
HOW TO: DIGITAL REAL ESTATE

PRODUCED BY

I N O V O R Δ

A short e-book for
Property
Developers and
Agents about how
emerging
technologies can
be harnessed to
[sell more](#) off-the-
plan.

PREFACE

Proptech (or 'Realtech') is highly technical and sophisticated jargon that combines the words 'property' and 'technology' and essentially refers to technology designed to allow for easier stakeholder decision-making (buyers, sellers, brokers, lenders etc.).

In itself, the Proptech industry is a flourishing ecosystem of innovation and venture capital (approx. \$5 billion globally in 2017), with growth set to continue.

Okay - so what?

Well, amidst the fray of innovation are highly functional visualisation solutions that revolutionise the way properties are sold off-the-plan.

Through the power of high-spec, gaming technologies; stakeholders can bring a future property to life through nifty Digital Models, Augmented Reality interfaces, or immersive Virtual reality experiences that let users witness their future home, in its entirety, long before a single dollar has been spent on construction.

From an off-the-plan sales perspective, this offers enormous upside. Providing your prospective home-buyers with the opportunity to explore their future home before it even exists?

Priceless (cred. Mastercard).

This short e-book aims to demystify whats-what as far as off-the-plan visualisation technologies are concerned; and provide some hot tips as to how you can go about integrating them as part of your next campaign.

ENTER PROPTech

TECHNOLOGY
CHANGES
EVERYTHING

THE PROBLEM

IT IS HARD TO SELL SOMETHING THAT DOES NOT EXIST

especially if its meant to be someone's future home...



When selling off-the-plan, you are selling something that does not exist. Ultimately, it is a promise that upon construction, a home or investment will exist for the purchaser.

Communicating this promise in a way that inspires confidence is not easy.

Humans are visual creatures and traditional off-the-plan marketing content only goes so far in communicating a future property. The average home buyer doesn't understand floor plans, nor can they contextualise your swanky kitchen CGI within the 500 other units you are trying to sell.

Gaps are left in the sales message as it is quite hard (and optimistic) to constrain a physical building to a CGI suite, 3D animation, or sales brochure.

There is so much more to it.

To fill in these gaps, purchasers have to use their imagination.

They imagine what it will feel like living in the space, moving through the space, the look, the touch, the feel. This creates an expectation that they know is not guaranteed.

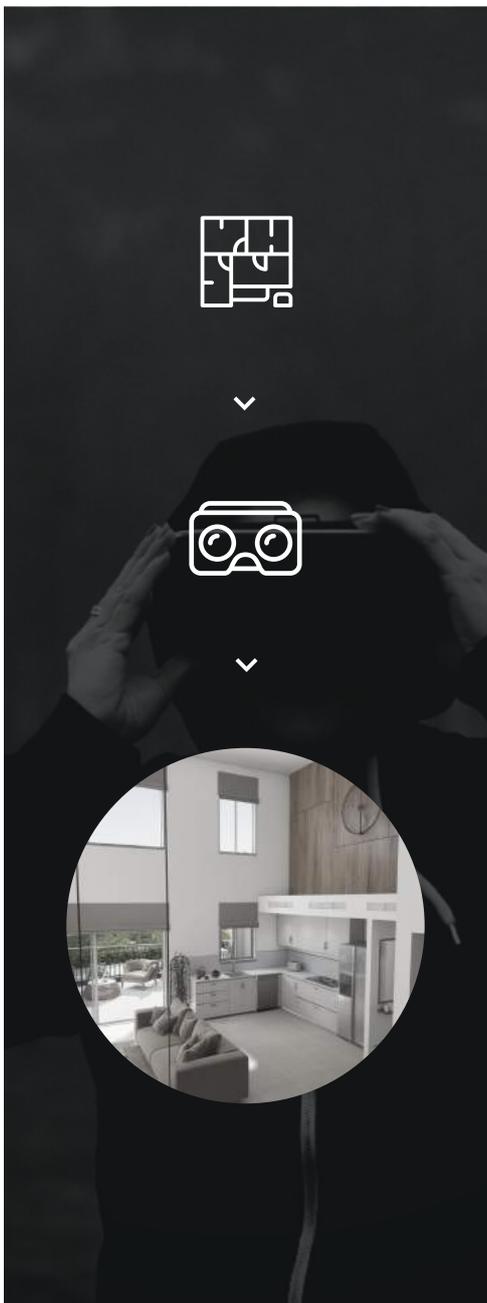
This erodes purchaser confidence, and creates obstacles to purchase, hindering the delivery of your pre-sales.

At the end of the day, it is far easier to convert a well-informed, confident purchaser that understands your vision and promise.

Conveniently, the visualisation technologies detailed in this short e-book are purposed to overcome these hurdles to sale.

[1] VIRTUAL REALITY

'Virtual Reality is defined as 'an environment that is created with software and presented to the user in such a way that the user suspends belief and accepts it as a real environment.'



VR essentially involves strapping a screen to your face (Head Mounted Display 'HMD') to both view and interact with a scene and/or scenes projected from either a phone or PC.

It can be a surreal experience, as thanks to the evolving graphical capabilities of modern day hardware the picture quality can be lifelike - impressing the notion of immersion and realism upon the user.

The beauty of VR is that it typically utilises video game development programs or 'engines' like Unreal 4 and Unity; allowing for limitless development potential and a fluid, user-friendly experience.

This ability to create a convincing environment and allow for a fluid and tangible end-experience (opposed to standard screen-based viewing) is revolutionary when marketing off-the-plan.

It puts the "Real" in off-the-plan Real Estate.

Property Developers can literally, 'bring to life' their future development within a high-quality, virtual setting.

Home-buyers can then prance around the space to their heart's content as they explore their future home; eliminating the uncertainty and ambiguity when purchasing off-the-plan as they can perceive and understand at their own accord.

They are able to purchase with confidence, aiding in conversion and the delivery of pre-sales.

DEGREES OF VIRTUAL REALITY

(A) 360-DEGREE VIRTUAL TOURS

Virtual Tours are PC and Phone-based experiences that utilise static images (renderings) to create a 3D representation of a property. The user travels through the space via viewpoints that morph the perspective from point to point (like google street-view) at 3 degrees of freedom (head movement).*

Typically, these tours are seen on Mobile HMDs (Samsung Gear, Google Cardboard etc.) however due to their simplicity, they can be hosted on websites and accessed on smartphone, allowing for widespread distribution and user-friendly experience.

What 360-Degree Virtual Tours lack however, is extensive functionality. As the tour is built from static images, it cannot support the level of detail and utility exhibited by a full-fledged VR walkthrough (below).



*typical viewpoint marker

(B) VR WALKTHROUGHS

Alternatively, a full-fledged VR walkthrough is built within a game engine (Unreal Engine 4 or Unity); allowing for wider functionality and immersion at 6 degrees of freedom (head and body movement).

The typical functions of a VR walkthrough include the live customisation of materials and various interactive elements throughout the space (open doors, turn on lights etc.). Some more sophisticated walkthroughs may also integrate costing data that is allocated to material selections made by users.

At its core, VR seeks to simulate reality and therefore presents a more immersive and intimate experience.

The downside - scalability.

VR walkthroughs require a high-spec hardware setup (HMD, sensors, PC etc.), which prevents access outside the display suite or wherever the hardware is situated.

As a substitute, VR walkthroughs can also be optimised for PC (mouse & WASD) and touch-screen use in order to forego the requirement for a HMD and sensors.



On July 6 2016, a mobile game was released called Pokemon GO. Mass hysteria followed.

Congregations of giggling teens, uni students, tradies and executive officers assaulted the streets and parks of Sydney, as they searched for cartoon monsters across the city.

Once constrained to the confines of the T.V. screen and literature, Pokemon were brought to life through Pokemon GO and its intuitive use of Augmented Reality.

Augmented Reality ('AR') is essentially a technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view. This is achieved via a device's camera, and occurs in real-time.

Although not as complex or immersive as its Virtual Reality counterpart, the ability to provide digital interaction without the need for complex hardware makes AR a great supplement to any project marketing campaign.

Where it falls short however, is it can be somewhat gimmicky if a low-quality model is developed; resulting in a jittery and broken experience.

Irrespective, AR can be highly malleable in its functionality and although it arguably lacks capacity to stand on its own two feet, it is great for providing a simple interactive experience that supplements a wider campaign.

In an off-the-plan context, an AR application may allow users to see a future building superimposed on a vacant site. Or similarly to IKEA's AR phone application, users may be able to twist, flip, shift and place virtual furniture from a catalogue throughout an existing space in real-time.



AR applications spring models to life on your phone or tablet device

[3] DIGITAL MODELLING



A Digital Model is exactly what its name suggests - it is a digital model of building (complex stuff).

Traditionally appearing in the computer labs of engineers and architects, the application of digital models has expanded in scope thanks to intuitive methods that allow for the redressing of a building's core technical structure and data, into an easy-to-digest form purposed for sales.

Highly util, Digital Models offer 'command-centre' type capability as they provide a holistic perspective that conveys space, site context and layout; providing another lense for interpreting a large space.

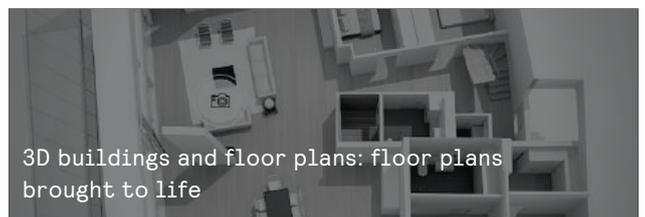
Accessible via website and/or smartphone-app, users are able to explore 3D panoramic perspectives of a site and surrounding amenities, 3D floor-plates, and 3D apartment floor-plans.

Certain models may also cater for furniture placement, allowing for the easy visualisation and live optimisation of space and layout.

Further functionality may include the integration of external marketing content like CGIs and video animations; while also catering for Virtual Tours and/or VR walkthroughs (subject to your hardware).



site context: understand amenity location, and building layout - great for masterplans and subdivisions



3D buildings and floor plans: floor plans brought to life



integration of marketing collateral: accessible via quick-launch icons

IMPLEMENTATION STRATEGIES

So, it all sounds pretty good.

Now what?

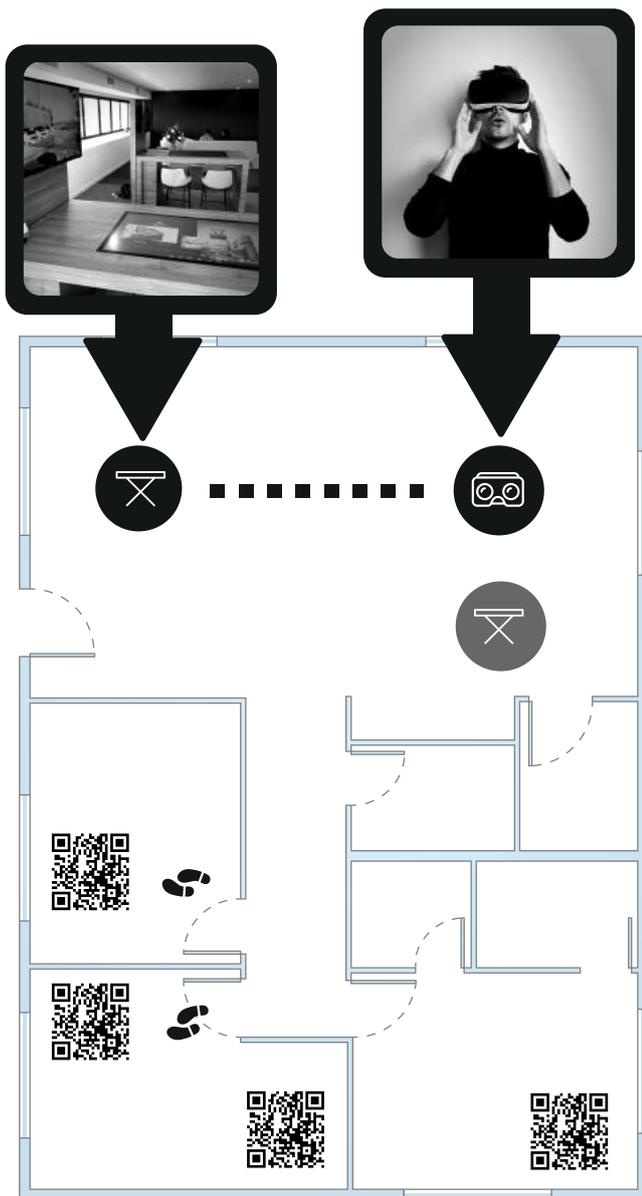
Understanding functionality is one thing, execution is a whole new ball-game. To maximise ROI on the aforementioned technologies, an efficient implementation strategy is advised.

The below and overleaf are tips. It is an opinion on where and how the technologies MAY be best implemented to play to their individual strengths within an off-the-plan sales context.

TECH	DISPLAY SUITE	WEBSITE / PHONE APP
[1] VR		
[A] Virtual tour		
[B] VR walkthrough		
[2] AR		
[2] DIGITAL MODELS		

IN THE DISPLAY SUITE

[EXAMPLE]



VR WALKTHROUGHS & DIGITAL MODELS



A touch-table (touchscreen built into table) is a great alternative to a standard PC as it offers a collaborative platform from which users can access both digital models and VR applications with the touch of a finger.

The VR headset can then be tethered directly to the touch-table, and the adjacent space utilised as the VR 'play-area'.

This allows for an effective two-fold dynamic; where the Digital Model speaks to the general understanding of the space, layout and context, the VR then allows the user to explore the space on an intimate level.

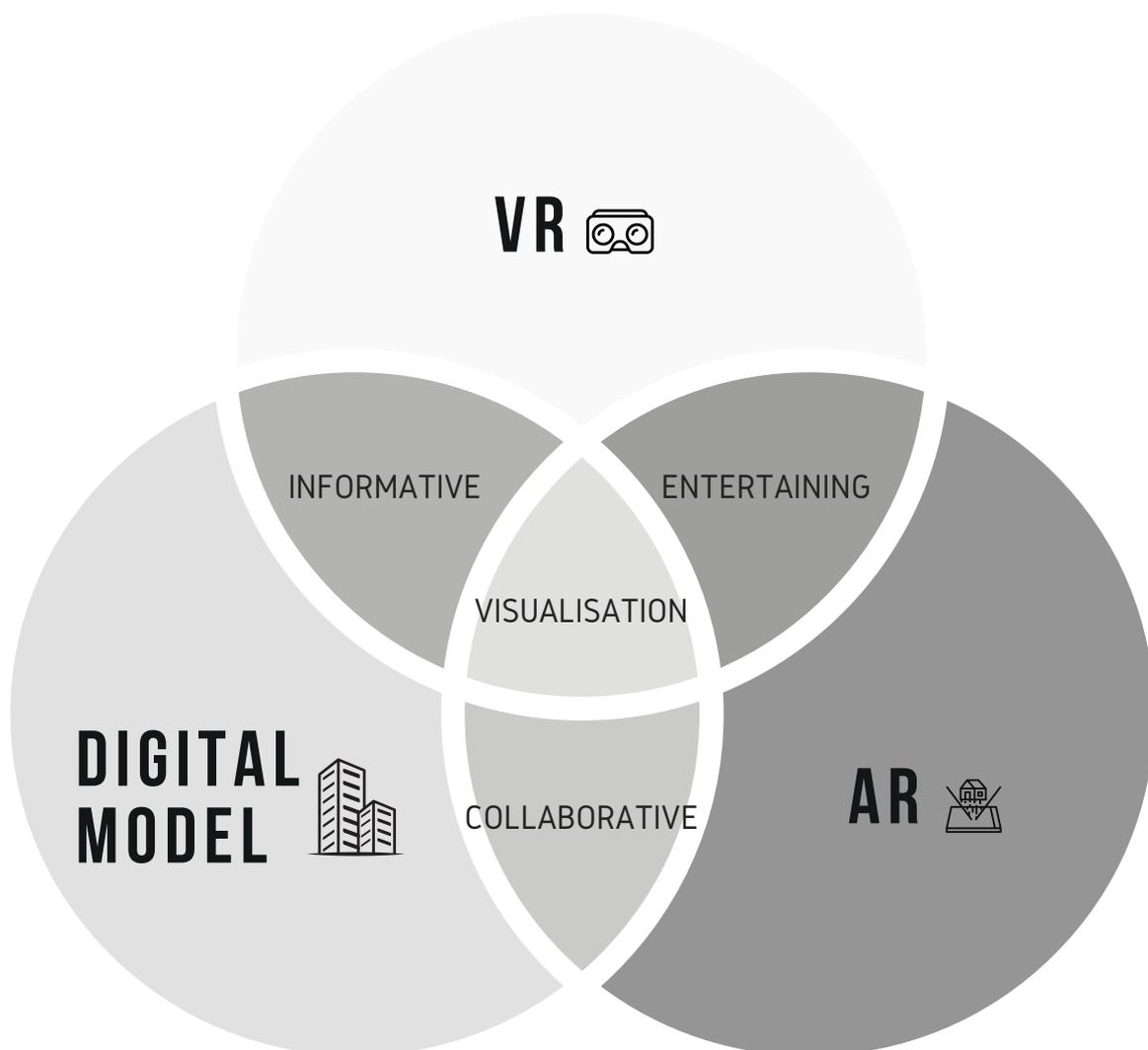
AR



To supplement the abovementioned, a custom AR app for smartphone is a great way at fostering engagement and interaction with unattended visitors. Users can 'engage' the AR via their smartphone camera that interacts with recognition-based markers placed throughout the display suite ('QR codes'. Where one marker may superimpose a 3D model of a building, the other may display a basic 3D sitemap etc.

INTERPLAY

The combination of all three visualisation technologies presents a formidable dynamic, and provides for an engaging, yet informative approach to off-the-plan sales.





GO BEYOND



Think outside the box.

Virtual Reality, Augmented Reality and Digital Models represent a new standard in pre-development visualisation.

However, they only sit on the precipice of what will be the future of project marketing. The uses detailed in this guide are stepping stones towards a wider, more exciting tomorrow.

Technology is a tool, that can be bent and shaped to suit the purpose of its master. In this way, the key in taking these technologies into the next stage of project marketing will be execution paired with a hint of imagination...

SELF-DESIGN CENTRE

Virtual Reality engines have the capacity to integrate custom furniture catalogues and then facilitate real-time purchase through inbuilt shopping-cart applications resulting in a complete self-design offering.

FACILITIES MANAGEMENT

More relevant to the commercial space, Digital Models can be re-purposed for ongoing facilities management. In integrating with third-party software, the digital model can provide an easy-to-digest visual, complete with alerts, tracking of people flows and energy consumption metrics.

INTERNATIONAL REACH

The setup of offshore technology-oriented display suites allows for the streamlining of required marketing collateral and provides the opportunity to showcase several projects from a single location.

TECHNOLOGY CHANGES EVERYTHING

At their core, these technologies are designed to bring architectural plans to life.

From a pre-development perspective, this offers an invaluable element to your off-the-plan sales campaign - the ability to inspire purchaser confidence.

In bringing your future development to life, the ambiguity and guesswork when buying off-the-plan can be eliminated and the homebuyer can approach their off-the-plan purchase well-informed, allowing for easier conversion.

Happy days.

It is hard to sell something that does not exist.
But it doesn't have to be.

Change the way you sell off-the-plan.



WANT AN OBLIGATION-FREE PROPOSAL?

CLICK HERE

OR E-mail us at vr@inovora.com.au