Safeguarding the future together

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Agenda

1: Horizon Scanning in OPSS – Daniel 5 mins
2: Fridge of the Future 2021 and 2022 - Stephen 5 mins
3: Safeguarding the future together – Group discussion 5 mins
What is horizon scanning?

The process of looking for early warning signs of change in the policy and strategy environment

(Horizon Scanning is just one tool in the Futures Toolkit)
Why Horizon Scan?

• PAC and NAO challenge to become more proactive regulator

• Will help OPSS identify and prioritise future techs of concern, build evidence on them and prepare for their coming

• Lead to safer, more successful adoption of future products, services, supply chains, routes to market and business models

• Maximise benefits / minimise harms to UK consumers of new technologies
5 PRINCIPLES.

1. Switch Perspective
   Look from the outside in to see the bigger picture

2. Look Further
   Take a longer view of time to see deeper patterns of change

3. Anticipate Values
   Understand people’s shifting values to anticipate social change

4. See Connections
   Connect more dots to see a richer view of change

5. Expect Surprises
   Take off the blinkers to reveal predictable surprises
How are we doing things in OPSS

By end of 2022/23 OPSS has set up a function with the relationships, expertise and resources it needs to operate and has run one scan/prioritisation process to inform current strategic development.

Our approach for scan 1.0:

• Phase 1: Longlisting
• Phase 2: Ordering and forming a 'taxonomy'
• Phase 3: Developing assessment metrics
• Phase 4: Gathering evidence
• Phase 5: Scoring and assessment

Output: Prioritised list of TDCs and development of resulting work plans

Methodology for scan 1 based on secondary research and analysis. Future versions will include more primary research and views of external experts.

Work will start with supplier August
Questions to think about

1. How is your industry approaching horizon scanning and identifying future challenges?
2. How could we work together to mitigate prioritised future challenges?
Organised in partnership with City, University of London, AMDEA and London Fire Brigade the aim of the event was to bring together stakeholders with an interest in understanding the future of domestic appliances to share perspectives, identify common interests and discuss how we could work together to achieve shared goals.

- Panel discussions on innovation, environment and product safety.
- Took place on the 16th September 2021 at City, University of London.
- Hybrid event with over 300 attendees.
- Full recordings and report available of the day.

https://youtube.com/playlist?list=PLLXyLAl0YkPW3yIYrq_w4ugf_etHThIwm
Social and Environmental drivers

Social
1. Greater connectivity
2. Ageing population
3. Changing diet and eating habits
4. Changing living spaces

Environmental
1. Energy supply
2. Reducing Energy use
3. Transition to circular economy
4. Net zero
Technological drivers

Cooking appliance technology

- Initial robotic cooking arms
- Smart adaptable induction surface
- Smart ovens with food recognition
- Live cooking feedback
- 3D printing with laser cooking
- Hydrogen cooking replacing gas
- Built in taste sensors, e-tongue

Fridge technology

- Food preservation, lighting and local temperature control
- Majority use of VIP insulation
- Nanolubricants and Nano refrigerants
- Initial IoT smart fridges
- Magnetocaloric refrigerators
- Smart fridges with food recognition
- Electrochemical compression

Washing machine and tumble dryer technology

- Initial filters in washing machines
- Modern clothes dryers
- Advanced micro fiber filters
- Ultrasonic washing machines and drying
- 3Dita or Aquafresco water saving
- Smart washing machines to recognize clothing
- Aromatubial and self-cleaning clothing
Panel discussions

Innovation
- Benefits and barriers of getting connected
- The opportunities for consumer usage data and issues around trust
- Innovation for sustainability; AI to reduce food waste and energy consumption
- Using technology to influence consumer behaviour
- Innovating inclusively – not leaving consumers behind

Net Zero
- Appliance efficiency has come far: look to other parts of product cycle
- Improving circularity of appliances, e.g. through design for recycling
- Challenges of right to repair and does it go far enough?
- Opportunities for alternative business models
- Using appliances more flexibly
- Empowering consumers to make sustainable choices

Safety and Standards
- Nudging consumers can be unreliable and should be supplemented with incentives
- The importance of collaboration in standards
- The pace of innovation and the role of standards to enable innovation.
- Data can drive safety improvements: e.g. with product recalls, but there is distrust
- Clarity is needed around liability in the event of a repair
Key takeaways and 2022 event

1. Connected technology has huge potential to make appliances more convenient, energy efficient and durable, as well as enhancing safety. However, there are challenges to do adoption that need to be overcome.

2. Data can be used to understand consumer behaviour and optimise appliances for consumers, but trust is a barrier which needs to be overcome. Better transparency is key.

3. Appliance efficiency has come a long way, but greater focus is needed to improve circularity and use.

4. Consumers are wanting to make ‘greener’ choices, but find it difficult to understand the environmental impact of their decisions: consumers should be empowered to make sustainable choices.

5. There are conflicting priorities. Stakeholders need to come together to achieve both: sustainability + safety, personalisation + privacy; innovation + regulation.

6. Innovation needs to be inclusive – it has to work for everybody.

Discussion

1. How is your industry approaching horizon scanning and identifying future challenges?

2. How could we work together to mitigate prioritised future challenges?
Thanks for listening

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