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The slides will be updated after each presentation and revisions will be placed on the ftp server in due course.





- 1. BACKGROUND
- 2. FUTURE
- 3. FUTURE TECHNOLOGIES, FOOD CHAIN, IMPACT
- 4. ANSA PROGRAMME ACTIONS



## ANSA MC / TC

### **DECEMBER AGREED**

- TALK TO INDIVIDUAL COMPANIES
- WORKSHOP IN MARCH
- -> CONSENSUS VIEW OF
  - MAINSTREAM "HARD" TECHNOLOGIES
  - DISRUPTIVE TECHNOLOGIES
  - FOOD CHAIN



# THE FUTURE



*"IN 1992 IBM WILL HAVE 100% OF THE MAINFRAME MARKET"* 

*"IN 1992 DEC WILL BE AS BIG AS IBM"* 



....WHATEVER HAPPENED?



## **TECHNOLOGY!!**

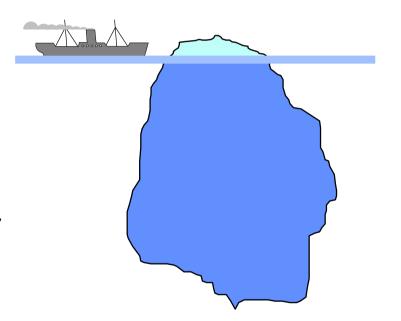
### ... TECHNOLOGICAL PERTURBATIONS DERAIL BIG COMPANIES



#### .... THERE'S ANOTHER ONE COMING

### THE WWW IS THE TIP OF THE INFORMATION ICEBERG

THE PRESENT WWW = THE COMMODORE PET



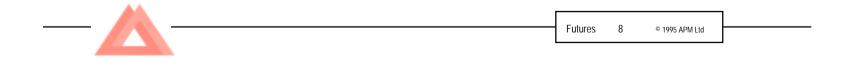


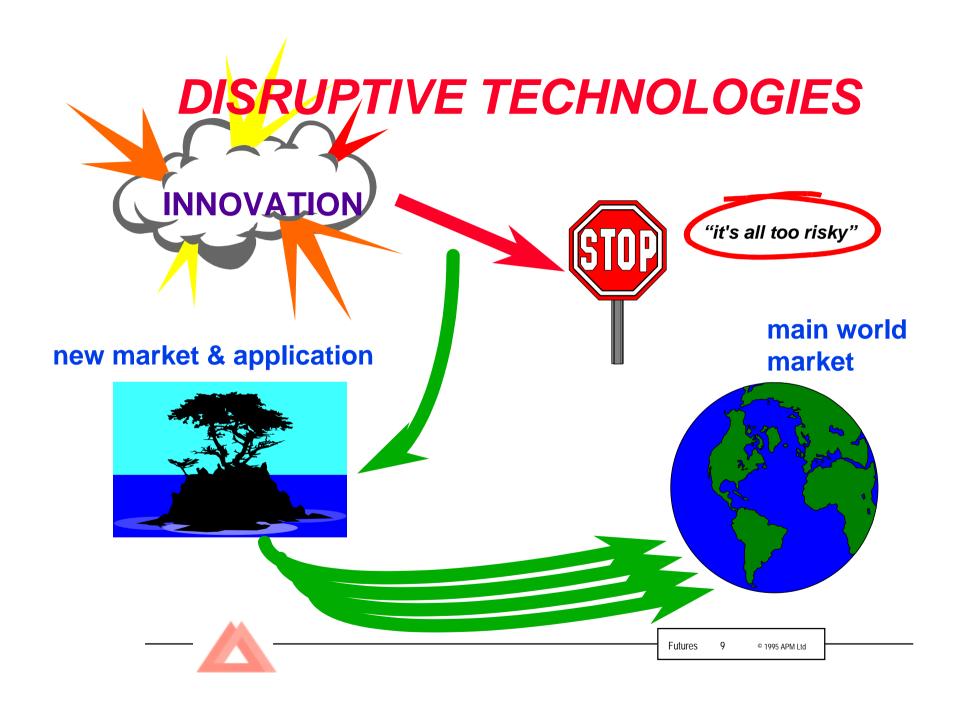
#### A HUGE MARKET WILL DEVELOP VERY FAST .....

- 1995 60% OF EUROPEANS DO NOT KNOW WHAT THE WWW IS
- BY 2000 95% WILL HAVE ACCESS



**SURVEY** 





### CHANGES IN

- BUSINESS MODELS AND METHODS
- SUPPLIERS AND SUPPLY CHAIN
- SERVICE INDUSTRIES

#### ..... STRONGLY FUELLED BY USER DEMAND

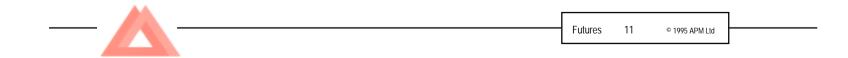
..... NOT OBVIOUS EXISTING COMPANIES WILL WIN





- "IGNORE IT"
- "WE'RE IN CHARGE"
- "WE KNOW BEST"
- "FOCUS, DOMINATE"

LIKE NCR,CDC,DEC? LIKE IBM? LIKE APPLE AND XEROX? LIKE MICROSOFT & NOVELL?





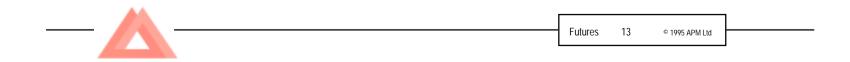
"..... being especially a consumer product company, we do not do any more long-term research in novel ideas that will not lead to a potential product in 3 - 5 years. This only holds for software and multi-media research, because the market is too dynamic and unpredictable...."

#### ... ANOTHER ONE BITES THE DUST?

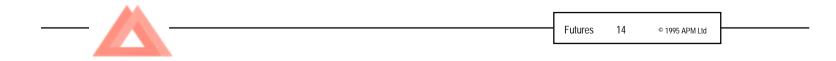




- " THE SYSTEMS INTEGRATION BUSINESS DECLINES
- " SMALL COMPANIES SUPPLY ALL SPECIAL APPLICATIONS
- " MIDDLEMAN COMPANIES VANISH
- " INTELLIGENCE IN THE NETWORK VANISHES
- " MANY BIG TELCOS MAROONED SHIPPING BITS OVER DUMB TRUNKS







## "ETHERMATION 2000"

- CULTURE
- CHARACTERISTICS
- INGREDIENTS



- MARKET MODELS





#### 1978 - CAPTURE THE DESK TOP (XEROX PARC)

### 2000 - CAPTURE THE PERSON

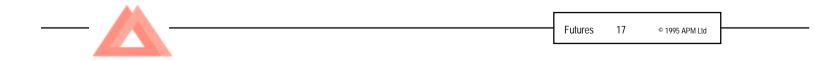
- AT HOME AND AT THE OFFICE



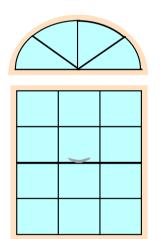
- "AND THEREBY THE CORPORATION"



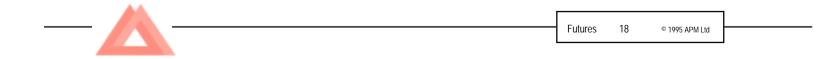




#### "YOUR WINDOW INTO INFORMATION WORLD"



## ..... WRONG!



- IT'S YOUR DOOR INTO INFORMATION WORLD
- ACTUALLY IT'S YOUR KIDS' DOOR
- AND IT'S OPEN









### BY 2003 SYSTEMS WILL HAVE TO DELIVER PERFORMANCE YOUR KIDS WILL ACCEPT

- THEY WILL SET NEW INTOLERANCE LEVELS OF
  - RESPONSE
  - EASE OF USE
  - ACCESS
  - RESISTANCE TO INERTIA





## **CHARACTERISTICS**

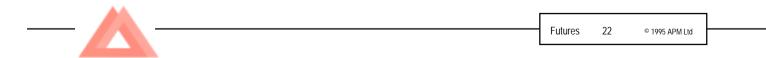




### - MY INFORMATION SPACE IS THE THINGS I HAVE COLLECTED

..... OR HAD FORCED UPON ME BY THE COMPANY

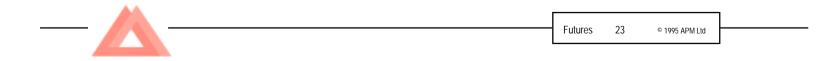
- SOME I USE OFTEN AND ARE LOCAL
- SOME I USE INFREQUENTLY AND ACCESS REMOTELY
- SOME MOVE WITH ME



## THE FOUR PERSONALS

- **RESPONSE** REAL TIME ANSA
- DISCOVERY FIND IT ANYWHERE ANSA
- **DIVERSITY** NOT LIMITED BY MY INSTALLED SOFTWARE, AND I'LL PAY WHEN IT WORKS
- **EMPOWERMENT** LIKE MY HOUSE, I'LL

PROTECT WHAT I CHOOSE - ANSA



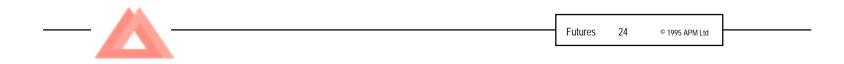
## **SPACE**

### - MY TIME IS PRECIOUS

- I WILL NOT WASTE IT MAKING SOFTWARE WORK, HIDE THE COMPLEXITY - ANSA

- MOBILITY

- WRONG CONCEPT - IT'S CONTACTABILITY. PEOPLE HATE TRAVEL AND HATE BEING OUT OF CONTACT



## **OPENNESS**

- UNIVERSALITY
  - GENERALLY RECOGNISABLE AND LOCALLY OPTIMISED - LIKE A CAR, I DON'T NEED THE INSTRUCTION BOOK TO DRIVE IT
- NO ONE-SIZE FITS ALL
  - MANY MODELS, LIKE CARS ANSA



### THE HIDDEN ESSENTIALS

- I DON'T WISH TO SEE THE:
  - NETWORKS
  - RELIABILITY AND DURABILITY MECHANISMS
  - CHARGING SYSTEMS
  - SECURITY MECHANISMS
  - **OPERATING SYSTEMS**
  - INFORMATION BASES
  - TRANSPORT SERVICES
  - **REGULATIONS**

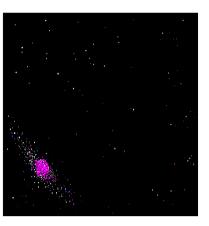


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## - IF THEY ARE HIDDEN

- WHO PROVIDES THEM?
- WHO PAYS?
- WHAT'S THE FOOD CHAIN?



## ...SOFTWARE QUALITY ?



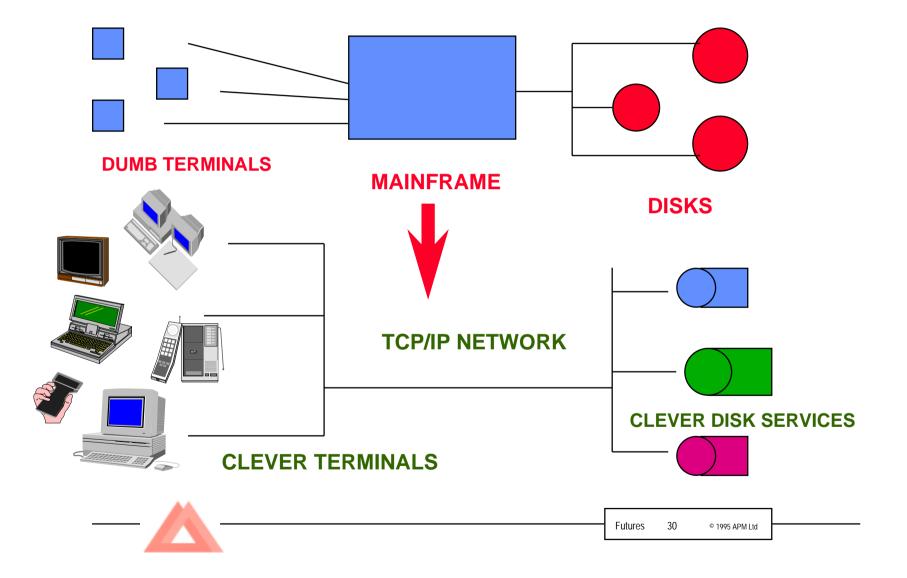


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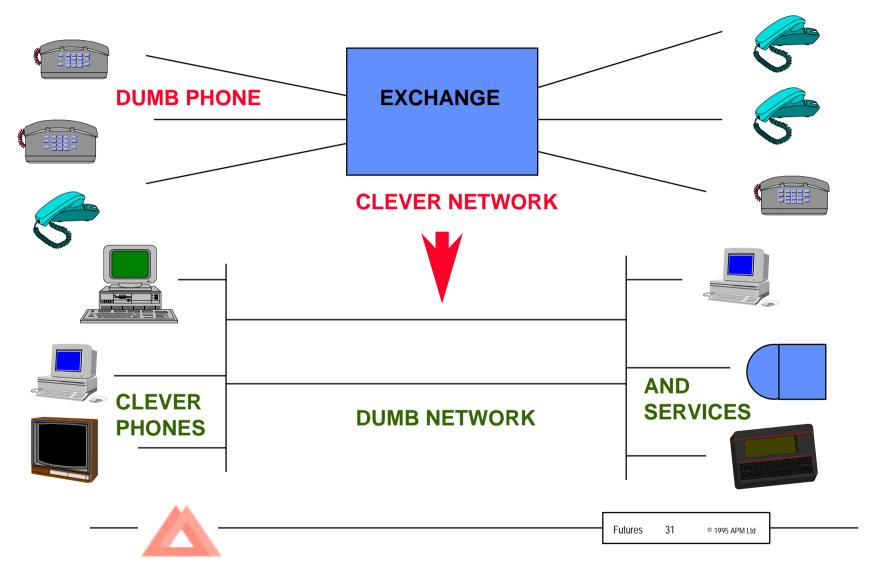
## **INGREDIENTS**



#### **COMPUTING INTELLIGENCE MOVES TO THE EDGE**



#### TELECOMMS INTELLIGENCE MOVES TO THE EDGE



#### THE USER DRIVE FOR A NEW BASE

1964	1974	1984	1994	2004	2014
VM, VME	Unix, VMS	DOS	GUI, NT	new	
Time share Batch	File based	PC-based	Network	Multi-net Multimedia	
DP dept	A wizard	You try to	No one	It runs itself	
	- and you can't find him	- and you fail	- and you wish they would	- at last?	at las again



## TECHNICAL INFRASTRUCTURE BROWSER 2000

Custom	Applications	
User Written Facilities - scri	pts for "my" tasks, "my" agents	
Programming: active, moveable	Information Base, Navigator	
Meta: intentional, reflective	Meta: Classifiers	
Distribution/federation/security		
services	Automatic configuration builder, manager and biller	
Application-attached OS services		
(STANDARD)		
Basic micro kernel	(invisible)- STANDARD	



## TODAY'S PHASE

- NT IN THE SERVER
- BROWSERS IN THE CLIENT
- UNIX PLATEAUS / DECLINES



### A KEY DISRUPTIVE TECHNOLOGY

- PLUG AND PLAY "STICKY OBJECTS
  - SELF ADJUSTING
  - LARGE AND SMALL
  - IN MOTION
  - ACTIVE CONTENT
- AUTO BUILD, TAILOR AND MANAGE

Futures

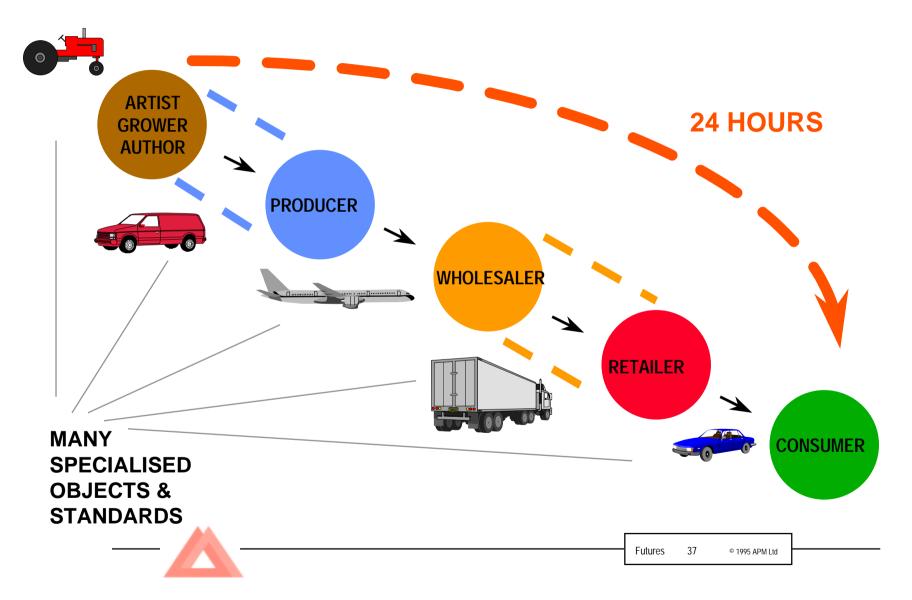
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- THE OBJECT AND ITS USER
- AND CHARGE FOR THE SERVICE

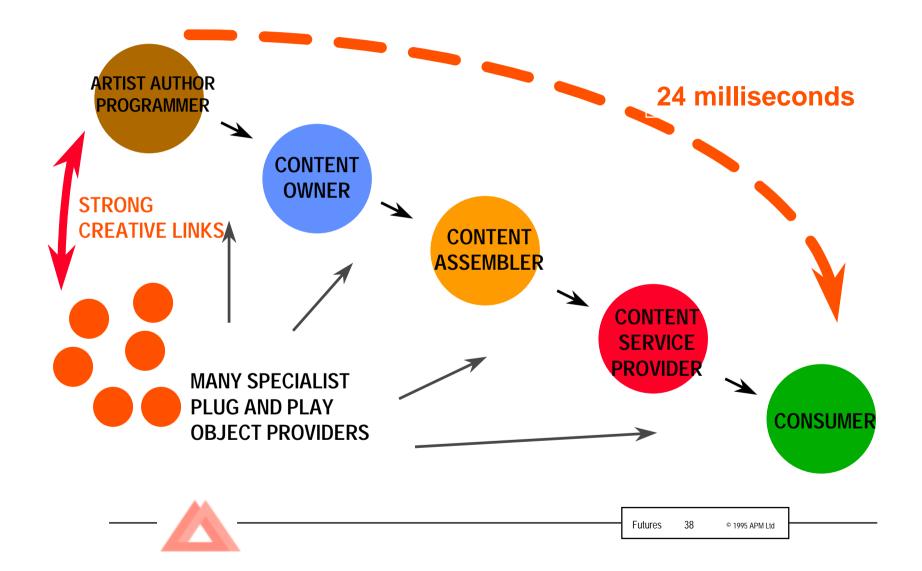
## THE MARKET



#### **MARKET MODEL - CONSUMER FOOD CHAIN**

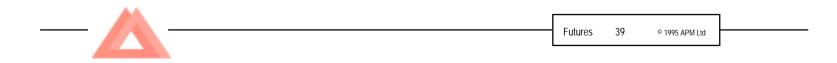


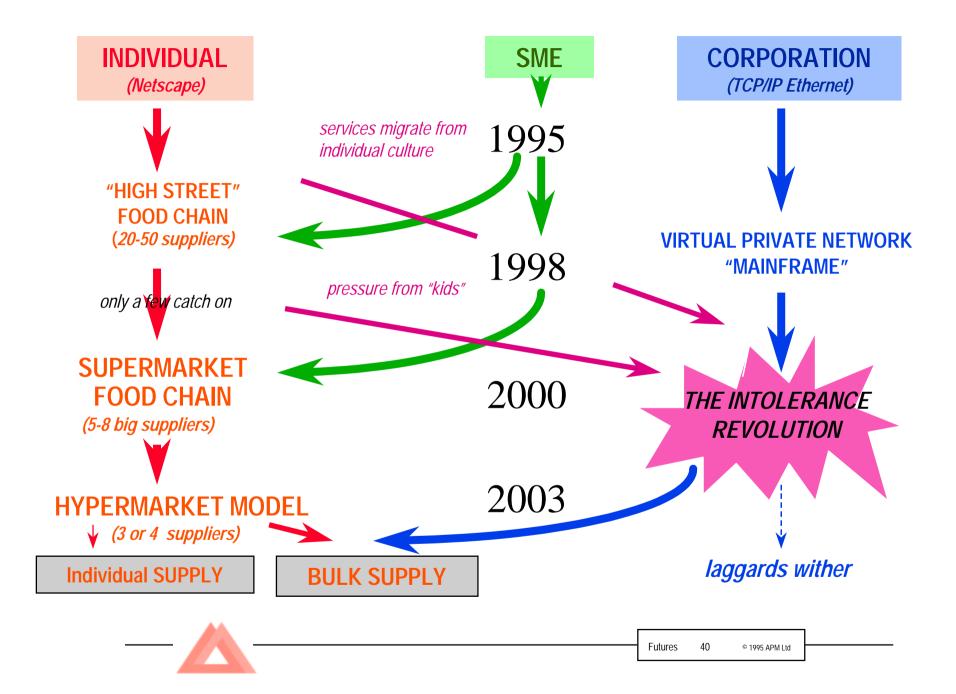
#### **THE INFORMATION FOOD CHAIN - DRAFT 1**

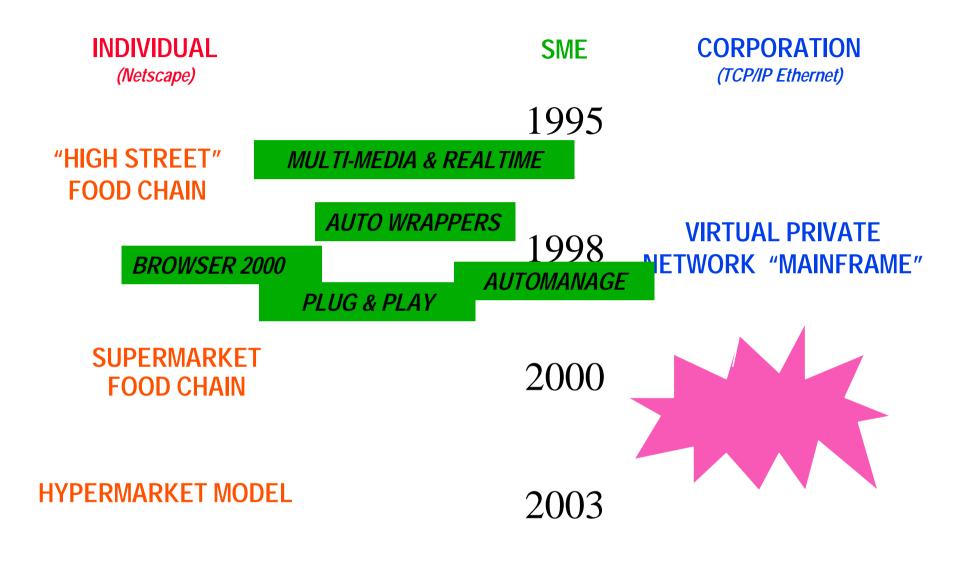




- THE HORIZON IS 10X SHORTER
- NOTHING WILL STOP THE USER-DRIVEN MARKET'S THIRST FOR THE BENEFITS FLOWING FROM NEW TECHNOLOGY
- BEWARE OF THE CLAIMED CURRENT NEEDS OF MANY OF THE BIG END USERS









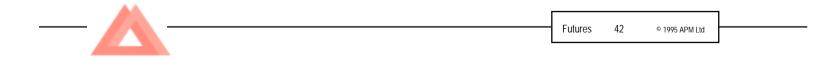
# THESE MODELS CHANGE THE CHANNELS TO MARKET



-SERVICES



.... MICROSOFT



# WHO SETS STANDARDS .....

#### 



#### OMG, OSF, ISO ETC ARE ALL TOO SLOW



# **A BUSINESS SCENARIO**

- BROWSERS EVOLVE TO BE THE OPERATING INFRASTRUCTURE -NETSCAPE KILLS MICROSOFT
- APPLICATIONS ARE PLUG AND PLAY OBJECTS SUPPLIED BY SMALL SPECIALIST COMPANIES
- BIG CORPORATE SYSTEMS ARE OBJECT WRAPPED & MAINFRAMES / UNIX IS "REPLACEMENT ONLY " MARKET
- OBJECTS EACH HAVE THEIR OWN MINI-OS WHICH PLUGS INTO THE BROWSER BASE
- ORACLE IS <u>THE</u> INFORMATION BASE SUPPLIER
- CABLE COMPANIES DELIVER HIGH B/WIDTH INTO THE HOME OVER FIBERS, TELCOS RESTRICTED TO THE TRUNKS

Futures

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- SYSTEM INTEGRATION IS A DIEING BUSINESS

# A NIGHTMARE?

# THE ENTERTAINMENT INDUSTRY AND NETSCAPE DO IT





# WHY? .... BECAUSE THEY WILL GET ON WITH IT

.... BUT AT WHAT QUALITY LEVEL?





## ..... NEVER UNDERESTIMATE IBM

# ..... OR THE UNEXPECTED

#### – E.G. MCNICHOLAS COMMUNICATIONS, J.DOCWRA



### THESE MODELS NEED MORE WORK

# - ALREADY THEY SHOW

# SOME HIGH RISKS

- A MISMATCH WITH MUCH OF THE IT INDUSTRY
- A ROUGH MATCH WITH A TELCO
- BIG, SLOW TRADITIONAL COMPANIES LOSE OUT



# SPEED OF RESPONSE WILL BE CRITICAL



- IT AND TELCO INDUSTRIES ARE SLOW COMPARED WITH THE ENTERTAINMENT INDUSTRY



- RISK MODELS ARE DIFFERENT, TOO

".....if only these damned objects would stay still so that we can arrange and manage them....."

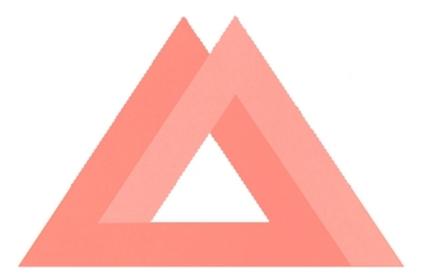


THE IT INDUSTRY IS STILL TRYING TO BUILD A BETTER "MAINFRAME"

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# ANSA



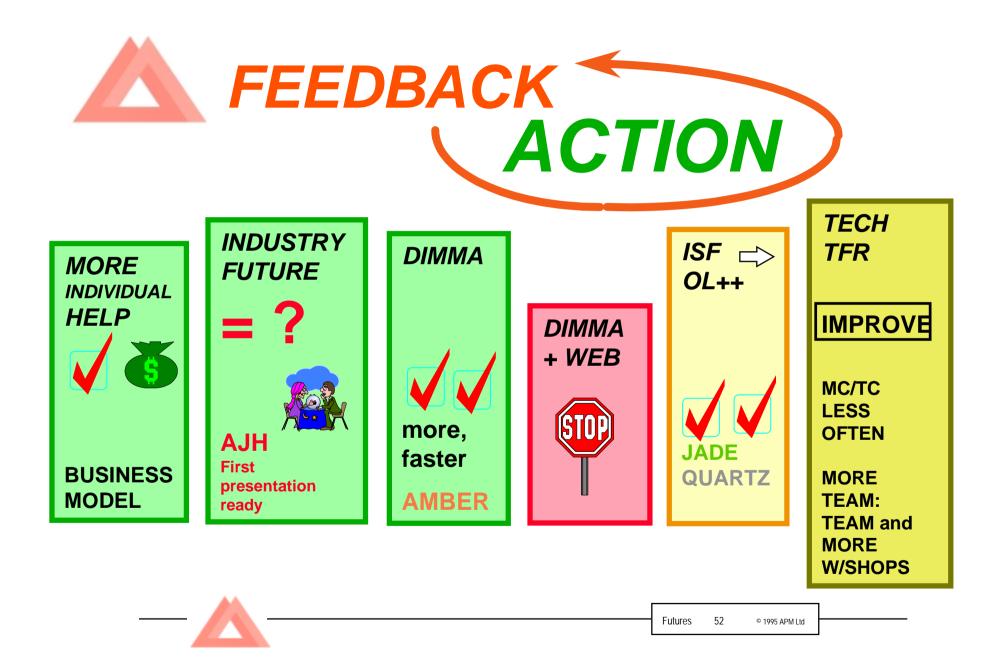


# - SHARED VIEW OF THE FUTURE

# KEY DIFFICULT TECHNOLOGIES SHORT TIMESCALE (OL+) LONG TIMESCALE (DIMMA)

- DISRUPTIVE TECHNOLOGIES



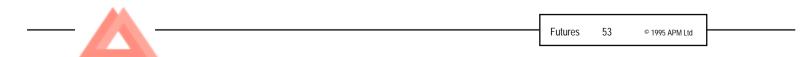


# ANSA :

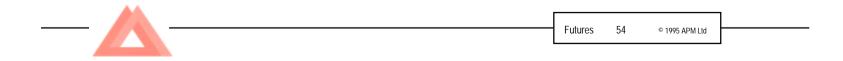
- HAS A VAST KNOWLEDGE OF THE KEY INGREDIENTS AND HOW TO APPLY THEM

- IS READY TO TACKLE PLUG AND PLAY OBJECTS AND AUTOBUILDERS

- AND THE FOOD / SUPPLY CHAIN MODELS



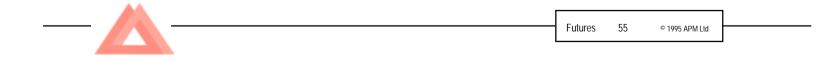
This is the end of the main presentation; the slides which follow are / were for specific audiences.



# **TECHNOLOGIES**

# - MAINSTREAM

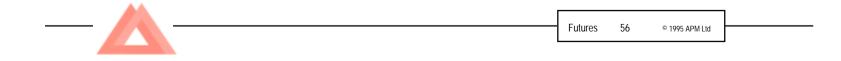
# - **DISRUPTIVE**





## MICHAEL EYRE - CEO

#### **ANDREW HERBERT - TECHNICAL DIRECTOR**



# **ISSUES TO EXPLORE**

- **DISRUPTIVES** 
  - STICKY OBJECTS
  - OTHERS ?
- MAINSTREAM DIVERGENCE ON RT/MM
- PRIVATE V SHARED



#### WORLD WIDE INFORMATION SYSTEM 2005

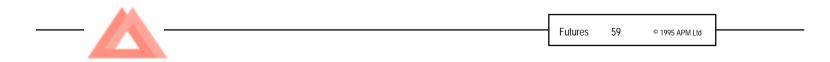
- NEW TECHNOLOGIES SOME UNDERSTOOD, SOME NEW
- NEW MARKET MODEL PARTLY UNDERSTOOD - PROFOUND CHANGES TO EXISTING PLAYERS

# ..... UNDERSTAND THESE!



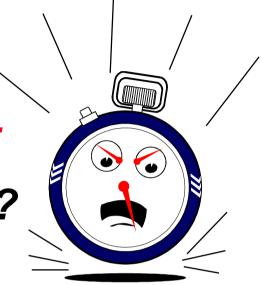


- HAS COMMAND OF MANY OF THE TECHNOLOGICAL INGREDIENTS
- UNDERSTANDS THE ESSENTIAL NEW ONES
- CAN HELP WITH BUSINESS MODELS
- IS A PROVEN FORUM FOR INTERCHANGE WITH OTHER PLAYERS





- LOOSE AND FLEXIBLE
- WHAT IS THE FUTURE?
- FASTER RESPONSE

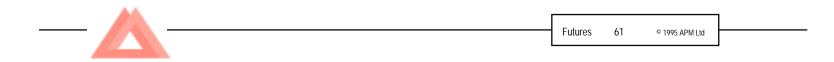


- GIVE US MORE, FASTER



- IT IS VITAL TO UNDERSTAND THE
- TECHNOLOGIES THAT WILL CAUSE THIS
- **REVOLUTION:**

- TO DEPLOY THEM
- TO UNDERSTAND WHO ELSE WILL



#### THE MAIN GROWTH & OPPORTUNITY ...

- PRODUCTS, SERVICES, NETWORK TRAFFIC, APPLICATIONS, INFRASTRUCTURE ...?
- WILL THE MOST INTENSIVE USES BE OFFICE, HOME, MOBILE OR ...?

