Autonomous Systems Demonstration Canvas

Define the purpose of the demo: Are you trying to build relationships? Attract buy-in and investment? Force a decision? Keep project funding? Show technical progress and capability? Get publicity?

Designing the demo

1. Concept + practice
Make realistic CONOPS

Train operators to use the tech in advance. Include a 'dress rehearsal'

Make a video of your demo working well–prepare a good outcome if the demo goes wrong (and they do)

Look after audience with water, refreshments, staff support, and merchandise.

Safety and security
Safety - appoint Range Safety Officer, create designated First Aid and medical plan for injuries or accidents

Security - Create a security plan. Reflect on how is attending, what they can see, what is in place to protect IP and classified information.

2. Pre-brief
Introduce your tech. Provide clear information from the start to stakeholders and in the lead up

Explain how the tech works including data used, models and training and limits including TRL level.

Explain the bigger vision of the future capability

Telling a story during the demo

3. Make it a show
- Introduce risks and conflict
- Involve the audience
- Use costume, movement and choreography
- Make it exciting by being big, noisy (flashbang, explosive effects!), ambitious, epic, smart, smelly
- Reveal the art of the possible

Aspects of the Techno Performance

Characters: *Humans and artificial agents*

Goals: *Something characters want to achieve*

Actions: *Characters move and interact with the world, each other, and the audience.*

Decisions: *Characters make decisions under risk*

Risks: *Characters confront reasonable and realistic challenges such as risk of misunderstanding the situation, making mistakes, failing to operate as intended or causing unintended harms.*

Mind: *Characters perceive, believe and communicate about themselves and their understanding of the world that might change due to new information or commands.*

Rules: *What rules or guidelines will characters show that they can abide by, e.g. commander's intent, COLREGS, IHL*

Communicate: *How will characters communicate their mind, intended actions and goals?*

Review and next steps

4. De-brief
Gauge via a survey or other evaluation tool:
- What the audience thinks
- What they know
- What was unclear or confusing
- What they would like to see more
- What worries them
- Any questions
- Next steps

5. Follow up
- Stay in touch with key stakeholders remaining respectful of their time
- make media/comms content and provide links to key stakeholders.

Make sure your audience can engage
- Assign staff to narrate the story including the characters, goals, cognitive capabilities, what behaviours they should expect to see (and not see), why things go wrong or behave in a way the audience might not expect or understand
- Include models that can be touched
- Use handouts for audience to refer to (and get them off their phones)
- Show decision making and actions using screens, speakers

TRUSTED AUTONOMOUS SYSTEMS

V.1.1 19 Apr 2022