



# CS4 遇上 Avatar- 阿凡達幕後製作秘辛

台灣奧多比

業務發展經理 夏榮慶



Avatar: 印度梵語，化身、體現、替身之意

# Avatar 小常識

- 導演：詹姆士卡麥隆 James Cameron
- 劇本初稿：1995
- 電影開拍：2006
- 電影上映：2009.12.18
- 拍片預算：一開始卡麥隆要求福斯電影公司5億美金，福斯批准2億，最後可能是3億
- 行銷費用：2億
- 2008北美票房超過5億的電影：1部

專訪：製片人 John Landau



有些軟體是用來做完工作，有些軟體是讓你把工作做得更好  
**Adobe CS Suite** 就是可以幫我們把工作做的更好的軟體。

影片連結：<http://tv.adobe.com/watch/customer-stories-video-film-and-audio/adobe-and-avatar/>

# Avatar 製作流程

前置作業

拍攝

後製作業

Plan

Acquire

Produce

Manage

Publish

Deliver

Playback



概念草圖

藝術製作設計

故事板 / 故事影帶

剪接 / 完成



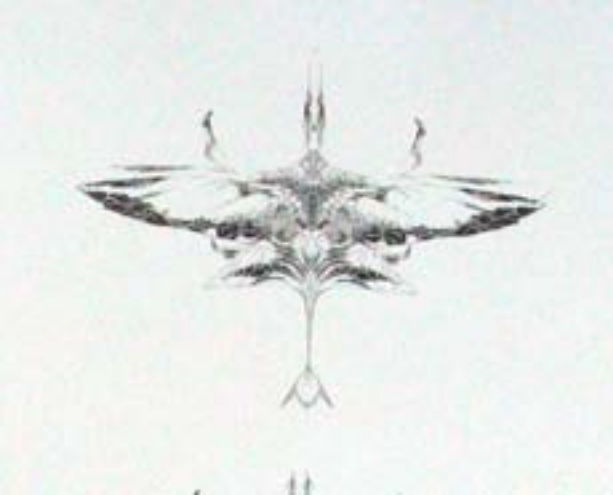
# 前置作業

- Photoshop 我們一開始就採購的軟體，它是我們的關鍵兵器，從概念發想到幫助我們設計出所有Avatar的奇幻世界，甚至也包括各種異形生物的紋理繪製。



資料來源：[The Art of Avatar](#)





資料來源：[The Art of Avatar](#)



資料來源：[John Landau interview](#)

# 拍攝階段



資料來源：[Wired magazine online](#)



## 2 Digital Closeup

Like many actors in *Avatar*, Zoë Saldana plays a fully computer-generated character, Na'vi princess Neytiri. To map her movements to her digital doppelgänger, Saldana wore a motion-capture bodysuit with reference markers and straps. She also wore a head rig designed by Cameron that aimed a small video camera at her face. That camera tracked green ink dots, painted on Saldana's face, throughout the scene, giving Cameron closeup-level detail of changes in expression to map to Neytiri's CG face.

## 3 On-Set Playback

To shoot a scene within a totally CG world, Cameron had virtual production supervisor Glenn Derry rig up augmented reality cameras. Cameron could watch from the sidelines as his actors' performances were instantly mapped to their CG characters and displayed via an on-set screen. Or he could use a portable motion-tracking virtual camera to walk through the volume and view the CG environment of the movie on its LCD screen.



## 4 Final Render

To transition from the CG produced on set to the photorealistic world of the finished movie, Cameron sent his rough footage to Weta Digital in New Zealand. There, special effects programmers used a facial solve program and facial action coding to translate the actors' every minute muscle movement—blinks, twitches, frowns—to believable expressions on the faces of Pandora's aliens.



novel. But you o  
everybody—that  
have to make it

## Gonzo Ef

Cameron's du  
has roots in his  
sci-fi geek from  
raised by a pain  
necer father. "I  
push between  
says. "My appo  
always very tech  
ining not that  
a special-effec

Unable to ac  
in Los Angele  
himself as a t  
visual effects co  
sity of South  
photocopying  
printing and  
stocks. "This is  
myself a great  
cost of the r

Cam  
a job  
Koo

V  
A.

我們從頭到尾都使用After Effects

-製片人John Landau



資料來源：[Wired magazine online](http://www.wired.com)



導演需要看到實際拍攝的鏡頭加上後製的效果，AE可以幫助Jim即時看到



After Effects可以幫助卡麥隆即時看到合成結果

資料來源：[John Landau interview](#)



# 後製流程

Premiere Pro 再把AE製作的片段整合成一段一段的影片，根據鏡頭敘述的語法，帶出畫面與畫面的銜接



# 當CS4 遇上 Avatar

前製、拍攝、後製

發行、流通

Plan

Acquire

Produce

Manage

Publish

Deliver

Playback



最棒的一點是 Adobe CS4 已經提供所有我們需要的  
從概念發想到完成電影製作



# Adobe + Avatar

The screenshot shows the Adobe website's homepage with a large banner for the movie Avatar. The banner includes a video player on the left showing a scene from the movie, and text on the right that reads "AVATAR In theaters December 18 Experience the Interactive Trailer See how the movie was made".

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**News:**

- Now available on Adobe Labs: Adobe AIR 2 beta and Flash Player 10.1 beta
- Get the details on Adobe product compatibility with Windows 7 and Snow Leopard
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**Industries:**

# 富媒體行銷：當AIR遇上Avatar

<http://www.avatarmovie.com/air>

AVATAR

DECEMBER 18, 2009 WORLDWIDE

ROLL OVER TO PURCHASE TICKETS

FILTER FEEDS



TRUDY CHACON'S  
PROFILE



12/15/2009



YouTube

# 富媒體行銷：當AIR遇上Avatar



QUARITCH'S  
PROFILE



互動式熱點：  
幕後花絮



WATCH QUARITCH'S  
PROFILE

# AVATAR

DECEMBER 18, 2009 WORLDWIDE

ROLL OVER TO PURCHASE TICKETS



連結社群分享



12/15/2009



officialavatar: Watch the exclusive music video for "I See You" (Theme from Avatar) by Leona Lewis on MySpace! <http://bit.ly/8mhYUw> #avatarmovie 12/15/2009



officialavatar: James Cameron's epic motion picture, Avatar - in theaters this Friday. Just 3 more days! <http://bit.ly/8WGSGF> #avatarmovie 12/15/2009

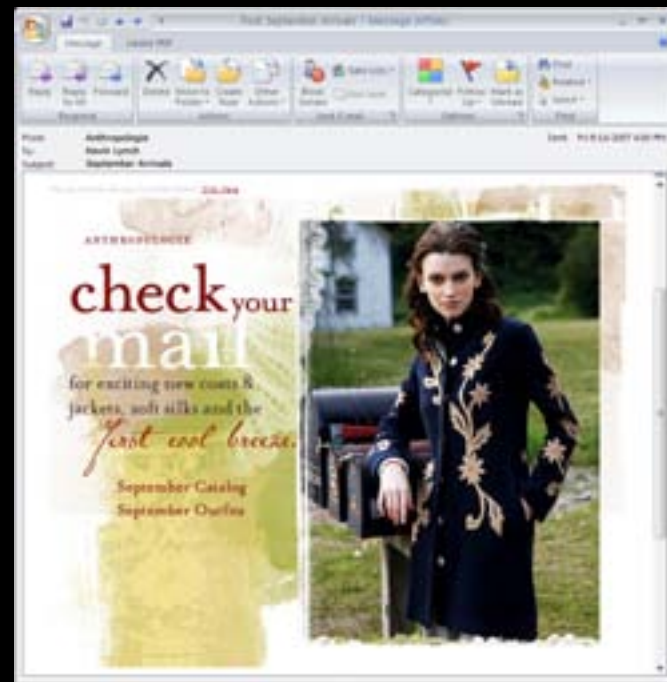


officialavatar: Pandorapedia - your guide to Pandora and James Cameron's Avatar: <http://bit.ly/50EgnV> #avatarmovie 12/15/2009



officialavatar: "4 Days of Avatar" - Avatar takes Mattel into uncharted toy territory: <http://bit.ly/8x8UTR> #avatarmovie 12/15/2009





# 全方位運用 Adobe



**Adobe**