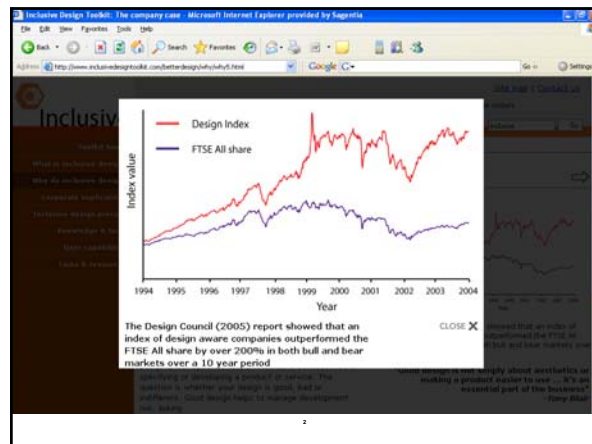


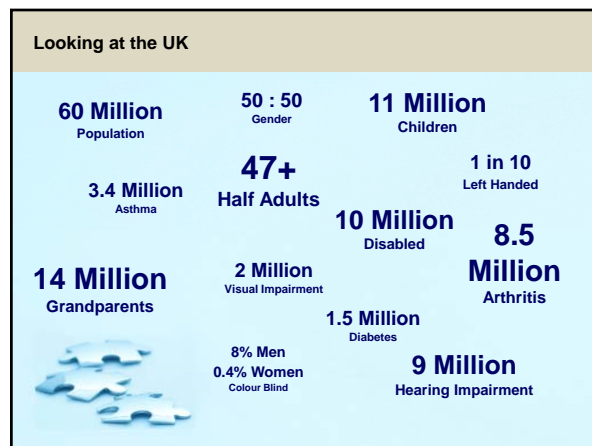
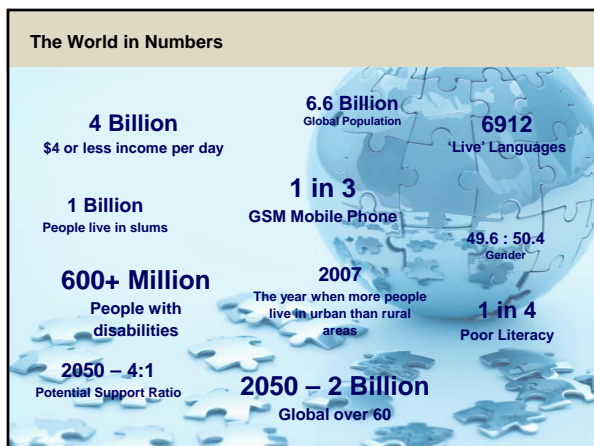
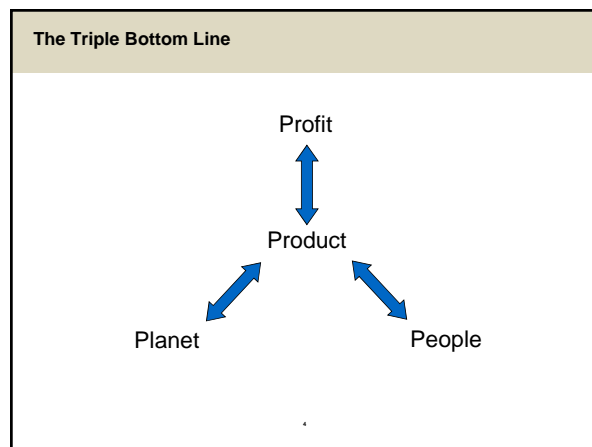
## The Case for Inclusive Design



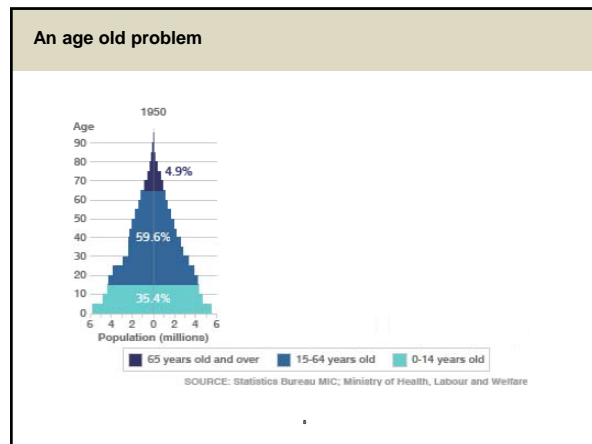
### Can you afford not to?

Design stage	Relative cost of change
Concept	1
Detail design	10
Tooling	100
Testing	1000
Post-release	10000

Source: Mynott C et al (1994)



It is **normal** to be *different*



**The future's bright, the future's grey**

In 1950 there were 200 Million over 65's worldwide

↓

In 2005 673 Million

↓

By 2050 2 Billion

**The changing world**

In 1950 the PSR was 12:1

Potential Support Ratio (PSR) is the ratio of the number of 15-64 year olds who could support one person 65+

**The changing world**

In 2000 the PSR was 9:1

**The changing world**

In 2050 the PSR will be 4:1

### The changing world

**In 2050 for the developed world it will be 2:1**

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### The impact of age

**How many people have less than "Full ability"?**

Age band	Percentage of age band
16-19	~1
20-24	~2
25-29	~3
30-34	~4
35-39	~5
40-44	~7
45-49	~10
50-54	~15
55-59	~25
60-64	~30
65-69	~35
70-74	~45
75-79	~55
80-84	~65
85+	~55

Half the adult population

Source: 1996/97 Disability follow-up survey

### It's not all bad news...

**Satisfaction with Life Overall by Age**

Source: British Household Survey/ Future Foundation (4 waves from 1996 to 2000)

15

### Money to spend and time to spend it

Source: 1996 Family expenditure survey

### More than just age

- American women were found to buy or influence 80% of consumer and business goods and services (Survey by Growth Strategies, February 2005)
- 1% of women felt that consumer electronics manufacturers have them in mind (Survey by the Consumer Electronics Association at 2006 CES)
- Only 20% of designers are women (Ramsey and McCorduck, 2006)

*We need to take off the rose tinted spectacles ...*

17

### Fortune at the Bottom of the Pyramid

The 'Base of the Pyramid' represents 4 billion people on \$4 a day or less a year

- 985 million are on less than \$1 a day
- 2.6 billion are on less than \$2 a day

The estimated total market value for this is \$5 Trillion

Exhibit 1: The World Economic Pyramid

Annual Per Capita Income*	Tiers	Population in Millions
More Than \$20,000	1	75-100
\$1,500-\$20,000	2 & 3	1,500-1,750
Less Than \$1,500	4	4,000

\* Based on purchasing power parity in U.S. Source: U.N. World Development Reports. **SAGENTIA**

### Inclusive design is a response to diversity

The British Standards Institute (2005) defines inclusive design as:  
 "The design of **mainstream products and/or services** that are accessible to, and usable by, **as many people as reasonably possible**, on a global basis, in a wide variety of situations and to the greatest extent possible without the need for special adaptation or specialised design."

**Inclusive design does not**

- Imply that one product fits all
- Replace the need for specialist products and services
- Only design products for a particular capability loss


### Design - how hard can it be?

One users' experience of trying to download Moviemaker:

*"So after more than an hour of craziness and making my programs list garbage and being scared and seeing that Microsoft.com is a terrible website I haven't run Moviemaker and I haven't got the plus package. The lack of attention to usability represented by these experiences blows my mind."*


----- Original Message -----

**From:** Bill Gates  
**Sent:** Wednesday, January 15, 2003 10:05 AM  
**To:** Jim Allchin  
**Cc:** Chris Jones (WINDOWS); Bharat Shah (NT); Joe Peterson; Will Poole; Brian Valentine; Anoop Gupta (RESEARCH)  
**Subject:** Windows Usability Systematic degradation flame



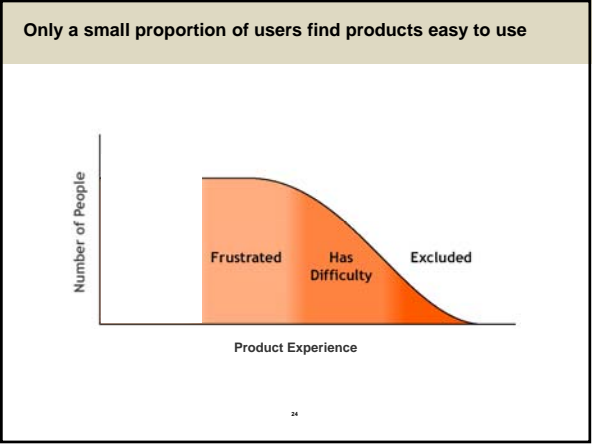
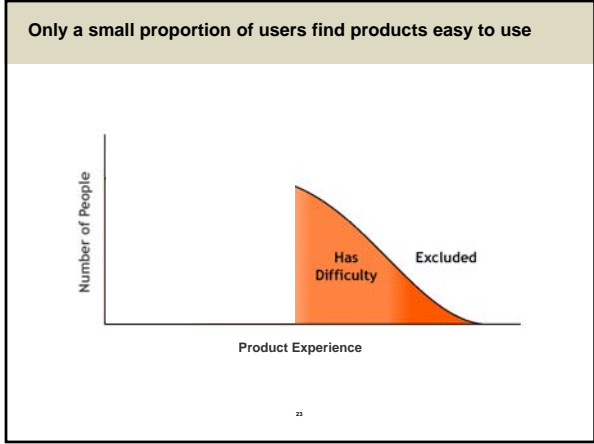
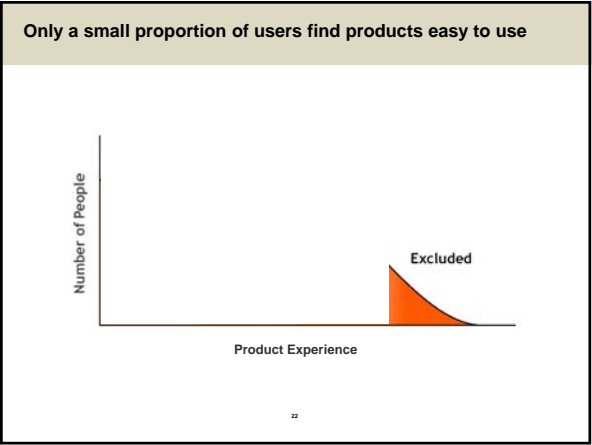
### Featuritis

In Microsoft Word 1.0 there were about 100 features. Word 2003 has over 1500



9 out of 10 features that customers wanted added to Office were already in the program.  
*"They simply don't know it's there"*  
 Chris Capossela, Microsoft VP

Only 13% of the public believes that in general technology products are "easy to use" Phillips Index Study 2004



### Only a small proportion of users find products easy to use

"2 out of 3 Americans report having lost interest in a technology products because it seemed too complex to set up or operate." - Philips Index (2004)

Number of People

Finds Easy Frustrated Has Difficulty Excluded

Product Experience

25

### The Technology Honeymoon is Over

Somewhere along the way, the promise of the digital revolution to make our lives easier, simpler, better, is not being delivered. In fact, in many respects, it's only made life more complicated. We must start making things easier for consumers or we will never see the real promise of the digital revolution come to life. And we must do it now.

Gerard Kleisterlee, CEO Philips, CES, Las Vegas, 2004

### Design can improve product experience

27

### From Humiliation to Aspiration – Disability without Invisibility

1930's NHS classified spectacles as 'medical appliances', their wearers as 'patients'

Today It has been recorded that up to 20% of some brands of glasses are purchased with clear non-prescription lenses

28

### Inclusive design can be commercially successful

### Inclusive design = Better design

Number of People

Finds Easy Frustrated Has Difficulty Excluded

Product Experience

29

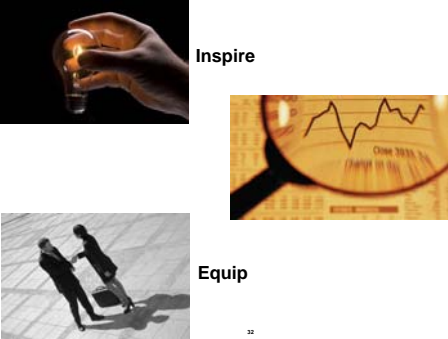
Better design = Good business



21

This slide features a title "Better design = Good business" at the top. Below the title are two side-by-side photographs. The left photograph shows a hand holding a pair of scissors, while the right photograph shows a hand holding a stapler. At the bottom center of the slide is the number "21".

A Call to Action



Inspire

Inform

Equip

22

This slide is titled "A Call to Action" and contains three distinct images. The top-left image shows a hand holding a glowing, orange, spherical object, labeled "Inspire". The top-right image shows a magnifying glass over a line graph on a document, labeled "Inform". The bottom-left image shows two people in business attire pushing a cart, labeled "Equip". The number "22" is located at the bottom right of the slide.

Thank you for listening

23

This slide has a central title "Thank you for listening" set against a light beige background. At the bottom center of the slide is the number "23".