Communicating Forecasts

Charles Ewen – Met Office Chief Information Officer
Agenda

• What users want
• Taking a knowledge management approach
• How forecasts are being communicated
• Accuracy to impacts
• Conclusions
• Q&A
How important or unimportant are each of these elements of a weather forecast?

- Easy to use (181): 97%
- Easy to understand (939): 96%
- Clearly presented (773): 95%
- Useful (939): 94%
- Accurate (939): 93%
- Local detail (939): 93%
- Info on changing weather (939): 87%
- Trusted supplier (939): 87%
- Certainty (939): 86%
- Good visual (850): 86%
- Far enough ahead (939): 77%
- National detail (768): 75%

Source: GfK UKMO PWS Annual Weather Survey Report (4 – 18th December 2012)
Q3. How often do you usually see or hear a weather forecast?

- More than once a day: 37%
- Once a day: 43%
- Several times a week: 10%
- Once or twice a week: 7%
- Once or twice a month: 2%
- Less often: 2%
- Don't know: 1%

Source: GfK UKMO PWS Annual Weather Survey Report (4 – 18th December 2012)
Q11. What actions, if any, have you taken as a result of a weather forecast in the last 12 months? For example please think about whether you changed any plans to travel or how you travelled etc as well as anything you did around your property.

- Taken an umbrella or worn different clothes: 38%
- Changed travel plans: 29%
- Planned a different activity: 22%
- Cancelled a planned activity: 13%
- Altered my work plans: 9%
- Salted paths: 4%
- Secured things around the property: 3%
- Informed local friends/neighbors about it: 2%
- Found out if the home is at risk of flooding: 1%
- Other: 4%
- No action taken: 26%

Source: GfK UKMO PWS Annual Weather Survey Report (4 – 18th December 2012)
NWP – Creating Data

- Insights
- Understanding
- Predictions
- NWP base products

Science

data

information

knowledge

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Non-expert consumers, enabling decision making

- Post Processing
- Visualisations
- Understanding
- Behaviour

Consumers
Repeat this 3 times defining the role each time

Science

Consumers
The consumer model

Visualisations & Forecaster Apps
The consumer model

NMS Data Driven Apps
The consumer model

3rd Party Data Driven Apps
The consumer model

Cross Domain Simulation, Modelling, Prediction
From accuracy to impacts

Improving accuracy

Improving knowledge

Improving usability, context, usefulness

NWP

‘useful’ data

forecasts

reach

improving message, medium, format

Brand & platforms
Digital marketing
Supporting content

Layered content
Visualisations

improving understanding

Science

behaviour
How can we make weather forecasts more ‘actionable’?

**Message**
- Metadata for mortals
- Meaningful representations of probabilities and confidence
- Tailored post-processing for known applications
- Direct and re-usable data & content
- Areas and Sites

**Medium**
- Direct data (to non-experts)
- Direct content (to non-experts)
- Data & content for intermediaries
- Key channels (online, small screen, TV)

**Format**
- Appropriate Visualisations (platform aware)
- Determinism/Probabilities/Confidences effectively represented
- Rich media presented
So What?

- Reach, (direct and indirect)
  - End use medium and format aware
  - Understand and engage with ‘Digital’

- Create Knowledge (in non-experts)
  - More effective visualisations (direct or examples)
  - Re-usable data & content
  - Geospatial re-use
  - Tackle probability and confidence for non-experts
Questions & answers

Thanks for your attention