# 40.000.000 pixels vs 20.000.000 photographers

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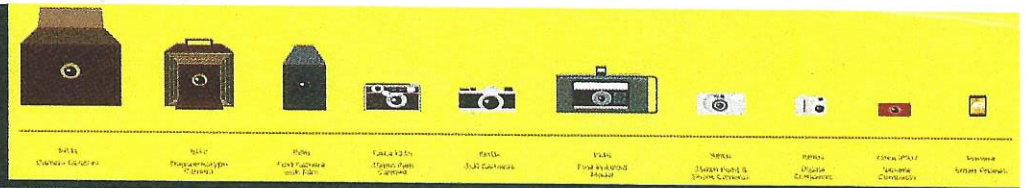


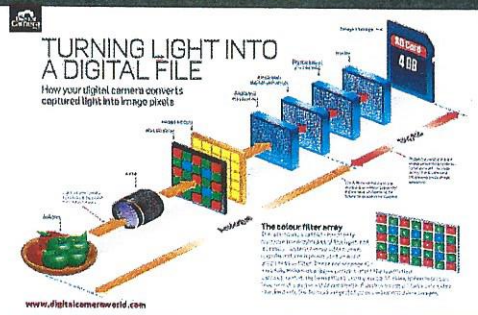
## Introduction

**Have mass produced digital cameras replaced the core Understanding of photography ?**

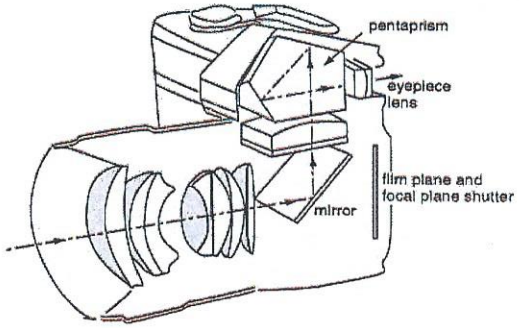
## Hypothesis

•Digital has contributed to the art of photography cameras are cheaper and widely available as stand alone units or part of dual technology. Digital Pictures & and processing are instant, unlimited, increasing the ability to improve ones composition Skills Quicker ,as time to finished photo is instant.
•Do we really need to understand light and its interaction with machines in order to take a good photograph .

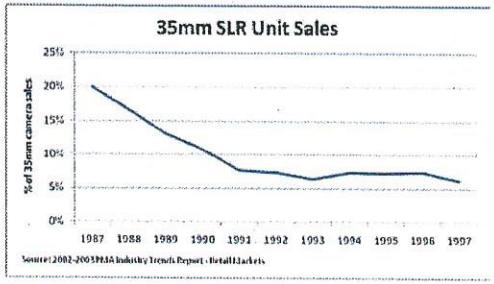
## Digital interaction

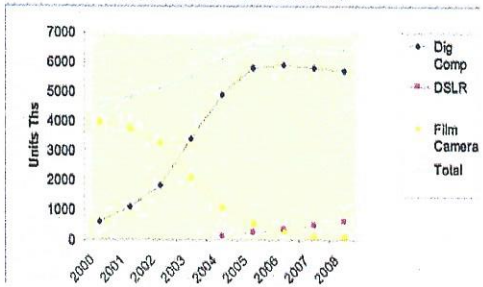



## Analogue interaction

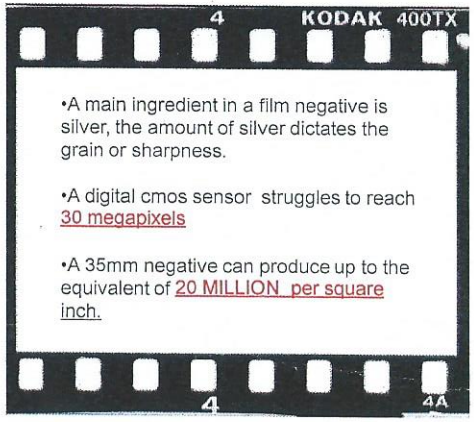



## Camera sales statistics




## 35mm film




## The analysis of pixels and film

Many people who use digital cameras want to know how large they can blow up or enlarge their photographs based the megapixel count of their camera. This article is aimed at teaching you how much you can enlarge your photographs depending on what type of digital camera you're using and what the pixel settings are on your camera

Fuji Velvia 50 is rated to resolve 160 lines per millimeter. This is the finest level of detail it can resolve, at which point its MTF just about hits zero.

Each line will require one light and one dark pixel, or two pixels. Thus it will take about 320 pixels per millimeter to represent what's on Velvia 50.

320 pixels x 320 pixels is 0.1MP per square millimeter.

35mm film is 24 x 36mm, or 864 square millimeters.

To scan most of the detail on a 35mm photo, you'll need about 864 x 0.1, or 87 Megapixels.

But wait: each film pixel represents true R, G and B data, not the softer Bayer interpolated data from digital camera sensors. A single-chip 87 MP digital camera still couldn't see details as fine as a piece of 35mm film.

## Conclusion

❖ Digital Photography is now a fact of life , and the rise in increasing sales as illustrated has shown no trend in subsiding .
❖ Tests and results have shown that digital photography has become a medium reaching an expectable level of reproduction for personal and use in industry .
❖ I would certainly conclude that digital photography's main advantage Is speed .
In a Digital world where time v's money "seems" to out weigh the benefits of truly understanding the beauty of light and its interaction with technology.
❖ It is my own personal conclusion that the human body was the first imprinted interaction with the sun, and cameras have come a long way since the days of Neolithic sun burn.
But if a child can pick up a camera in this day and age and see his or her results within seconds, the ability to develop a more artistic camera eye and maybe a different view of his/her surroundings is a faster process ,Abstract/artistic/harmonic/sympathetic.
❖ Digital / analogue have separate processes but the end game is the same, I like to think as digital being a first class introduction to understanding.

## References


- Rockwell, K .(2006) - Film vs. Digital Cameras http://www.kenrockwell.com/tech/filmdig.htm#examples. Electronically accessed 22/07/2015
- Icon Photography School https://photographyicon.com/enlarge/. Electronically accessed 22/07/2015
- Calder,J, _Garrett,J. (1990). The new 35mm photographer's handbook.
- Time life, (1970). Light and film. Life library of photography.