No Industry Can Afford To Ignore DeepTech Disruption: a Case Study of G7G's Use of DeepTech, AI, Blockchain, Metaverse Technologies, VR, and AR To Create a Sustainable FoodTech Future

While Deep Knowledge Group typically focuses its attention on supporting and furthering DeepTech's disruptive impact on similarly cutting-edge, innovation-driven Frontier Technology Industries like Longevity, advanced biomedicine, GovTech, InvestTech, and others, it is illuminating to come across examples of DeepTech's impact on older, traditionally slower-moving industries and sectors.

Such examples show clearly that no industry, no matter how rooted in decades and centuries-old business models, or how far away from the cutting-edge of technology, is safe from disruption by DeepTech and the exponentially-growing rate of technological innovation.

We recently had an opportunity to see one palpable example of this during Deep Knowledge Group's dinner reception following the December 2021 press launch for 'Artificial Intelligence in the UK: Industry Landscape Overview in 2021', a new open-access report and IT-Platform produced by Innovation Eye, Big Innovation Centre (the Secretariat for the UK APPG for Al and APPG for Blockchain, respectively) and Deep Knowledge Group's flagship DeepTech analytical subsidiary Deep Knowledge Analytics, in dialogue with the UK All-Party Parliamentary Group for Artificial Intelligence.

Several prominent figures in the UK AI sphere were present at the press launch and subsequent dinner reception, including (among others) the Rt. Hon. Lord Clement-Jones, MP (Co-Chair of the UK AII-Party Parliamentary Group on Artificial Intelligence), the Rt. Hon. Lord Bethel (UK MP and Parliamentary Under-Secretary of State for Innovation), Dr Mike Short, CBE, FREng, FIET (Chief Scientific Advisor for the UK Department for International Trade), and Dr Lutz-Peter Berg of the UK Swiss Embassy.





[Left] Prof. Birgitte Andersen (Co-Founder of Innovation Eye and CEO of Big Innovation Centre, the Secretariat for the All-Party Parliamentary Group on Artificial Intelligence), the Rt. Hon. Lord Clement-Jones, MP (Co-Chair of the UK All-Party Parliamentary group on Artificial Intelligence) and Deep Knowledge Group General Partner and Innovation Eye Co-Founder Dmitry Kaminskiy with the print report summary. [Right] Hosting the private launch dinner reception in the River room at the historical Royal Horseguards Hotel in Westminster, London.

Present at the launch, as well as the subsequent dinner reception hosted by Deep Knowledge Group, were executives from Generation 7 Group (G7G), which are focused on using DeepTech, AI, and VR technologies to drive sustainable innovation in the FoodTech Industry.

Generation 7 Group describes itself as a 'seven-brand powerhouse' that owns and operates heritage brands, focusing on developing digital capabilities to power offline to online integrations and merging the past behind the world's most valuable brands with the future of cutting-edge technologies to build a new world and new value for subsequent generations. G7G's



vision is to create a future where the value of heritage and authentic craftsmanship is preserved, reimagined, and unlocked over again for generations to come through ever-evolving, sophisticated tech capabilities that allow them to transform consumer expectations into experiences.

G7G supplied the attendees of the post-Al-in-UK press launch dinner reception with complimentary bottles of one of their newest releases, *Kinahan's Black Oak Special Release Project Whiskey*, one of the newest offerings from a centuries-old whiskey brand, which G7G owns and manages. This whiskey is matured in unusual casks, hand-made from rare, native Portuguese oak wood of 'Quercus Pyrenaica' species, and possesses a full-bodied profile with rich flavours of nutmeg, fig, mango, sun-dried raisins, and a roasted banana.

From its founding in 1779, the Kinahan's brand was at the forefront of whiskey making history. Dubbed as 'the Pioneer of Irish Whiskey', Kinahan's acquired its worldwide recognition back in the 1800s for its unconventional approach to whiskey making and innovation in wooden casks. The modern team at Kinahan's continues this work today.

Since its acquisition of the Kinahan's Irish Whiskey brand, G7G has been utilising a number of emerging technologies very familiar to Deep Knowledge Group, including AI for analysis of customer experience data, metahumans (digital avatars), blockchain and nonfungible tokens (NFTs), and the metaverse to create a new innovation-driven FoodTech and BeverageTech business model. This model aims at connecting brands and people through powerful offline to online integrations for the consumption of high-end food and beverages in a maximally appropriate cultural and experiential way and limiting exposure to risks of health detriments as well as pioneering the way for technology to become the primary shop-window for leading heritage brands and offering solutions to environmentally sustainable production and responsible, educated consumption to bring value to individuals and societies in general.















These principals and ideals are perhaps best exemplified by the words of G7G members:

We live in a world where real authenticity and heritage generated over centuries of refinement is becoming rare. A world where there is more and more information and products but less and less value. This world is ripe for change. The vision behind G7G is to create a new future, where the value of heritage and authentic craftsmanship is preserved, reimagined, and unlocked again for generations to come. We will do this by merging the past behind the world's most valuable heritage brands with the future of creative, cutting-edge consumer-facing technologies, powerful offline to online integrations, innovative storytelling, and education. We imagine a

new world, where technology is the gateway deep into the world of your favourite brands.

G7G's activities within the Kinahan's whiskey brand alone offer an interesting glimpse into the ways that industries most people don't associate with high-tech innovation, like food and beverages, are now being disrupted by common DeepTech staples.

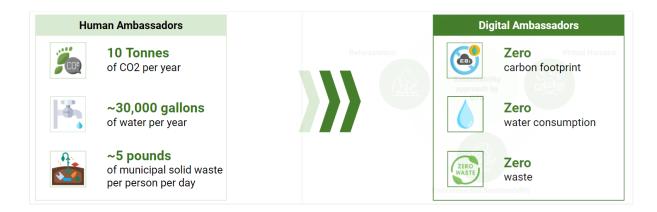
Take, for example, their <u>Metahumans project</u>, where G7G is creating digital avatars to act as brand ambassadors for Kinahan's within the metaverse in an effort to create a customer experience and journal more in line with the tastes and trends of the modern age and to reduce the environmental sustainability of their operations.





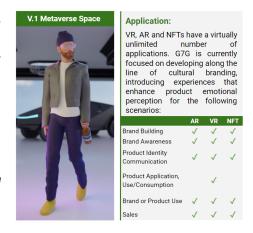
In the words of G7G CEO Zak Oganian:

"In November 2021, Kinahan's introduced the world's <u>first digital human avatars</u> in the Food and Beverage industry. These digital humans will act as brand ambassadors. Traditionally, human ambassadors used to play this role and travel the world to perform several activities such as brand activation, presentation, education, etc. But things are changing now. Our brand will now rely predominantly on digital humans to perform these tasks, reducing its impact on global carbon emissions due to reduced travel, waste, etc.



This will act as our passport to sustainability, where Kinahan's impact on water consumption, CO2 emission, and garbage generation for every one human brand ambassador will be neutralised via substitution by a virtual ambassador every 2 months.

The negative impact on sustainability will be equal to almost zero in one year if the group of six human ambassadors will be continuously replaced by virtual avatars.





- 3D virtual human (character type look) "Chatbot" level of quality of interaction
- and learning Personalised experience for the
- customer



- · Al, Deep learning, trained with real data out of a real person
- Expressions in real time, complex lighting with the environment
- State of the art AI, including facial recognition and full data collection

Diverse virtual humans perfectly resemble diversity in real human society. This broad variety will help to encompass all sorts of possible clients while not contributing to the carbon Footprint. G7G is pursuing a goal of further development and improvement of virtual human ambassadors. Avatars will undergo a huge advancement both visually and functionally in order to replace real people in the most efficient, customer-driven meaningful, and manner."

The brand's emphasis on the latest digital technologies to improve both sustainability and customer experience is also conveniently illustrated by their recent forays into the emerging realms of NFTs. Kinahan's recently released a 3D Formula Racing Car as an NFT at Rarible.com during Lewis Hamilton's thrilling win at the British Grand Prix. This is an exclusive token to this 3D/AR art piece of a hyperrealistic formula racing car, which was available for preview at the Silverstone Circuit British Grand Prix 2021 race and sold to the highest bidder during the limited time for \$4,800 via NFT. The 3D/AR artwork of the model was created in collaboration with Morysetta - a digital NFT artist who is becoming known in the NFT world for her unusual cosmic style that focuses on objects and feelings distilled into almost tangible emotions.

Meanwhile, G7G CEO and Kinahan's Director Zak Oganian says that while the British Grand Prix was the brand's first NFT, it will certainly not be their last. Oganian informs that they are working on a number of other NFTs tied to real-world physical goods (specific Kinahan's whiskey brands, casks, etc.) as well as the use of blockchain to provide quality and authenticity traceability to their



products, as well as 'blockchain casks' to authenticate the flavour-provenance traceability of their unique hybrid whiskey casks.

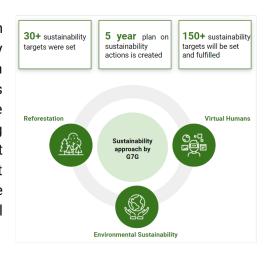
This is much more than a mere collaboration, this is a hybridization of different worlds, ideas and identities to create a new experience that has never been done before in our industry. This work allows us to establish and celebrate the future as we see it – the digital future. It is time for all brands to re-imagine long outdated traditional experiences and bring new value to our beloved fans.

Zak Oganian, CEO of G7G and Marketing Director at Kinahan's Whiskey Co.

G7G's emphasis on using DeepTech solutions to both enhance customer experience and journey *and* produce a more environmentally sustainable and impact-conscious business model is also exemplified by other activities within the Kinahan's brand alone.

A few years ago, the Kinahan's Whiskey project had set over 30 sustainability targets, demonstrating a commitment to improving the sustainability and environmental footprint of the business, with clear measurable and time-bound sustainability goals across Raw Material Sourcing, Manufacturing Process, and Social Sustainability.

The project has developed 5-year milestones on sustainability actions, which are reviewed annually by Mabbett (a leading global inspection verification testing and certification company). Their business activities are audited according to key legislative criteria to maintain high levels of ongoing compliance. This is possible due to the project participation with Origin Green (Irish Government Sustainable Assurance Scheme). Throughout the entire period, around 150 sustainability targets will be set and fulfilled.



These attitudes, principles, and objectives are also reflected by Kinahan's Reforestation project. Because the source of Kinahan's unusual flavour notes and rare characteristics is derived directly from uncommon and rare oak species used for their unconventional 'hybrid casks', some of the wood types used are very rare. As an Irish government-certified 'Sustainable Producer', Kinahan's decided to partner with Quercus (Europe's largest nongovernmental organisation in this sector) to bring the vast population of rare oak species back to its habitat and has thus far planted thousands of oak trees for this purpose.

With the world losing its natural forests at an alarming rate, Kinahan's has taken steps to care for and recover native forests and native trees firstly, primarily in areas from which they source our wood for whiskey production. In 2020, Kinahan's agreed with Quercus to collaborate for reforestation, aiming to return dissipating Quercus Pyrenaica (also known as Black Oak) population and preserve it for the coming generations. These trees sustain rich biodiversity and traditional livelihoods, provide opportunities for development in economically and socially disadvantaged areas, and play a key role in ecological processes such as water retention, soil conservation, or carbon storage. With these concerns in mind, Kinahan's has committed to continued replanting of Portugal-native species of Quercus Pyrenaica at the Plantation until the Plantation is fully established.

Ultimately, G7G's efforts to disrupt the FoodTech sector with innovation-driven use of DeepTech staples like AI, blockchain, NFTs, digital avatars, the metaverse, AR, and VR is an illuminating example of a hardthe increasingly clear fact that DeepTech is not just a driver for industries famous for their exponential rates of change and their need to on-board emerging technologies to keep pace with their competitors (e.g.,like Longevity, aAdvanced bBiomedicine, FinTech, GovTech, InvestTech, etc.and others)., land that, indeed, no industry (no matter how rooted in tradition or insulated from technological change) can afford to ignore the disruption of itstheir practices by DeepTech, or the need to adapt and adjust their business models and their customer experience infrastructure to the expanding capabilities and possibilities of technological progress.

G7G's use of tiliszing emerging technologies like NFTs, VR and AR, metaverse, etc.and more to disrupt the ways that customers engage with and experience high-quality heritage brands within the Food and Beverage Industry was also showcased at the Deep Knowledge Analytics October 2021 virtual conference, "The Technology Revolution of the FoodTech Industry", where key FoodTech influencers and experts shared insights and discussions of emerging trends surrounding the application of modern technologies in the Ffood and Bbeverage lindustry.