



M A G A Z I N E

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A RECIPE FOR AMAZING

Simulator quality AV transforms
high-end hospitality

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Motion-sensing cameras allow diners to flick projections of lemons towards their neighbours when they come rolling down the table.



HOW AV BRIGHTENS THE NIGHT

The restaurant, *Krasota*, opened in April inside the *Address Downtown*, a sail-like five star hotel at the foot of the Burj Khalifa. The venue combines themed fine dining powered by simulator quality AV technology, where guests are immersed in the narrative.

By Caroline Reid and Christian Sylt.

O

ver the past six months a new trend has swept through Dubai. Called gastro-theatre, it's essentially a modern take on a haute cuisine dinner

show which gives guests the impression they have been transported to far-flung places.

The restaurants tend to be pop ups and, just like traditional theatre troupes, most of them come and go in a matter of months. There is one exception and it has cutting-edge AV to thank for its staying power.

Called *Krasota*, it opened in April inside the *Address Downtown*, a sail-like five star hotel next to the famous fountains at the foot of the world's tallest tower, the Burj Khalifa.

Krasota tells a story with the kind of technology you find in simulator attractions and combines it with fine dining themed to the visuals to make guests feel like they are part of the story.

You can tell this isn't your average restaurant long before you set foot in the door as you don't book a time or a seating but a 'performance'. Reflecting this, the experience starts in a discrete ante-room with low lighting and walls draped with pale purple velvet curtains like those you'd find in a stylish pre-theatre wine bar.

There's no wine but there are extravagant mocktails accompanied by bite-sized dishes with lavish presentation. It starts with some black arctic lemon which gives the air a dry scent of the Dubai

desert. It's a stark contrast with the strawberry watermelon on a mint leaf which comes next.

The highlight is presented on a table-top structure which looks like a bare bonsai tree as it is formed from wooden branches with grassy squares on their tips. Fois gras in a paté-flavoured meringue sits on the squares and tastes savoury even though it has the texture of a dessert. This surreal sensation sets the scene for what's to come.

Main dining room

Guests are then led to the main dining room which seats just 20 people and is in the round in-keeping with the theatre theme. Diners sit around the perimeter at a circular table which appears to be in

front of a purple curtain lining the walls. On closer inspection it becomes clear that the curtains are actually images beamed from 20 overhead Epson projectors pointing at a wraparound screen with a seamlessly integrated door so that the waiters can access the room. The 360-degree surface is the star of the show.

Krasota's USP is that each of its eight courses is themed to a late 19th or early 20th century artist with the diners surrounded by the artwork on the screen and even the tablecloth in front of them. The connection between fine dining and art is a little confusing at first but you soon get swept away by the surrealism of it all.

It's an almost spiritual experience eating curry with handmade wooden spoons, which look like gnarled branches, whilst pastel landscapes of the Himalayas swirl around you set to the kind of music you hear in *Lord of the Rings*.

The restaurant seems made for Instagram and no stone has been left unturned. The chairs even swivel so that you can get silky-smooth panoramas of the sweeping screen.

White-gloved waiters tell diners the history of the artists before each course which is when it all starts to make more sense. One course is themed to Russia's Aleksandr Deyneka who dreamed of becoming a pilot when he was a child. Those aspirations went up in smoke when he pursued his passion for art so, fittingly, the screens show paper planes made from matches burning in the sky as they nosedive. Mosaics in his trademark realist art



"A place where great tastes meet pixel-perfect visuals and story narration in a mind-blowing tango."

Anton Nenashev,
Krasota

style are beamed on to the tablecloth from 10 overhead projectors next to an array of motion-sensing cameras. They soon come into their own.

During one segment, the tablecloth transforms into cracked earth which bursts when tapped. In another, the screen shows pouring rain which appears to build up on the tablecloth. It forms puddles which ripple when tapped until eventually, koi karp start swimming by and flit away if you touch them.

It culminates in the swirling swell of the ocean surrounding diners thanks to vistas from acclaimed seascape artist, Ivan Aivazovsky. Watching the waves roll around the screen is a dizzying experience which can make it seem like the room is spinning even though it doesn't actually move an inch. Thankfully it calms down by the time that the food (fish, of course) arrives. The table is at the heart of the maelstrom as clouds are beamed on to it and if you touch them, lightning appears to beam out of your fingertips.

Crazy cool Far Eastern inspiration

The visuals are the brainchild of Anton Nenashev, former film director and co-owner of *Krasota*. He came up with the idea for it around two years ago after travelling to Shanghai and Tokyo. "Crazy cool restaurants caught my eye. I've been riding the waves of video design and computer graphics since day one so, why not blend these two passions together with gastronomy into something wild?"

"That's when the concept of this restaurant started brewing, a place where great tastes meet pixel-perfect visuals and story narration in a mind-blowing tango."

Nenashev's partner is Boris Zarkov, whose White Rabbit business runs 36 restaurants in Dubai, Turkey and Russia, two of which were awarded Michelin stars in 2021.

"With Boris and a big team of professionals on board, we created the final product. A canvas where pixels meet plates, flavours fuse with visuals, and innovation cosies up with authenticity," says Nenashev.

He also credits *Krasota's* chef Vladimir Mukhin who is famous for starring in the Netflix series 'Chef's Table'. "He masterfully encapsulated the essence of each scene into each dish," at *Krasota* says Nenashev. It is no exaggeration.

Krasota means 'beauty' in Russian and the dishes are as sublime as they are surreal. Crab is served in a square dish that looks like an ice cube but is mysteriously self-heated. A baked potato (complete with a green shoot sprouting from its



A wrap-around front-projection screen immerses diners in animated artwork



The exotic dishes at *Krasota* complement the vivid visuals.



Hidden away in the rafters is an array of 20 Epson projectors and motion-sensing cameras



Even the crockery has a starring role in *Krasota* as some of the surreal dishes are served on plates that look like large ice cubes but are actually piping hot

skin) has an urchin and caviar inside whilst the scallop comes wrapped in asparagus and is served in a huge clam shell sitting on a piece of driftwood. The projections complement the food.

As the satsuma vanilla lemonade arrives, virtual lemons start rolling down the tablecloth and with a flick of your wrist you can direct them to your neighbour. During French artist Marc Chagall's course diners even get to try their hand at painting as the tablecloth becomes a blank canvas and colours magically appear when it is rubbed.

Jaw-dropping effects

Krasota saves the most jaw-dropping effect till last as perfectly square slabs of cheesecake are served with palette knives in a course dedicated to cubist artist Kazimir Malevich. Providing palette knives instead of traditional cutlery initially seems to be another example of attention to detail but it soon becomes clear there's a practical reason for it.

The cheesecake appears to pulsate red waves around the table before it shimmers in psychedelic colours. Bafflingly, the projected colours wrap around it so they precisely match the shape of the cake, no matter how much you've eaten. They are even beamed on to the slice on the palette knife, so the projections are visible right up to the moment it enters your mouth. The palette knife plays a part in this neat trick as it increases the chance that the slices will be uniform shapes which makes it easier for the cameras to recognise them.

"Each guest has an individualised projection setup, resulting in high-precision imagery with remarkable pixel density," says Nenashev. "The use of industrial machine vision cameras enhances interactivity, tracking tabletop interactions and distinguishing hands and objects via optical tracking, particularly noticeable in the scene dedicated to Malevich.

"Artificial Intelligence is trained to discern plates from other objects, identify the plate's centre, and separate food from the plate itself. This brings an enchanting quality to the experience, as any movement of the plate triggers corresponding visual effects, ensuring a seamless synchronisation of elements."

He adds that the software is supported by "Epson projectors, turbocharged servers powered by NVidia Quadros professional graphics muscle, and the backbone – Kramer switches.

"However, equally intricate, if not more complex, is the playback system itself – an in-house developed elaborate patch crafted by our team of programmers, enabling the playback of both rendered and realtime content at sixty frames per



PHOTOS: EGOR ZHELOV, ZHELOV.COM

Scallops are served in huge sea shells during the underwater segment.

second."

Nenashev says he had very specific criteria to ensure that the equipment generated the intended image quality. "On one hand, they must be reliable devices, while on the other, they should have acceptable dimensions, a reasonable price, and robust technical support. As for the switching equipment, our criterion was reliability. Projectors were chosen based on the balance between brightness and image quality." Even that wasn't enough.

Ever the perfectionist, Nenashev says he "had to make projectors work seamlessly together without hiking up the black levels. It's our own secret sauce, an in-house solution."

It is particularly noticeable during the finale when there's a chefs parade in front of the Dubai skyline



Projections track place mats and even the food

which spans the screen with virtual fireworks lighting up the night sky above it. It's almost impossible to discern where one part of the image begins and the other ends. It's not for lack of resolution as the output is so sharp you would be forgiven for thinking it's an OLED.

"We are the first ones to create a restaurant in such a format – not the typical four-walled box, but a true panoramic 360-degree experience," says Nenashev. "This is achievable due to the circular design of the room, which eliminates the limitations of rectangular spaces, such as image distortion at corners and diminished vibrancy caused by light reflections. The circular room ensures accurate colour dispersion and illumination, offering a window-like experience without any unwanted disruptions."

Tweaking and perfecting

It's clear that Nenashev isn't complacent as he says "we're not just building it once and calling it a day, but constantly tweaking and perfecting it. If something raises an eyebrow in terms of inconvenience, we update it. I'm talking about re-engineering, revamping, and even changing cable routing. It should be as spot-on as a high-tech assembly line, or else, well, (you can) consider progress to be paused."

There's a high price to pay for this perfectionism as *Krasota* has earned the title of being the most expensive restaurant in Dubai with a price tag of £500 per person. But given that it's one of the world's most high-tech restaurants, that seems to be a small price to pay. ■



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