

對汽車產業來說，

VR (Virtual Reality ， 虛擬實境) 是沉睡的巨人嗎？

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世界領先的企業都在利用 VR (虛擬實境) 技術幫助他們成為優勢品牌，未來 VR 的使用只會多不會少，現在汽車製造商，也是時候該上船了！

摘要

是時候改變了嗎？有些產業在過去幾十年來，一直都以差不多相同的方式在運作，且也保持地不錯。但對另一些產業來說，故步自封已經不再可行。

技術能夠讓企業徹底思考他們的核心流程，而且往往是以革命性地精簡物流步驟及提高效率使成本大幅減低的方式。對於汽車產業來說，VR 可能只是個創新的新鮮東西，但是想一下以下兩種情形，一種是利用 VR 來模擬新車實境讓消費者進行評估，另一種則是製作實體原型再將他們運往世界各地。製造商肯定是會選擇能夠節省巨大成本的方式，更不用說還可以在開發階段省去大把時間。但是，這個產業真的能夠接受這項技術嗎？



益普索的洞察：汽車製造商在前期模型開發階段上，對於採納 VR 技術的最大障礙，是他們害怕作出改變。這個障礙不容小覷，它有可能阻礙企業在技術上的採用或測試。要推出一個新的特殊方式，其背後使用已久的基礎設備都會受影響。但整體來說，其實這都只是心態的問題。

領先的企業都在投資 VR 技術

對汽車業來說，VR 是個沉睡的巨人嗎？答案很簡單，是的，而且是時候把他叫醒了。VR 並不是噱頭，它已存在於我們的生活當中。VR 也不再是遊戲產業的專屬，也將成為巨大的遊戲顛覆者。你會發現全球產業龍頭在設備及應用上，都在 VR 技術上注入鉅資，為消費者以及產業擴展 VR 的應用範圍。

此外，據《消費者報告》(Consumer Reports) 預測，未來消費者將利用 VR 來購物。如果市場上更多能夠讓消費者使用 VR 的機會，消費者將利用 VR 提供給他們的資訊來評估該購買何種車型。這聽起來可能很不可思議，但當我們瞭解了軟體創建的人工 3D 環境的驚人力量時，這一切就說得通了。透過佩戴配有螢幕和具有感應器的手套的頭盔，人們可以在一個企業所創建的虛擬「場所」觀看、聆聽、甚至與其互動。這是最近一項引人注目的工具，對企業如何利用 VR 來告知、吸引和教育消費者有著巨大的啟發。

VR 對汽車業的影響

益普索針對汽車產業內消費者使用 VR 的影響進行研究。原始設備製造商 (OEM) 常常需要針對他們要發佈的車輛作出重要決定，但是往往 OEM 既沒有完整或實體的原型可用，也沒有用於全面產品評估的預算或時間（這需要數年的時間）。傳統上，汽車製造商會製作厚重的樹脂或粘土原型以用於評估，然後付錢將它們送往各個市場進行測試。但是，如果模型成功無望呢？那公司就必須放棄投入消費市場，或延遲發佈，但無論作何種選擇都會造成不菲的損失。OEM 一直都在尋找一個較經濟的方式，於新產品的創新階段，作可以節省時間又可靠的改變及投資。我們建議，可以將 VR 作為選擇方案之一，尤其是對於早期開發而言。



益普索在汽車市場中，針對 VR 進行了研究

為了驗證假設，益普索進行了三項獨立的研究，以轎車、掀背車和緊湊型 SUV (compact SUV) 等作為樣本，使用 VR 作為產品評估的方式。

這幾個研究的主要目的是：

1. 確定 VR 是否可以作為完整產品評估的替代測試方法。
2. 找尋 VR 技術的最佳應用。
3. 找出 VR 的優點與缺點。

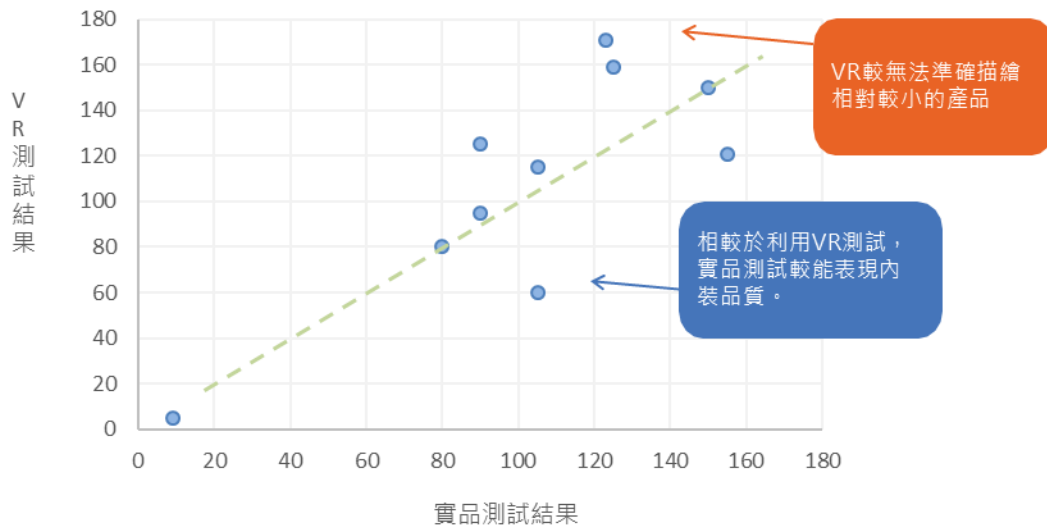
我們發現，汽車製造商可以使用 VR 作為替代的方法，雖然不適用於所有的產品評估，但是：

- 在完整的產品展示和 VR 刺激之間，評估是相對一致的。
- 相較於實品展示，消費者在 VR 的給分是較高的，不過基於新技術的基礎上，這點並不奇怪。
- 對於評估尺寸、空間和內裝的感覺，VR 並不適用。

結果

我們的分析顯示，VR 有能力讓企業對一項創新作親身體驗以及完整的產品評估，並更進一步預測該創新的市場潛力。該分析是基於益普索針對評估概念潛力強度的預測量表：市場成功得分 (Market Success Score, MSS)。

VR 測試及實品測試的 MSS 比較

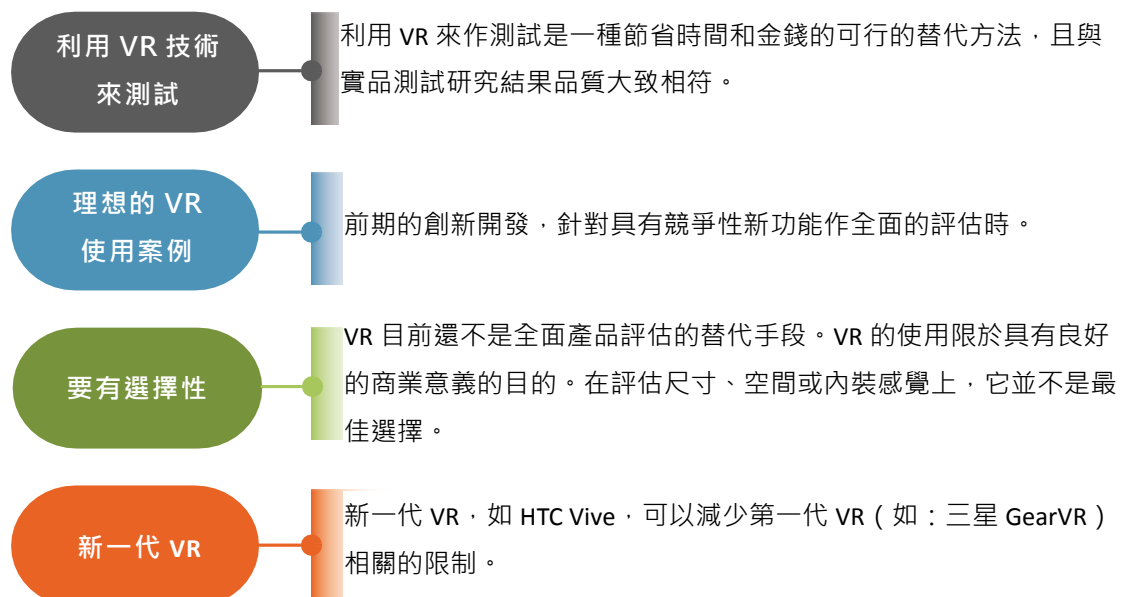


由於三星 GearVR 頭戴設備有尺寸和空間上的限制，我們建議使用能更融入實境的技術，如 HTC Vive 或 Oculus Rift。利用這些技術，企業可以提供更為逼真和引人入勝的評價。有了新一代 VR 設備作為親身體驗評估的潛在替代方案，企業能作出更為一致的評價。

對於考慮採用 VR 技術的汽車製造商來說，最佳的著手方式為：

- 對於採用 VR 技術保持開放的態度以及使用有戰略性的方法。
- 瞭解 VR 技術能夠在該產業被成功地利用。
- 同時也要知道該技術的侷限性，它並不是在所有的應用上都能奏效。
- 在前期的周期模型評估中考慮使用 VR 技術，例如將其應用在原型設計的過程中。VR 測試能夠讓 OEM 以具有成本效益的方式，在開發上有更多的投入。

VR 技術的結論



Ipsos Marketing 益普索行銷研究

Ipsos Marketing 是益普索集團旗下致力滿足客戶創新與品牌增長需求的事業體，根據不同的市場調查需求，我們再區分成：創新與預測、市場與品牌宣傳、醫療和質化研究等四大領域。我們的行銷研究專家專門協助企業夥伴把市場趨勢轉換成產品競爭優勢，並持續提供創新的市場研究模組，幫助夥伴更有效運用管理市場研究預算。我們也善用利用科技和研討會，結合不同的資料整合知識，幫助企業獲得即時的市場洞察。

更多的資訊，請參考 <http://www.ipsos.com/marketing>

或洽詢我們的研究團隊

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Is VR (Virtual Reality) the Auto Industry's Sleeping Giant?

John Kiser, Senior Vice President, US, Ipsos Marketing

The world's leading companies are using virtual reality (VR) to a major advantage, and that will only increase in the future. Vehicle makers need to get onboard now!

Summary

Is it time for a change? Some industries have been doing things in much the same way for decades, and that is still valid. For others, the “because we’ve always done it that way” philosophy needs updating. Technology is allowing companies to completely rethink their core processes, oftentimes in revolutionary ways that mean substantial cost savings, in streamlining logistics and gaining efficiencies. For the automotive business, virtual reality may be just that innovation. Imagine evaluating a new car model with a virtual reality simulation vs constructing physical prototypes and transporting them around the world. Manufacturers would enjoy enormous savings, not to mention the time they could shave off the development phase. But can the industry embrace it?



Ipsos insight: The biggest barrier automakers face to adopting virtual reality as a part of their early-model phase development is fear of change. This is no small obstacle and may hamper adoption or even trial, despite clear advantages. A long tradition of a particular way of rolling out new prototypes, and all the infrastructure behind that, is also in play. But overall, it's a mindset matter.

Leading companies are investing in VR

Is VR the sleeping giant for the auto industry? The simple answer is, yes. And it's time to wake him up. VR is not a gimmick—and it is here to stay. It will also be a major game changer for vehicle manufacturers. VR is no longer just for gaming. Follow the leaders: global powerhouses such as Facebook, Microsoft, Google and HTC, are placing huge investments on equipment and applications to broaden the usability and reach of VR for consumers and industry alike.

Further, Consumer Reports predicts consumers will leverage VR for shopping in the future. The fact is, if more consumers in the market get access to VR headsets and content—and they will—they will leverage this information in their decision making on what alternative vehicles to consider and even purchase. It makes sense when you consider the power of software-created artificial 3-D environments that feel uncannily real to the user. Wearing a helmet outfitted with a screen and/or gloves with sensors,

a person can see, hear and interact in a simulated “place” of the company’s creation. It’s a compelling tool that’s just now coming into its own, with huge implications for how companies might use it to inform, engage and educate consumers.

VR’s impact on the auto industry

As a result, we at Ipsos have explored consumer VR usage impact within the auto industry. Original Equipment Manufacturers (OEMs) need to make important decisions on their vehicle launches. But at times, OEMs either do not have a full or physical prototype available, the budget or the time for a full product evaluation, which can take years. Traditionally, automakers have built heavy resin or clay prototypes for assessment, then paid to ship them from market to market for testing. But what if that model is a non-starter? Then the company must either forgo consumer input or delay launch— either option can be a costly misstep. OEMs are looking for economical ways to provide timely and credible input for their new product innovations. We suggest VR can be one of those alternatives, especially for early development.



Ipsos studied VR in the auto market

To test this hypothesis, Ipsos conducted three independent studies matching samples for full product evaluations and VR stimulus evaluation within sedans, hatchbacks and compact SUVs. Our main goal of these studies was to:

1. Determine if VR could be an alternative stimulus approach to full product evaluations;
2. ID best uses of VR technology;
3. Find strengths and weaknesses of VR stimulus.

We discovered that:

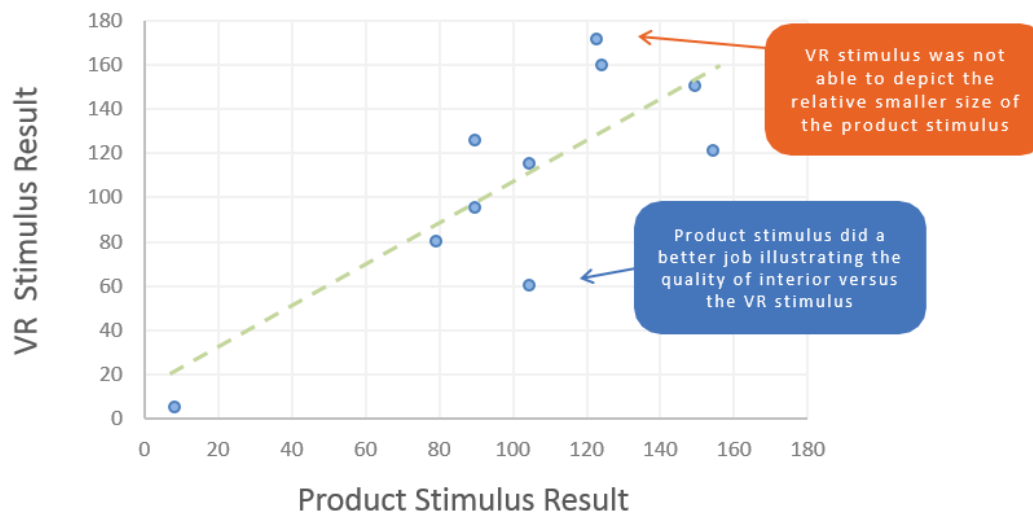
Automakers can use VR stimulus as an alternative education approach, though not for all product evaluations.

- Evaluations are relatively consistent between the full product displays and VR stimulus.
- Consumers’ VR stimulus scores are elevated compared to full product display scores—not surprising based on the new technology.
- VR stimulus is not ideal for rating size/roominess and interior feel.

Conclusion

VR stimulus has the ability to accurately predict new innovation's potential as an in-person or full-product evaluation, our analysis indicated. (This is based on our Ipsos predictive metric for assessing the strength of concept potential: Market Success Score or MSS.)

MSS Comparison Summary

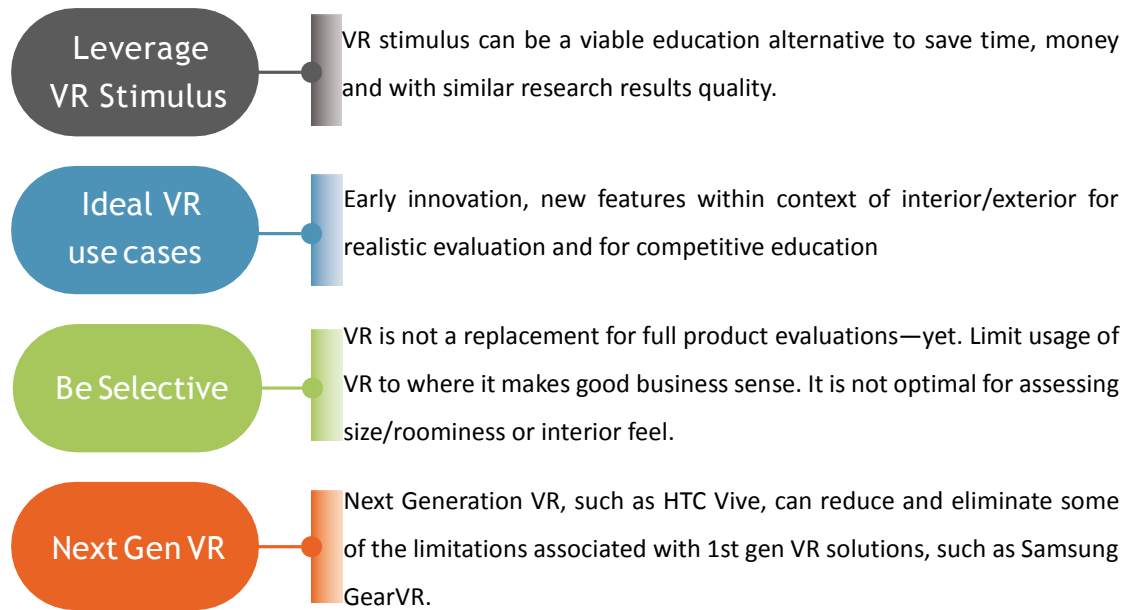


With limitations in size and roominess using Samsung GearVR headsets, we recommend instead more immersive technology, such as HTC Vive or Oculus Rift. With these, companies can provide a more realistic and engaging evaluation. With this next Next Generation VR equipment, companies can make an even more consistent evaluation for VR stimulus as a potential replacement for in-person evaluations as well.

For automakers considering VR, the best way to get started is to:

- Take an open-minded, strategic approach to using the technology.
- Recognize the industry can successfully take advantage of VR technology.
- Realize that it has limitations and will not work for every application.
- Consider VR for early production cycle model assessment, such as wrapping it into the prototyping process. VR testing allows OEMs to get input and iterate quickly in a cost-effective way.

VR tech conclusions:



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