeing to spread costs over several years, rather than

cash discounts. But insiders at All Nippon Airways, which with 17 787s was the Dreamliner's biggest customer, said: "ANA would prefer to have the cash."

All 50 Dreamliners have been grounded for two months after a string of safety incidents including a battery fire.

Boeing's compensation bill is set to hit tens of millions of pounds: Japan Airlines, which owns seven Dreamliners, has said the grounding had sliced almost \$8 million (£5.3 million) from its

earnings to the end of March. Boeing may not be legally obliged to compensate for lost business. But since airlines are the jet manufacturers' biggest customers, relationships can be valued above contracts.

Willie Walsh, boss of British Airways-owner International Airlines Group, said BA expects to receive compensation for the manufacturing giant's problems delivering the Dreamliner.

Boeing said compensation was not yet being discussed.

“Dreamliner crisis” (not ANA)

Reported in consumer media outlets

Evening Standard, March 20, 2013

20 MAR 2013

'Final' battery test on 787 Dreamliner 'straightforward,' Boeing says

By Thom Patterson, CNN

April 7, 2013 — Updated 1526 GMT (2326 HKT)

STORY HIGHLIGHTS

- The test is part of Boeing's work on an improved 787 lithium-ion battery system
- 50 Dreamliner aircraft have been grounded since January after two battery fires
- Boeing says it will analyze the data from the test and submit material to the FAA

(CNN) — A flight labeled the "final" certification test of an improved battery system for the grounded Boeing 787 Dreamliner was "straightforward" and "uneventful," the airplane maker said Friday.

The test was an important one for Boeing, which has billions of dollars riding on the success of the new airliner. The U.S. Federal Aviation Administration and similar regulators worldwide grounded the Dreamliner in January after two battery-related fires damaged 787s in Boston and Japan. No one was hurt in the fires.

In March the FAA approved a Boeing certification plan to fix the 787's problematic lithium-ion battery system and prove the new design is safe. Friday's nearly two-hour flight was the final certification test of that plan.

Boeing announces changes to Dreamliner battery system

Boeing "will now gather and analyze the data and submit the required materials to the FAA," the company said in a news release. It said it expects the material to be delivered in a matter of days.

The flight left Paine Field in Everett, Washington, at 10:39 a.m. with a crew of 11, including two FAA representatives, Boeing said, and it returned at 12:28 p.m.

"The crew reported that the certification demonstration plan was straightforward and the flight was uneventful," Boeing's news release said. "The purpose of the flight was to demonstrate that the new battery system performs as intended during normal and non-normal flight conditions."

At the time the planes were grounded, 50 787s were flying worldwide. U.S. President Obama said the grounding was a "significant step" toward resolving the issues.

United plans to resume 787 service in May

By Aaron Cooper, CNN

April 9, 2013 — Updated 1507 GMT (2307 HKT)

In the news:
APRIL
2013



A 787 Dreamliner passenger jet is tested above the Boeing factory at Paine Field in Everett, Washington state on March 20, 2011.

STORY HIGHLIGHTS

- United Airlines is only U.S. carrier that flies the 787; 50 in service worldwide
- The 787 was grounded in January after two battery fires in Boston and Japan
- The Federal Aviation Administration must still sign off on Boeing's battery redesign

Washington (CNN) — United Airlines plans to resume flying the 787 Dreamliner in May, the carrier told CNN in anticipation of regulatory approval of Boeing's remedy for battery problems that forced the jetliner's worldwide grounding.

While United is the only U.S. carrier that flies the wide body, a signal from the world's biggest carrier indicates that others are also likely making plans to resume service in coming weeks.

For the first time in months, it also indicates a clear time line for Boeing to return the aggressively promoted but troubled jetliner to the

CNN website, April 7, 2013

CNN website, April 9, 2013

Transforming
knowledge
into action

And last
Friday...

Browser window showing the Reuters website. The address bar displays <http://www.reuters.com/arti>. The page title is "Boeing says Dreamliner reliability 'better but not satisfactory'".

Navigation menu: File, Edit, View, Favorites, Tools, Help.

Reuters logo and navigation links: HOME, BUSINESS, MARKETS, WORLD, POLITICS, TECH, OPINION, BREAKINGVIEWS.

Advertisement banner: FREE EXTRA DRIVE.

Boeing says Dreamliner reliability 'better but not satisfactory'

BY BALAZS KORANYI AND JOACHIM DAGENBORG
OSLO | Fri Jan 24, 2014 7:18am EST

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Customer-led innovation in your business unit

How good are we at:

1. Understanding unmet needs (value-in-use dimensions)?
2. Working with customers to co-create something better than we could create on our own?
3. Working with suppliers to co-create something better than we could create on our own?
4. Managing the risks that arise from open innovation around who owns the IP and retains the competence?

Listen to customers

Consider active involvement of customers not just for products but also for business models, service, marketing etc

Co-creation advantages include creativity, speed, commitment, publicity

But watch out:

- Get it right or you will be doubly punished
- Are you now dependent on customers (or suppliers)?
- Co-creation is a competence that takes time to develop

Building an open innovation culture

- See the Barwise, Meehan, Macdonald (2011) article “Relentless Tide”
- Further reading: Barwise, Meehan (2011) book “Beyond the Familiar”

