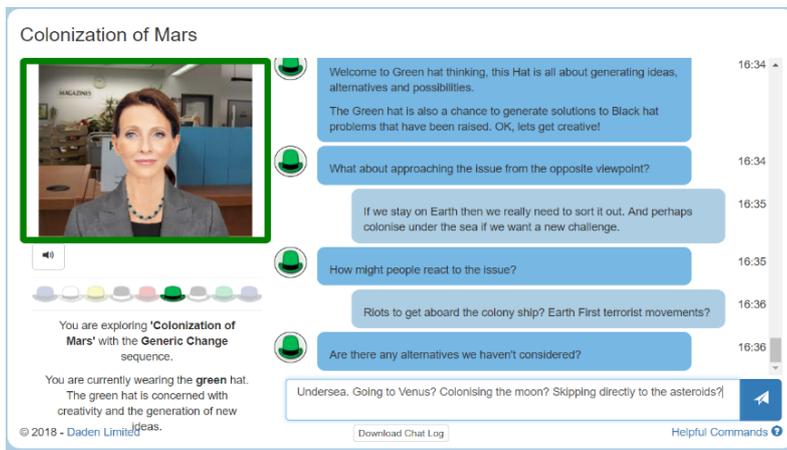


Developing a Reflexive Planning Tool for MOD



During the summer we were lucky enough to win one of the contracts in the MOD's [Future Fictions/Future Tools challenge](#), a £138,000 competition from the Defence Science and Technology Laboratory (Dstl) to find ways of enabling MOD staff to better think through future issues and future scenarios. Daden were one of 11 companies selected for funding from a field of 60 submissions (eight of which were ours!).

The system we proposed, and have now developed, is based around [Edward de Bono's 6 Hats concept](#), where each hat (or in this case chatbot) represents a different perspective on a problem. By talking to each hat in turn a user is challenged to consider an issue or future scenario from a variety of different perspectives and identify problems or opportunities which may not have otherwise been uncovered. By having the chatbot facilitate a one-to-one session an employee can test ideas before opening them up to a wider audience – and the system can also be used to facilitate a group discussion.

Having used the 6 Hats approach in other contexts we thought it an ideal subject for a "Future Tool" as it brings a rigour of thinking to almost any problem, and can help users come up with new ideas, and identify potential issues, in a very time-efficient way. The order of the hats can also be varied depending on the type of problem or issue being addressed. We have even developed an iterative sequence to help develop future thinking out to 5, 10, 20 or more years hence. In development sessions the application has been used to help think through issues ranging from climate change to cyber-attacks and future battlefield technologies.

We've always loved the 6 Hats approach, and this was a nice opportunity to embody it within a bot in order to meet a real need and to potentially bring it to a wider audience. The whole Future Fictions/Future Tools programme was also a great way for people to generate new ideas to help Defence think through some of the key challenges of the future.

The application will now form part of Dstl's Museum of the Future in order to be shown to a wider audience within MOD. We already have plans to further develop the concept, in particular developing it as a mobile application for general business and personal use. This would support a wider range of bots (such as one providing challenges based on common business models such as Porter's 5 Forces), and allow users to create their own bots. The resultant tool would enable a wide variety of perspectives and different thinking and business models to be used, making it a valuable general-purpose reflexive planning tool.

World Space Day 2018



The World Space Day event held in Worcester, on 6th October this year, is apparently the largest free public Space event in the UK. It is organised by the West Midlands branch of the British Interplanetary Society.

Daden took the opportunity of the day to give a large number of kids and adults their first taste of VR. To provide a very quick, high impact sense of immersion we created two new locations for Fieldscapes; one showing Mars as seen from Phobos, and the other Jupiter seen from Io. In both these cases the planets are huge – filling most of your visual field – so it's a real "wow" moment when you first see them!



We even had one young girl who refused to turn around once she'd seen Mars looming behind her!

The Oculus was in constant use for the whole event, with queues forming, people coming back a second time, and people still asking for a go after the event had officially finished. And seeing as Dr Who's K9 was also there we had stiff competition for attention! Describing the event the BIS reported that "the most popular exhibits were the Virtual Reality on Mars experience presented by Daden, which featured astronauts with a BIS logo mission badge", and their own stand with a Soyuz simulator!

We've added both locations the shared resources on Fieldscapes.

Virtual Route Learning for Brain Injury Patients



A recent study by the Birmingham Community Healthcare (BCHC) NHS Foundation Trust found that after brain injury over 70% of patients reported a reduction in their ability to navigate and this had a major impact on quality of life. If you take a moment to think about

all of the cognitive skills you draw on just for a simple journey, this can become quite a complex task for someone with difficulties in all of those skills. In an outdoor environment we often rely on tall distinctive landmarks to help us build a 'bird's eye' or overhead map of the environment or we use local landmarks such as post boxes or shop fronts that help us learn a route using more of a 'worms eye' view.

Prior research had already shown that people used similar navigation strategies in a VR environment as they did in the real world. So, in order to better understand way finding and route learning in people with acquired brain injury (ABI - e.g. stroke and traumatic brain injury), BCHC asked us to develop a virtual simulation that patients and researchers could use – saving a massive amount of time on outdoor, providing greater control, and reducing risk. We created a network of identical streets lined with typical Victorian terrace housing, and gave researchers the ability to drag and drop distant landmarks (e.g. church spires, tower blocks) and nearby landmarks (e.g. pillar boxes, bus shelters) to create different route finding challenges. The researcher could then mark up the desired route with virtual arrows and let the patient learn the route from the landmarks, and then remove the arrows to see how well they could navigate with only the selected landmarks.

Theresa Powell, Consultant Clinical Psychologist at BCHC reported that they found Daden “very customer centred, checking with us at each stage in the development that it was exactly what we wanted. None of our very ‘un’ technically phrased questions were ever too much for them and if our build requests went beyond the realms of possibility, they were always able to find an acceptable solution with us.”

The system has generated far more data than BCHC had expected. There are now two Doctoral students, two Masters students and two BSc students who have or are using the software in their research projects. Between them they have so far tested around 20 people with traumatic brain injury (TBI) and 30 to 40 controls for various projects.

And the findings so far? One project looking at the impact of contact sports on route learning showed that female American Football players performed worse on recalling certain types of routes than student controls. Another pilot project showed that people with TBI perform worse than controls when only landmarks in the distance were available and BCHC is continuing to gather more data to see if this is supported. Another new project is even combining the virtual route learning app with a fMRI scanner!

Second Life Remembered



Although we haven't ruled out doing another project in the Second Life virtual world (yes, it is still around) our corporate memory of what we did in SL is fading fast – despite the key role it played at Daden during 2006-2012, and all the great things that we and others did in there.

So, we decided to create a dead-tree A4 photobook to capture all our projects and adventures in SL. The book runs to 82 pages and is now pulled out to show to anyone visiting the office what we did there!

But luckily the service we used to create it (Bob Books – highly recommended) provides an eBook version on their web site that anyone can view for free. So, if you want to relive (or see for the first time) all the various projects we did in SL just head over to:

<https://www.bobbooks.co.uk/bookshop/photobook/dadens-adventures-in-second-life>

Oh – and if you really want to you can buy your own copy!

Get in Touch!

If there is anything in this newsletter that has caught your interest and you'd like to discuss more just email info@daden.co.uk or call us on +44(0) 121 250 5678, or visit our website at www.daden.co.uk. We look forward to talking to you.

CONTACT US

Faraday Wharf, Innovation Birmingham Campus, Holt Street, Birmingham, B7 4BB, UK

t: 0121 250 5678
e: info@daden.co.uk
w: www.daden.co.uk