Driven by Intuition: Car by Lexus, Story by Artificial Intelligence, Camera by Oscar-Winning Director

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- New *Driven by Intuition* film created using bespoke AI, developed by Lexus in partnership with The&Partnership London and Visual Voice
- Story brought to life by Oscar-winning director Kevin Macdonald
- AI developed by IBM Watson and multiple data sources, including past award-winning luxury adverts and intelligence on human emotional responses
- Film forms a key part of new 'Driven by Intuition' campaign launching the new Lexus ES executive sedan in Europe. Available to view now on Lexus media channels

Lexus, a brand famous for being at the leading edge of technical innovation, has explored new ground in film-making with the release of *Driven by Intuition*, an advert that has been scripted entirely by artificial intelligence (AI). It has been shot by director Kevin Macdonald, whose credits include *The Last King of Scotland*, the Whitney Houston biopic *Whitney* and the Oscar-winning documentary *One Day in September*.

This world-first collaboration between AI and a renowned craftsman aimed to test the boundaries of how humans and machines can work together in perfect harmony, exploring the importance of intuition in the relationship between the two to showcase the responsive features of the new Lexus ES executive sedan.

The result is an engaging short drama: a minute-long film telling the story of a Lexus *takumi* master craftsman who completes his painstaking work and releases the new Lexus ES into the world, only for it to be taken away and threatened with destruction. At the crucial moment, the car's automatic emergency braking system cuts in to save the day, demonstrating the value and effectiveness of the intuitive technology built into the car.

The innovative creative approach to the project is perfectly aligned with the qualities of the new ES, a car that is constantly aware of and instantly responsive to the driver's intentions and changing road and traffic conditions. This is witnessed at a fundamental level in the agility, poise and strength of the ES's new GA-K (Global Architecture – K) platform, and in the intelligent operation of its Lexus Safety System+ functions. These can recognise hazards and automatically initiate braking, steering and driver alerts to prevent an accident from happening, or reduce the consequences if a collision does occur.

Lexus' creative agency The&Partnership London collaborated with technical partner Visual Voice

to create the AI scriptwriter, using IBM Watson to analyse a range of external audio, text and visual data and extract insight on what makes content award-worthy. From this, the AI could contribute to the creation of a script outline that would be emotionally intelligent and entertaining for the audience. Once this process had evolved, Kevin Macdonald was approached to direct the work and bring the story to life.

To produce the original story, the AI was "trained" with 15 years' worth of car and luxury advertisements that have won prestigious Cannes Lions international awards for creativity. It was also primed with emotional intelligence data by video marketplace Unruly to learn which moments connected most strongly with viewers and understand how actions, objects, locations and emotionality are used in different combinations and sequences to communicate the desired messages.

In using so much information about previous adverts, it was important to avoid the risk of producing something that felt familiar, or too mass-market in tone. Thus additional data on the Lexus brand and the project guideline were input into the AI to keep the script original and on-brand.

Macdonald was immediately intrigued by the concept and recognised how it required a different approach from a conventional film. He said: "When I was handed the script, the melodrama of the story convinced me of its potential. The fact the AI gave a fellow machine sentience, placed it in a sort of combat situation, and then had it escaping into the sunset was such an emotional response from what is essentially a digital platform. The charmingly simplistic way the AI wrote the story was both fascinating in its interpretation of human emotion, and yet still unexpected enough to give the film a clearly non-human edge."

Alex Newland, Co-Founder of Visual Voice, said: "This was both a highly challenging and deeply fascinating project to have had the privilege to be a part of. From the outset, it was almost impossible to know what level of quality or intelligibility the AI would produce.

"To see the project brought together with such a rich finished piece is extremely satisfying and exciting to witness. We believe this project moves AI-generated content into the beginnings of true, stand-alone creative merit."

To focus closely on the "intuitive" aspect of the story, the AI was further coached with intelligence from a bespoke experiment conducted by MindX, the applied science division of the University of New South Wales in Australia. This explored what makes someone intuitive and how people who have a high level of intuition respond to car adverts.

The result is a script that is rich in genuine human emotion and undistinguishable from one written by a human, bar some unexpected details. For example, AI gives the character of the car sentience and a surprising emotional depth, while appearing to treat human behaviour, such as the habit of watching disasters unfold from behind a screen, with a degree of healthy cynicism.

Dave Bedwood, Creative Partner at The&Partnership, said: "I thought I'd be writing an ad with the assistance of AI. Instead it took over and wrote the whole script: a machine telling the story of a machine coming to life. Much AI work to date has been interesting because of the process itself; this has been because the end product is good in its own right."

Vincent Tabel, Senior Manager Brand and Communications, Lexus Europe, said: "Here at Lexus we love to push the boundaries of technology and design, and that's why we wanted to do something completely different – a world first – to launched the new Lexus ES. The ES is both

intuitive and innovative, so we wanted the advert to reflect this. The resulting film surpasses our expectations of what an AI is capable of, from its creativity to its human emotion."

Reece Medway, Media and Entertainment Specialist, IBM Watson, UK and Ireland, said: "We applaud Lexus, Visual Voice and The&Partnership for being first movers in harnessing the power of Watson AI and analytics as a springboard for the creative process. The magic of storytelling will always come to life in the human creative process, and using Watson to identify the common attributes for truly award winning creative work is an example of how man and machine will collaborate in the AI era. It was a privilege to be part of this process."

ENDS

APPENDIX: DRIVEN BY INTUITION – THE AI PRODUCTION STORY IN DETAIL

The lengthy AI creation process involved the machine "learning" a large volume of information to ensure the data produced was as useful and detailed as possible.

The first step was to integrate a number of third-party AI Visual Recognition tools into the Visual Voice AI platform, which included IBM Watson. This process was used to examine the past 15 years of Cannes Lions award-winning automotive adverts. The parameters for the data collection focused on elements such as the actions, objects, locations and emotionality contained within these adverts, together with where in the adverts they occur and in what combinations. Adverts that expressed intuition, instinct and knowledge were given higher relevance scoring, with other aspects organised and categorised around these pillars.

Once this data had been collected, the Visual Voice AI platform was used to analyse the large quantities of information for trends and correlations, such as things that typically happen in the middle of an advert, and objects and locations which frequently occur together. From the initial findings, it was apparent that there was a commonly occurring kind of award-winning advert which was heavily weighted towards more mass market car brands. In order to avoid making an advert that would feel both very familiar and mass market, further detail was provided to the AI.

Firstly, Cannes Lions award-winning adverts about luxury brands, not just cars, were entered. This introduced new ideas and data to help avoid the finished script feeling too mainstream. In addition, the AI was provided with Lexus' brand guidelines. When an element of the award-winning adverts aligned with a Lexus guideline, the highest AI confidence level data was recorded.

Lastly, to identify individual preferences of intuitive individuals in respect to automotive adverts, a study was commissioned in collaboration with MindX; the applied science division of the University of New South Wales. This data was provided to the AI, in addition to the underlying data on the preferences of the wider population. Teaching the AI in this way enabled it to give the highest weighting to preferences which were most prevalent in intuitive individuals, relative to the wider population.

One of the strongest findings from the MindX study was the preference for an emotional experience. To identify which aspects of adverts stimulated an emotional response, data from Unruly was inputted which showed which automotive adverts had the highest emotional indices. This data consisted of a series of automotive adverts (which were ingested by the AI in the same means as above) but also raw data collected around human responses to these adverts in terms of

their emotions. The emotional response scoring was broken down into various categories for different emotions. From this data, the AI was able to correlate the objects, actions and locations (among many other parameters) with the resultant emotional effect on a human. From this information, the AI formed the ability to 'turn on' different emotions in the person watching the advert.

All of this data was processed by the AI, with particular confidence given to the aspects where there was a convergence between the various data sources, for example, aspects which were frequently occurring in award-winning adverts that provided a high emotional impact and also aligned with the brand guidelines.

The resulting script output was two-fold in that, as well as the sequence of objects, actions, people and locations forming the basis for a script, there was also a separate output outlining the underlying findings of the AI, such as the preference for limited speech, for example. It is this 'success' criteria document which gives insight into what the AI was attempting to achieve, with the elements included or excluded from the script, resulting in the unique Lexus ES ad film.

About The&Partnership London

The&Partnership London is a future-focused creative agency whose mission is to bring together creativity, technology and data in new, exciting and effective ways. Originally founded in 2001 as CHI, the agency rebranded in 2018 as The&Partnership London, underlining its position as the creative and strategic heart of WPP-backed The&Partnership, which is both the UK's largest and Europe's fastest-growing independent agency network. The&Partnership London believes the future of the creative industries lies in big, bold and bionic ideas which blend world-class creativity with smart data, progressive technology and artificial intelligence.

About Visual Voice

Visual Voice are a leading bespoke marketing technology services provider. Our unique and proprietary platform is the engine room for a wide range of campaigns ranging from interactive micro-personalised media generation, through to Artificial Intelligence and Machine Learning based content development and analysis. The Visual Voice platform facilitates the creation of engaging interactive experiences across web, mobile, Messenger, Twitter and DOOH incorporating virtual assistance, rewards and loyalty incentivisation, personalised content generation and augmented reality.

About Unruly

Unruly is the video marketplace you can trust to move people, not just reach people.

We help the world's biggest advertisers engage global audiences by harnessing the power of our data-powered video marketplace, UnrulyX, on brand-safe, premium sites, while helping top publishers better monetise their audiences. Our superpower is emotional testing and targeting via UnrulyEQ, which leverages over a decade of video data and almost 2.2 million viewer reactions to videos to provide deep analysis of metrics that matter, enabling us to deliver better targeting and higher campaign ROI at scale.

Unruly was founded in 2006 with a mission to transform advertising for the better. We're passionately committed to encouraging and celebrating diversity and wellbeing through our inclusive and nurturing company culture.

Unruly was acquired by News Corp (NASDAQ: NWS, NWSA; ASX: NWS, NWSLV) in 2015 and now has over 350 Unrulies doing amazing things across more than 20 locations worldwide.

About IBM and Artificial Intelligence

A world leader in AI software, services, and technology for business, IBM has deployed Watson solutions in thousands of engagements with clients across 20 industries and 80 countries. IBM's Watson solutions are widely used in virtually all industries, including agriculture, automotive, entertainment, financial services, manufacturing, retail and a range of other industries. IBM Watson's clients include 7 of the 10 largest automotive companies and 8 of the 10 largest oil and gas companies. Visit www.ibm.com for more information.