

**TOPIC -**

**“ JUST OUTLINE -**

**SIGNIFICANCE OF KAYPROS OF 1980'S**  
**IN EVOLUTION & REVOLUTION OF**  
**PORTABLE PERSONAL COMPUTERS**

**[PPC'S] “**

**SCIENCE, TECHNOLOGY & SOCIETY**  
**{ “STS” }**

**BY**  
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**FOR PRESENTATION AT THE 33RD 2008  
TRENTON COMPUTER FESTIVAL**

**AS SPEAKER & FULL PAPER IN TCF  
DIGEST CD OF PROCEEDINGS**

**APRIL 26 – 27, 2008**

**THE COLLEGE OF NEW JERSEY**

**EWING, NJ**

**THANK YOU FOR OPPORTUNITY TO  
PRESENT THIS TALK & PAPER**

**ALLEN KATZ, ORGANIZER  
SPEAKER PROGRAM**

**SOL LIBES, EDITOR FOR PAPERS  
FOR THE TCF CD OF THE  
PROCEEDINGS**

**[WWW.TCF-NJ.ORG](http://WWW.TCF-NJ.ORG)**

## **ABSTRACT CORRECTION**

Please note that there are **some errors** in the abstract printed and online of the TCF program with respect to this presentation. These errors are **corrected** in the Abstract on the TCF Digest CD.

This is **my fault** in submitting the original abstract and I apologize for any inconvenience it may have caused.

As far as I could determine, Osborne was **not** involved with Kaypro in making their computers. **Nor** was he was employed by Kaypro. He did leave the Osborne Computer Company [OCC] **before** it filed for bankruptcy.

**However, in discovering these errors, it alerted me to be sensitive to any references about Osborne and Kaypro.**

**Indeed, there is a reference I found that Osborne was working on a deal with Kaypro to sell software through his book publishing efforts!**

**Very simply, there was a court case with a software developer over such types of sales and he had to stop this activity in general. This is further explained and referenced later in this paper.**

- \* Osborne's book on **hypergrowth** tells his side of the bankruptcy of the Osborne Computer Company.
- \* It has many specific details involving the financial details on the bankruptcy. **Much to ponder here!!!**
- \* The book does intimate that although they were intense competitors, Osborne had a high regard for Kaypro.
- \* **NOTE – KAYPRO FILED FOR BANKRUPTCY IN 1990 & ASSETS SOLD IN 1995 [ABOUT 10¢ / \$1].**

# CORRECTED ABSTRACT

“It is difficult to know where you are going, unless you know where you have been.”

In the **early 1980's**, only **”3”** portable personal computers [**PPCs**] existed: The **Kaypro** & **Osborne** using the **CP/M** operating system [the first true portable] & the **Compaq** using **PC/MS-DOS** [the first MS-DOS portable].

Many of the **Kaypro's** innovations & features (“**Compleat**” {Complete} computer, affordable price, bundled home & business software, suitcase style, rugged construction, detachable keyboard, etc.) established some of the **standards** for PPCs.

**But long term business success depends on more than a good product by an established customer oriented electronic company.**

**Regrettably, Kaypro filed for bankruptcy in 1990, a little more than 7 years from its start.**

**Osborne bankruptcy filing was only about 3 years after they began in 1983.**

**Compaq continued on with an incredible long term record of successes!**

**Why?**



\* **USUAL DISCLAIMERS / CAVEATS / LIMITATIONS, ETC.** - PLEASE SEE FULL

PAPER FOR SPECIFIC DETAILS

\* NATURALLY, IN OUR SO LITIGIOUS SOCIETY TODAY, THERE CAN BE **NO LIABILITY FOR ME IN ANY WAY & IN ANY FORM** WITH RESPECT TO THIS TALK & PAPER. IT IS PRESENTED IN “GOOD FAITH” & “AS IS.” IT IS BASED ON THE BEST INFORMATION AVAILABLE TO ME AT THE TIME.

\* IF YOU MAKE USE OF THIS PAPER, THEN YOU ARE AGREEING IN FULL TO THESE CONDITIONS OF USE.

I WOULD LIKE TO SHARE  
WITH YOU

**A VERY BRIEF,**  
**IMPORTANT EXTRAORDINARY**  
**ERA IN MODERN COMPUTING**  
**HISTORY I DISCOVERED**

AN INCREDIBLE ADVENTURE

FASCINATING MANY “WHAT IFS”

# AUDIENCE ANALYSIS

SOME QUESTIONS FOR “YOU”

**PLEASE SHOW HANDS** –  
HOW MANY PEOPLE –

NOW OWN A KAYPRO?

DID OWN A KAYPRO?

KNOW OF KAYPROS?

**OSBORNE**

**COMPAQ OF 1980'S**

# INTRODUCTION

WHY I WROTE THIS PAPER

& GAVE THIS TALK

FOR 2008 TCF

# **SOME INITIAL POINTS –**

**[MORE SPECIFIC DETAILS DEVELOPED IN FULL PAPER**

**SIMPLIFICATION – JUST 1980'S PPC'S**

**[PORTABLE, PERSONAL COMPUTERS]**

**COMPATIBILITY – DIVERSE AUDIENCES**

**MOUNTAINTOPS – MAIN POINTS**

**PERSPECTIVE & CONTEXT – 1980'S**

**“YOUR” CHALLENGE – WHAT WILL**  
**“YOU” SAY – 25 YEARS FROM NOW OR 3**  
**– 5 YEARS!**

**ATTRACTION OF COMPUTERS**

\* PLEASE CONSULT THE FULL PAPER  
IN THE 2008 TCF CD DIGEST FOR MORE  
SPECIFIC DETAILS

\* THIS **1 HOUR** TALK CAN ONLY VERY  
BRIEFLY SUMMARIZE MANY OF THE  
MAIN ASPECTS OF THE FULL **100 +**  
**PAGE** PAPER INCLUDING NUMEROUS  
REFERENCES

\* THIS IS MY INTERPRETATION OF THE  
DATA BASED ON MY APPROACH

\* PLEASE DO YOUR OWN RESEARCH &  
SHARE YOUR RESULTS WITH US.  
THANKS!

# SPECIFIC PERSPECTIVE / CONTEXT

1982, TIME MAGAZINE DECLARED  
“**THE COMPUTER**” THEIR “MAN OF THE  
YEAR FOR 1981”!

IN FEBRUARY 1982, **STEVE JOBS**,  
CHAIRMAN OF APPLE SINCE 1981,  
APPEARS ON THE COVER OF TIME  
MAGAZINE

**BY THE END OF THE 1990'S,  
MORE PC'S WERE BEING  
SOLD WORLDWIDE THAN  
CARS OR TV'S!**

**ONLY 20 YEARS AFTER PPC'S  
BEGAN IN EARLY 1980'S!**



# EARLY 1980 COMPUTER OPTIONS

Mainframes

Desktops for offices

“Kits” to build your own for hobbyists

A wide variety of very diverse systems

- all **trying to be “real”** computers as we know them today

Special cases – initial Apple, IBM & Radio

Shack systems – **NOT REALLY PPC'S**

# FIRST PERSONAL COMPUTER [PC]

ORIGINAL IBM PC {"PERSONAL COMPUTER"}  
MODEL 5150 OF 1981

ACTUALLY A DESKTOP & NOT PORTABLE,

HOWEVER IT REVOLUTIONIZED  
COMPUTING AND SET MANY OF THE  
STANDARDS FOR PPC'S.

# Enter the “Portable” Personal Computer [PPC] In the Early 1980’s

THESE WERE NOT LAPTOP COMPUTERS!

THEY WERE **VERY LARGE** – SUITCASE SIZE &  
**VERY HEAVY [20 – 30 POUNDS]**, HARDLY  
SOMETHING YOU WOULD PUT ON YOUR LAP  
TO USE.

**SELF CONTAINED “COMPLEAT”  
[KAYPRO’S TERM] / COMPLETE SYSTEMS**

**ABLE TO DO ALMOST ALL SMALL BUSINESS  
& HOME USERS WOULD WANT TO DO.**

**A NEW REVELATION FOR PAST COMPUTER  
USERS.**

**PREVIOUSLY NO REALISTIC “COMPLEAT /  
COMPLETE” COMPUTER SYSTEMS FOR  
EVERYDAY USERS.**

**PORTABLE** – NOT LAPTOPS, BUT SUITCASE  
LIKE - REALISTICALLY & RELATIVELY EASILY  
TAKEN ON THE ROAD & USED AT WIDE  
VARIETY OF LOCATIONS, NOT JUST IN  
OFFICE OR AT HOME – **DESIGNED TO FIT  
UNDER AIRPLANE SEATS FOR AIR TRAVEL!**

**PERSONAL** – GENERALLY **AFFORDABLE** FOR  
**SMALL BUSINESS & HOME USERS.**

# TRUE COMPUTERS

**NOT JUST CALCULATORS**

**COULD DO MOST BASIC COMMON COMPUTER TASKS –**

**WORD PROCESSING,  
SPREADSHEETS,  
DATABASE MANAGEMENT,  
COMPUTER PROGRAMMING,  
NETWORKING THRU A MODEM, ETC**

# **SELF CONTAINED – INCLUDED**

**MONITOR,  
KEYBOARD,  
STORAGE DEVICE – DISK DRIVE,  
SOFTWARE, ETC.**

**TRULY “COMPLETELY COMPLETE” SYSTEMS**

**READY TO USE “RIGHT OUT OF THE BOX!”**

# 3 FIRST MAIN “PPC” PLAYERS

OSBORNE, KAYPRO & COMPAQ

“THE CAST OF CHARACTERS”

*TO PLAY THEIR PARTS*  
ON THE “PPC” STAGE



# OSBORNE 1 - FIRST "PPC" IN 1981

INITIALLY BUILT IN EAST COAST NJ PLANT

NEW COMPANY FOUNDED BY ADAM  
OSBORNE

WELL KNOWN TECHNICAL WRITER OF  
VERY UNDERSTANDABLE COMPUTER BOOKS

SAW THE NEED AHEAD OF MANY OTHERS  
& PRODUCED A COMPUTER TO ADMIRABLY  
FILL THIS NEED.

# KAYPRO II - SECOND IN 1982

BUILT IN WEST COAST PLANT IN CA

BY A LONG ESTABLISHED INTERNATIONAL  
ELECTRONIC MANUFACTURING  
COMPANY - **NON-LINEAR SYSTEMS**

FOUNDED BY ANDY KAY [NOT "ALAN" KAY].

# COMPAQ PORTABLE - THIRD IN 1983

**BUILT IN TEXAS PLANT**

**NEW COMPANY FOUNDED BY ROD CANION,  
JIM HARRIS & BILL MURTO**

**FORMER SENIOR TEXAS INSTRUMENTS  
MANAGERS**

**INVESTED \$1000 [**\$2400** IN TODAY'S  
DOLLARS] TO FORM COMPAQ**

NAME DERIVED FROM -  
COMPATIBLE AND QUALITY  
COMPAQ

MY THOUGHTS -

COMPAQ WAS COMPACTQ  
{A COMPACTQ COMPUTER}

[BUT FOUND **NO** REFERENCE  
TO SUCH A WORD CONNECTION]

**NOTE - IBM DID NOT COME OUT WITH A  
“REAL PPC” UNTIL 1984**

**CALLED SOME EARLIER COMPUTERS  
“PORTABLE” {?} TO DISTINGUISH THEM  
FROM LARGE STATIONARY MAINFRAMES**

**THESE “PORTABLES” {?} WERE REALLY  
MORE LIKE DESKTOPS – BIG / HEAVY  
– NOT EASILY MOVED**

**THEY WERE ALSO VERY EXPENSIVE!**

**EARLY “PORTABLE” {?} IBM COMPUTERS –  
REALLY *DESKTOPS* – SINCE NOT MAINFRAMES**

**1975 IBM 5100 = \$19,975 {\$78,883}**

**1978 IBM 5110 = \$10,225 {\$32,847}**

**1981 IBM 5150 DESKTOP PC = \$3,000 {\$7,077}**

**1981 OSBORNE 1 PPC = \$1,795 {\$4,235}**

**1982 KAYPRO II PPC = \$1,795 {\$4,235}**

**1983 COMPAQ PORTABLE PPC = \$3,590 {\$7,678}**

**1984 IBM 5155 PPC = \$4,225 {\$9,718}**

**{NOTE – RED COSTS ARE IN TODAY’S DOLLARS}**

**OSBORNE & KAYPRO WERE CP/M  
OPERATING SYSTEMS**

**COMPAQ WAS IBM COMPATIBLE USING  
PC-DOS / MS-DOS BY MICROSOFT, LIKE IBM**

**BUT THEIR OWN BIOS, NOT IBM'S BIOS,  
SO THERE WOULD BE NO PATENT  
INFRINGEMENTS.**

**DECISION BETWEEN CP / M &  
PC-DOS / MS-DOS NOT AS  
SIMPLE AS MAY FIRST APPEAR**

**BUT A PIVOTAL DECISION FOR  
ULTIMATE SUCCESS / FAILURE**

**ALSO GOOD REFERENCE –  
“ACCIDENTAL EMPIRES”  
BY ROBERT X. CRINGELY**



**SPECIFICS - SPECIFICATIONS**

**COMPARISONS – CONTRASTS**

**\*\*\*SYSTEMS\*\*\***

**“HARDWARE - COMPUTERS”**

**“SOFTWARE – BUNDLES”**

**ALL THREE PPC'S SHARED SAME**  
**GENERAL HARDWARE**  
**CHARACTERISTICS -**

**STURDY LARGE CASE – SUITCASE STYLE**  
**HEAVY – 20 – 30 POUNDS**  
**MONITOR**  
**KEYBOARD**  
**DISK DRIVES FOR STORAGE**  
**POWER SUPPLY**  
**MAINBOARD – “MOTHERBOARD”**  
**[IN CASE NOT KEYBOARD – E.G. TRS-80]**

# SOFTWARE

**OSBORNE & KAYPRO PROVIDED WHOLE SUITE COMMON PROGRAMS –**

**WORD PROCESSING, SPELL CHECK,  
DATABASE, SPREADSHEET,  
PROGRAMMING IN BASIC,  
COMMUNICATION, GAMES, ETC.**

# COMPAQ DID NOT

IT WAS IBM COMPATIBLE, SO LOT OF SOFTWARE ALREADY AVAILABLE

BUT DID PROVIDE LOTUS SYMPHONY -  
ONLY SPREADSHEET, WORD  
PROCESSOR & COMMUNICATION  
– BUT **NOT** BIG SUCCESS!

BESIDES JUST USUAL OPERATING  
MANUALS

**WHAT THEY DID “NOT” HAVE THAT WE  
TAKE FOR GRANTED TODAY –**

**MOUSE – ONLY KEYBOARD TO  
COMMUNICATE WITH IT**

**CD / DVD DRIVE – ONLY 2 DISK DRIVES  
OF ONLY 191K OR 320K CAPACITY**

**HARD DRIVE – SO NO PRELOADED  
OPERATING SYSTEM & SOFTWARE**

**NO VIRUSES! [YET! – APPLE  
DISCOVERED 3 VIRUSES IN 1981  
THAT CAME WITH SOME GAMES  
THAT WERE INCLUDED IN THEIR  
OFFERING]**

**FEW REMOTE BULLETIN BOARDS TO CONTACT  
BY MODEM [EXTERNAL ACOUSTIC COUPLER] –  
ONLY ABOUT 200 IN EARLY 1980'S**

**NO REAL GRAPHICS OR COLOR – BUT  
COMPAQ DID HAVE SOME GRAPHICS**

**NO WINDOWS – ONLY “TEXT ON SCREEN”**

**YOU HAD TO “MEMORIZE” SOFTWARE  
COMMANDS OR USE COMMAND LISTS –**

**NO PULL DOWN MENUS LIKE IN WINDOWS  
FOR COMMANDS**

# DIFFERENCES -

**KAYPRO HAD ALUMINUM METAL CASE – MORE RUGGED & MINIMIZED INTERFERENCE WITH OTHER ELECTRICAL DEVICES [FCC CONCERNS – E.G., RADIO SHACK HAD TO EVENTUALLY RECALL ALL TRS-80'S]**

**BUT EXPOSED COOLING VENT HOLES IN METAL CASE COULD LET THINGS FROM ENVIRONMENT INTO IT [E.G., RAIN, SNOW, DUST, DIRT, BUGS, ETC.].**

\* **KAYPRO** ALSO HAD KEYBOARD, SERIAL & PARALLEL PORTS EXPOSED ON THE BACK OF CASE.

\* BUT SEVERAL VINYL & NYLON OUTER COVERS / CARRYING CASES AVAILABLE FOR SOME PROTECTION

\* **OSBORNE** HAD A VERY SMALL **5"** **DIAGONAL SCREEN** AS OPPOSED TO THE LARGER **9"** SCREEN.

\* BUT APPLE MACINTOSH HAS A **9"** SCREEN! SO THIS SIZE IS ACCEPTABLE EVEN TODAY!



**OSBORNE** ALSO DID **NOT** HAVE A DETACHABLE KEYBOARD, BUT OTHER 2 DID.

**COMPAQ** MADE IT MORE DIFFICULT TO LOSE THE COILED KEYBOARD CONNECTING CABLE BY MAKING IT RETRACTABLE.

**MISPLACING OF THIS CABLE A USUAL OCCURRENCE FOR MANY KAYPRO OWNERS!**

**KAYPRO & OSBORNE HAD EXTENSIVE  
“BUNDLED” SOFTWARE – EQUAL TO  
PRICE OF TOTAL SYSTEM**

**COMPAQ DID NOT**

**HOW COULD THEY DO THIS?**

**OSBORNE INDICATED THEY GAVE STOCK  
TO THE SOFTWARE COMPANIES & VERY  
SMALL FEE PER COMPUTER FOR USING  
THEIR SOFTWARE**

**SALES / LOSS**

**ULTIMATE SUCCESS / FAILURE**

# LIKE RELAY RACE –

PARTICIPANTS KEEP HANDING OFF TO  
THEIR NEXT TEAM MATE **EVER MORE  
IMPROVED COMPUTER MODELS**

**NO FINISH LINE**

**SO NOBODY FINISHES**

**ONLY JUST DROP OUT**

**NEW ONES CONTINUALLY ENTER**

**SOME EARLIER AND SOME LATER**

**NOT FOR THE “FAINT HEARTED!”**

**TAKES A VERY SPECIAL COMPANY &  
VERY SPECIAL PEOPLE TO EVEN BE  
SIGNIFICANT PLAYER**

**VERY SIMILAR TO THOSE WHO GO  
INTO THE SMALL FARM TYPE WINERIES  
SO POPULAR TODAY [AN AREA OF MY  
PARTICULAR EXPERIENCE & EXPERTISE]**

# HOW TO MEASURE SUCCESS?

**CAN BE BASED ON MANY FACTORS – LONGEVITY, QUALITY, PROFITABILITY, HIGH IDEALS, PERSONALITIES, FILLING CONSUMER NEEDS / WANTS / DESIRES, UNIQUE – INNOVATIVE PRODUCTS, ETC.**

**BUT -**

**OSBORNE ONLY LASTED ABOUT  
3 YEARS BEFORE BANKRUPTCY FILING**

**KAYPRO LASTED ABOUT 7 YEARS BEFORE  
FILING BANKRUPTCY**

**COMPAQ CONTINUED VERY SUCCESSFULLY  
FOR MANY YEARS - RECENTLY BECAME  
PART OF HP AFTER VERY CONTROVERSIAL  
& CONTENTIOUS “**COURTING PHASE  
& EVENTUAL MARRIAGE CEREMONY!**”**

**FINANCING WAS MADE POSSIBLE BY  
RELATIVELY NEW RISING PHENOMENON  
AT THAT TIME –**

**VENTURE CAPITALISTS**

**1983 WAS A “BOOM YEAR”**

**HOW FORTUITOUS FOR THE PPC INDUSTRY.**



MUCH DEPENDED ON LONG TERM  
“GOOD RESULTS” BY THE PPC INDUSTRY

KEEPING INVESTORS HAPPY WITH  
CONTINUAL FLOW OF GOOD NEWS / PR  
ESSENTIAL TO MAINTAIN CONFIDENCE

SOME SETBACKS WERE EXPECTED &  
UNDERSTOOD

CONSUMERS ALSO TARGETS OF SUCH  
GOOD NEWS TO KEEP THEM BUYING

**SOME**

**HARD**

**DATA**

**TO**

**CONTEMPLATE**

**“SNAPSHOT” OF THE BEST COMPUTER  
SELLERS BY CATEGORY FROM OCTOBER  
1985 TO NOVEMBER 1986 [14 MONTHS]**

**THE HEIGHT OF THE FRANTIC COMPETITION  
IN THE COMPUTER INDUSTRY ESPECIALLY  
FOR PPC'S.**

**OSBORNE WAS ALREADY OUT OF BUSINESS**

**IBM AND APPLE WERE DOMINANT -  
AVERAGE 58%**

**KAYPRO'S AVERAGE ABOUT 6%**

**COMPAQ'S AVERAGE ONLY 3%**

**THE REST, ON AVERAGE OF ABOUT 27%,**

**INVOLVED A LOT OF OTHER SMALL,  
RELATIVELY UNKNOWN COMPUTER  
COMPANIES **ALL DESPARATELY FIGHTING**  
**FOR MARKET SHARE & SURVIVAL!****

# WHY SUCCESS OR FAILURE?

MANY COMPLEX FACTORS, AS IN MOST  
HUMAN ENDEAVORS

THIS TALK CAN ONLY CITE SOME MAJOR  
ASPECTS

MY FULL PAPER ON TCF CD DIGEST  
GOES INTO MANY MORE SPECIFICS IN  
GREATER DETAIL

MY INTERPRETATION OF DATA

MY CONCLUSIONS

# SOME “POSITIVES”

## ALL 3 COMPANIES -

**HIGHLY QUALIFIED & EXPERIENCED  
PEOPLE**

**VERY GOOD & INNOVATIVE  
PRODUCTS**

**INITIAL FANTASTIC SUCCESS**

**TRIED VERY HARD!**

**LITTLE IF ANY REALLY INTENTIONAL  
“BAD DECISIONS” BY PEOPLE ACTING  
“IRRATIONALLY”**

**BUT MANY OTHER COMPUTER COMPANIES  
DID MAKE INTENTIONAL BAD DECISIONS &  
ACTED IRRATIONALLY - AS NOTED IN MANY  
BOOKS**

**ONE IN PARTICULAR –  
“ACCIDENTAL EMPIRES”  
BY ROBERT CRINGELY**

**{“RAMPANT INSANITY RAGING???”}**

# FOR OSBORNE & KAYPRO –

**MANY DECISIONS, IF NOT ALMOST ALL,  
MADE BASED ON BEST DATA AVAILABLE  
**AT THE TIME** & WERE BELIEVED TO BE  
CORRECT **AT THAT TIME, UNDER THOSE**  
**SPECIFIC CONDITIONS****



# BUT A “NEW INDUSTRIAL ERA”

**NEW** PRODUCT

**NEW** MANUFACTURING PROCESS

**NEW** MANAGEMENT REQUIRED

CRITICAL DECISIONS HAD TO BE  
MADE **VERY FAST**

**LITTLE ROOM FOR ERROR**

OSBORNE’S **“HYPERGROWTH”**

THEY WERE IN “UNCHARTED WATERS”

THERE WERE NO PREVIOUS “CASE STUDIES”  
TO GO TO FOR GUIDANCE

NOBODY HAD EXPERIENCED SUCH  
“HYPERGROWTH” IN SUCH FAST MOVING  
COMPLEX TECHNICAL AREAS PREVIOUSLY.

**BUT WHAT DOES “HYPERGROWTH”**  
**REALLY MEAN?**

**ONE EXAMPLE MAY BE VERY USEFUL -**  
**MANY COMPUTER COMPANIES MENTION -**

**10,000 COMPUTERS “ORDERED” / MADE /**  
**SHIPPED / MONTH**

**SO \$ THERE!!!**

**BUT CAN YOU FILL DEMAND?**

**330 / DAY - 14 / HOUR - \*\*\*1 / 5 MINUTES\*\*\***

**[3 SHIFTS 8 HOURS EACH – NO BREAKS!]**

**ALL DAY/ EVERY DAY – “24 / 7”**

**BUT THEY DID NOT GO DOWN EASILY  
OR WILLINGLY!**

**MANY DECISIVE, CREATIVE &  
EXTRAORDINARY ACTIONS WERE  
TAKEN TO TRY TO TURN THE TIDE,  
IN THE MOST PURE & IDEALISTIC  
MOTIVATIONS IN MANY CASES.**

**SOME WORKED & SOME DID NOT.**

**OVERALL, IN THE LONG RUN, IT JUST  
WAS NOT TO BE.**

**THE DECK WAS TOO STACKED  
AGAINST THEM IN TOO MANY WAYS.**

**HOWEVER, THERE ARE TIMES  
“TO CONTINUE TO FISH & THERE  
ARE TIMES TO JUST CUT BAIT &  
MOVE ON.”**

**OVERALL, MANY INVOLVED FINALLY  
REALIZED THIS & **MOVED ON** WITH  
THEIR LIVES, MANY BEING VERY  
SUCCESSFUL IN OTHER AREAS OF  
LIFE AND BUSINESS.**

**MY DECADES OF STS RESEARCH INDICATES  
THERE ARE PATTERNS IN MANY INDUSTRIES,  
ESPECIALLY THOSE INVOLVED WITH HIGHLY  
SCIENCE & TECHNOLOGICAL INTENSIVE  
COMPANIES.**

**MANY REASONS ARE INVOLVED & MANY  
REASONS ARE VERY SPECIFIC TO A  
PARTICULAR INDUSTRY & ONLY RECOGNIZED  
MANY YEARS AFTER THE FACT, SOME MAY  
NEVER BE RECOGNIZED.**

**SOME SPECIFIC**

**DATA**

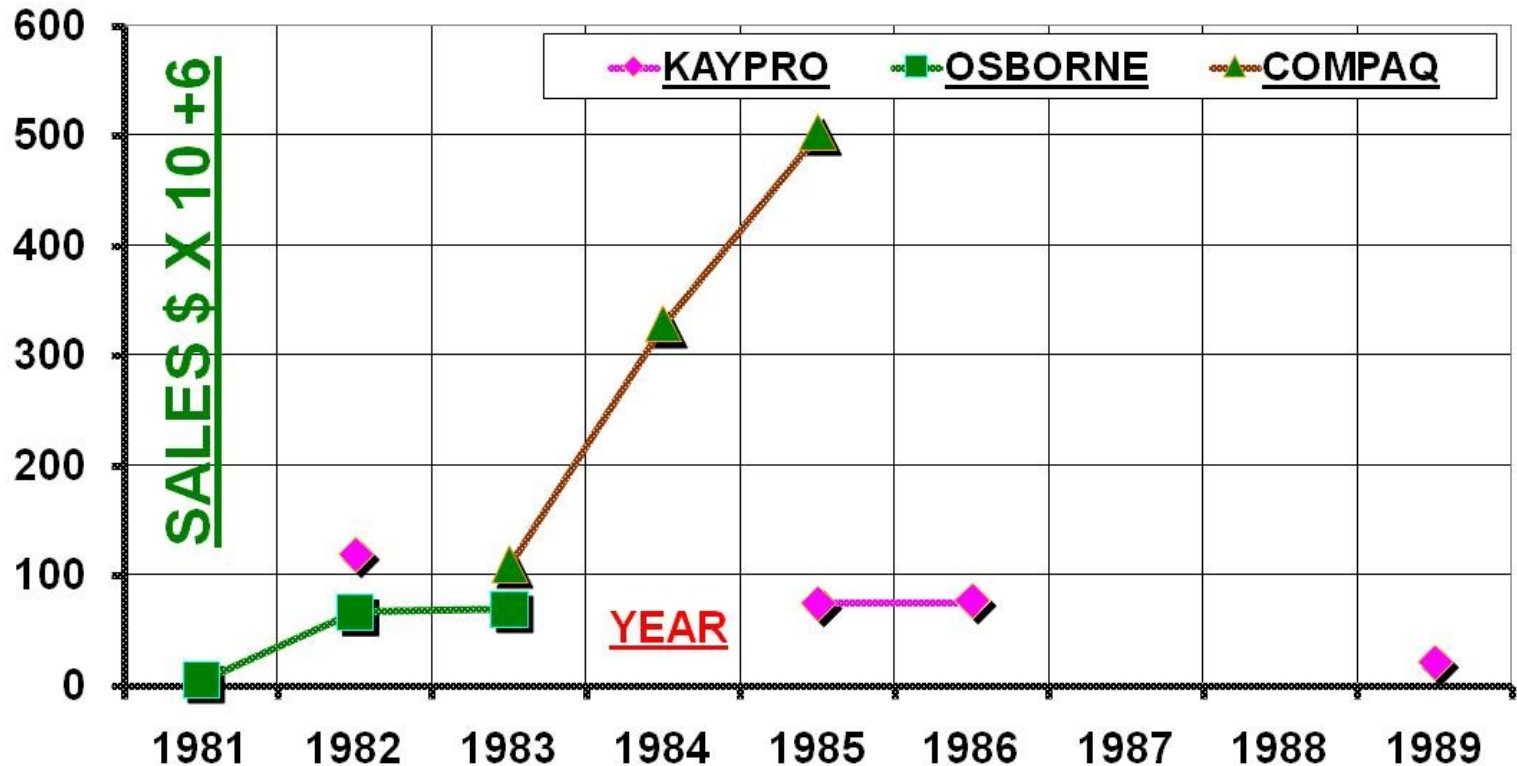
**TO LOOK AT**

**& INTERPRET**

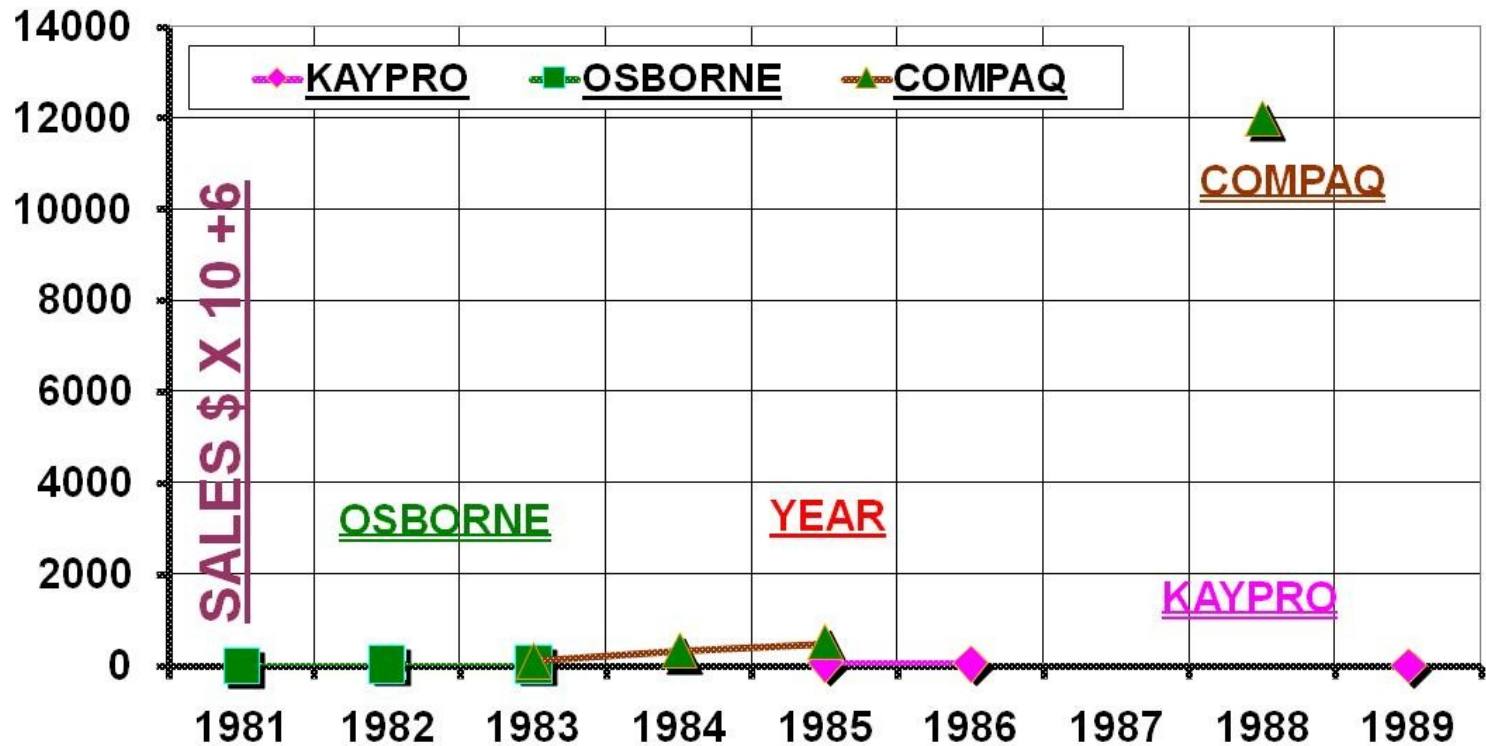


# SALES

**SALES 3 MAIN PPC COMPANIES 1980'S**  
**[BUT NOT COMPAQ 1988 \$12 BILLION]**



## SALES 3 MAIN PPC COMPANIES 1980'S [INCLUDES 1988 COMPAQ \$12 BILLION]



**BUT**

**SALES**

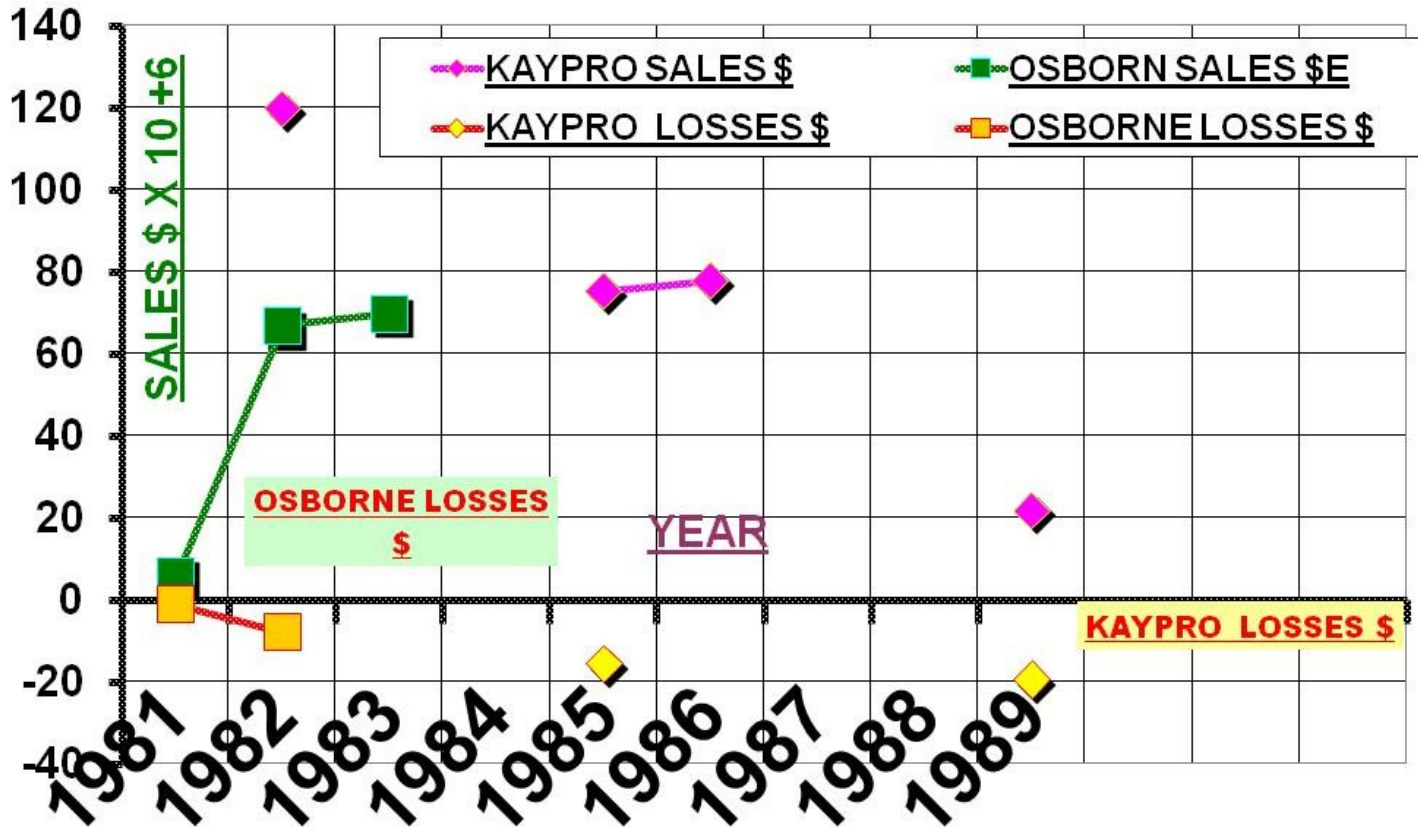
**&**

**LOSSES**

**[INPUT & OUTPUT]**

**{PROFITS???**

**SALES & LOSSES ONLY OSBORNE & KAYPRO PPC COMPANIES 1980'S [COMPAQ HAD NO LOSSES]**



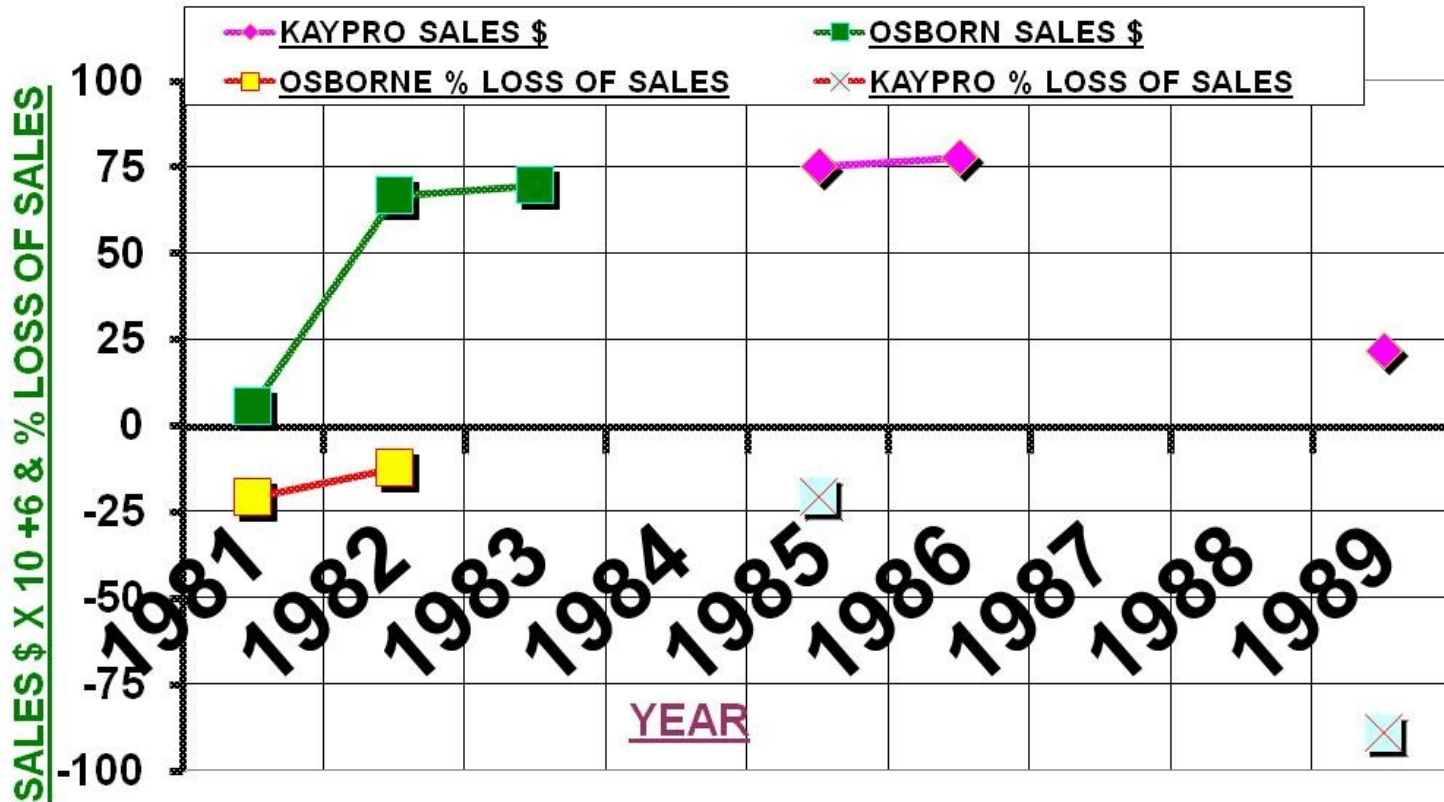
**LOSSES**

**AS “%” OF**

**SALES**

**[WHAT ARE YOU  
GETTING FOR  
ALL YOUR EFFORT?]**

**SALES & LOSSES JUST OSBORNE & KAYPRO PPC COMPANIES 1980'S [NOT COMPAQ - HAD NO LOSSES]**

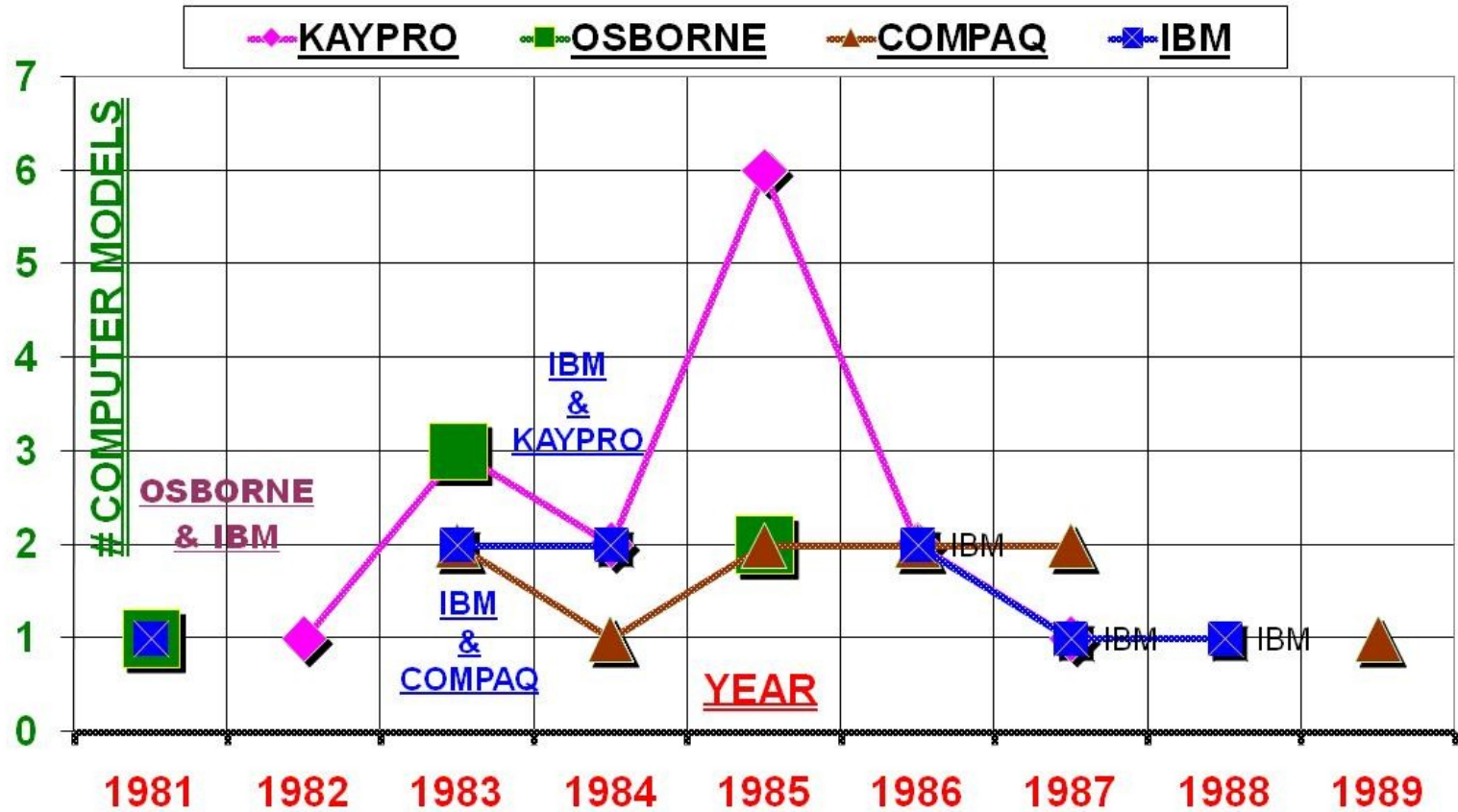


# ANOTHER SIGNIFICANT FACTOR

**“#” DIFFERENT  
COMPUTER  
MODELS  
MADE EACH YEAR**



## 4 MAIN PPC PLAYERS - # COMPUTER MODELS PRODUCED



SO "MY TAKE" ON OSBORNE & KAYPRO  
ARE AS FOLLOWS FROM THE DATA I FOUND

## OSBORNE

"THINGS JUST MOVED TOO FAST!"

THERE WAS LITTLE TIME TO  
ADEQUATELY ADJUST

THEY ONLY LASTED LESS THAN  
3 YEARS

IN A FAST MOVING INDUSTRY, HOW DO  
YOU EVEN DETECT IMPORTANT  
CHANGES, SINCE YOU ARE SO  
BUSY MANAGING SUCH A  
SUCCESSFUL BUSINESS?

**EVEN IF YOU DETECT THESE CHANGES,  
HOW DO YOU ANALYZE IT & DEVELOP  
AN APPROPRIATE “ACTION PLAN”  
FAST ENOUGH, BESIDES “PROPERLY  
IMPLEMENTING” IT FAST ENOUGH?**

**ADAM OSBORNE** KNEW HE NEEDED A  
PROFESSIONAL & EXPERIENCED  
MANAGER – HE KNEW HE WAS  
**NOT** THAT PERSON

**HE HAD DIFFICULTY ATTRACTING SUCH  
PEOPLE TO SUCH A NEW & UNKNOWN  
INDUSTRY**

**HE GOT THE BEST HE COULD UNDER THE  
CIRCUMSTANCES**

**BUT HIS SELECTION PROVED VERY  
CONTROVERSIAL**

**READ HIS BOOK ON “HYPERGROWTH”  
FOR MORE SPECIFICS**

**OSBORNE** COMPANY DID COME OUT OF  
BANKRUPTCY IN 2 YEARS [1985]  
& HAD SOME NEW PRODUCTS,  
BUT ITS TIME HAD PASSED

CERTAINLY DIRECT COMPETITION FROM  
**KAYPRO** DID NOT HELP

BUT **COMPAQ** WAS WELL ON ITS WAY TO  
**CONTINUED FANTASTIC SUCCESS**  
BY 1985 – FAR OUTDISTANCING  
**BOTH** OSBORNE & KAYPRO

# KAYPRO

DATA INDICATE THAT IN 1985 KAYPRO  
HAD SOME SERIOUS DIFFICULTIES  
THEY DID SEEM TO START TO RECOVER  
BUT IN 1989 THEY LOST ALMOST ALL  
THEY EARNED [-89%]  
THEY FILED FOR BANKRUPTCY THE NEXT  
YEAR 1990 & DID NOT COME OUT OF IT  
ASSETS WERE EVENTUALLY SOLD FOR  
ABOUT 10 ¢ ON \$1 IN 1995  
– AS IN MANY SUCH CASES.

**THEY LASTED LONGER THAN OSBORNE**  
– **7 VERSUS 3 YEARS** – SO THEY HAD  
MORE TIME TO TRY TO ADJUST  
HOWEVER, THEY MAY HAVE **TRIED**  
**TOO HARD!**

IN **1986**, RECOVERING FROM **1985**, THEY  
INTRODUCED AN ASTOUNDING **“6”**  
NEW COMPUTERS **IN JUST 1 YEAR!**  
3 OTHER COMPANIES INTRODUCED **1- 3 / YEAR**  
THEIR **OVERALL INTRODUCTION** OF NEW  
COMPUTERS WAS THE **HIGHEST** OF  
**ALL 4** COMPANIES – **2.5 / YEAR**  
VERSUS **1.2 TO 1.7 / YEAR**

**BESIDES DEVELOPMENT & MANUFACTURING COSTS INVOLVED WITH SO MANY COMPUTER MODELS, **PAST & PRESENT**, SUPPORT OF SUCH A LARGE NUMBER OF COMPUTER MODELS CAN ALSO BE A SUBSTANTIAL CHALLENGE –**

**SPARE PARTS  
INEVITABLE “BUGS” TO FIX  
SHIPPING  
MARKETING / SALES  
ETC.**



**THE DATA ALSO INDICATE THAT THEY CONTINUED TO BE HEAVILY DEPENDENT ON CP/M OPERATING SYSTEM COMPUTERS, EVEN THOUGH IBM COMPATIBLE COMPUTERS, NOT USING CP/M, BUT RATHER PC-DOS / MS-DOS OPERATING SYSTEMS WERE CLEARLY PREFERRED BY CUSTOMERS**

**60% OF ALL KAYPRO COMPUTERS WERE CP/M BASED – INCREDIBLY SUCCESSFUL COMPAQ HAD NO “ONLY” CP/M BASED COMPUTERS & NEITHER DID IBM**

**EVEN IN 1986 KAYPRO STILL OFFERED  
A “NEW” [?] CP/M BASED COMPUTER**

**MAYBE THIS WAS JUST TO USE UP  
SPARE CP/M COMPUTER PARTS &  
INCREASE MUCH NEEDED “CASH FLOW”**

**OSBORNE MAY HAVE ALSO BEEN TRYING  
TO DO THIS JUST BEFORE FILING FOR  
BANKRUPTCY IN 1983**

**KAYPRO DID BEGIN TO MAKE IBM  
COMPATIBLE COMPUTERS AFTER  
A SLOW START – NOTE THAT THIS CAN  
BE JUST MONTHS NOT YEARS IN SUCH  
A FAST PACED INDUSTRY!**

**DAVID KAY MAINTAINED THEY WERE  
THE ONLY COMPANY TO MAKE  
TRANSITION FROM CP/M  
TO MS-DOS / PC-DOS – THE OTHER  
COMPANIES WENT BANKRUPT**

**INDEED KAYPRO BEGAN OFFERING IBM  
COMPATIBLE COMPUTERS IN 1985**

**ONLY 2 YEARS AFTER COMPAQ OFFERED  
THEIR FIRST IBM COMPATIBLE  
PPC IN 1983**

**IN FACT, KAYPRO OFFERED FIRST IBM  
COMPATIBLE “LAPTOP” IN 1985**

**BUT NOT SUCCESSFUL FOR MANY REASONS**

**OVERALL KAYPRO –**

**WAS SLOW TO OFFER IBM COMPATIBLE  
COMPUTERS**

**STAYED WITH CP/M COMPUTERS TOO LONG**

**MADE TOO MANY DIFFERENT COMPUTER  
MODELS TOO FAST**

**HAD SOME SERIOUS MANAGEMENT ISSUES**

**ADJUSTING TO THE NEW**

**“HYPERGROWTH” DEMANDS**

**OF THIS NEW INDUSTRY**

**COMPAQ JUST GOT TOO FAR AHEAD TOO  
FAST!**

# **NOTE – ON BALANCE**

**THE CP/M ISSUE IS “VERY COMPLEX”**

**IT WAS WELL KNOWN, ESTABLISHED,  
TESTED & WIDELY USED**

**MS-DOS / PC-DOS WAS NOT**

**IT WAS NEW – “UNTESTED” – BY A  
NEWCOMER TO COMPUTING**

**– BILL GATES!**

**THIS IS A GOOD AREA FOR FURTHER  
EXPLORATION**

## UNLIKE OSBORNE

**KAYPRO HAD PROGRESSIVE, SUCCESSFUL  
& EFFECTIVE MANAGEMENT STYLE**

**FAMOUS ABRAHAM MASLOW, “FATHER OF  
ENLIGHTENED MANAGEMENT”**

**SPENT SABBATICAL LEAVE STUDYING  
KAYPRO’S INNOVATIVE MANAGEMENT  
STYLE DEVELOPED BY **ANDY KAY** & WAS  
VERY IMPRESSED.**

**HE EVEN PUBLISHED A BOOK ON IT!**

**HOWEVER THIS JUST  
EMPHASIZES HOW DIFFERENT  
“HYPERGROWTH” WAS  
OLD SUCCESSFUL MANAGEMENT  
JUST DID NOT WORK  
WITH “HYPERGROWTH”  
DAVID KAY, ANDY’S SON, EVEN  
ADMITTED HIS FATHER WAS SLOW TO  
CHANGE FROM PREVIOUSLY  
ESTABLISHED SUCCESSFUL WORKING  
MANAGEMENT METHODS**



**HOWEVER, WITH COMPAQ DOING SO  
CONSISTENTLY WELL – CONTINUALLY  
BREAKING ALL PAST RECORDS IN  
THE INDUSTRY**

**IT WOULD HAVE BEEN VERY DIFFICULT  
FOR ANY COMPUTER COMPANY TO  
“TRY TO CATCH UP”**

**SO NONE DID & MANY MAY NOT HAVE  
EVEN TRIED VERY HARD!**

# COMPAQ SUCCESS

**NOT MUCH WAS FOUND SPECIFICALLY**

**OBVIOUSLY, DECIDING TO GO WITH IBM  
COMPATIBLE & NOT CP/M WAS  
A MAJOR FACTOR**

**HAD OPPORTUNITY TO LEARNED  
FROM OSBORNE & KAYPRO  
EARLY MISTAKES SINCE  
STARTED LATER OF COURSE**

\* **COULD THINGS HAVE BEEN DONE DIFFERENTLY? SURE!**

\* **COULD OTHERS HAVE DONE BETTER? MAYBE!**

\* **BUT OVERALL, WHAT DIFFERENCE WOULD IT HAVE MADE?**

\* **COMPAQ HAD THE MARKET & WAS ASTOUNDINGLY SUCCESSFUL ON A CONTINUAL LONGTERM BASIS**

\* **TIME TO “BAIL OUT!” & MOVE ON TO OTHER MORE REALISTIC ENDEAVORS**

**& THEY DID! [EVEN IBM!]**

**OVERALL BOTTOM LINE** –

**“VERY CLEAR & DECISIVE”**

**COMPAQ WON!**

**NO CONTEST ONCE  
THEY STARTED**

**NOT EVEN CLOSE**

**NO HOPE FOR ANY CHANGE**

## ON A MORE PERSONAL NOTE –

LONG TIME LOYAL KAYPRO USERS  
WERE IN A “STATE OF SHOCK” THAT  
THEIR TRUSTED KAYPROS WERE  
NOW **NOT SUPPORTED** BY KAYPRO,  
SINCE THEY WERE OUT OF BUSINESS

HOW TO MANAGE?

**THIS IS DELINEATED IN THE FULL PAPER,  
ALONG WITH “SOME LESSONS LEARNED”  
FOR MANAGING OUR COMPUTER SYSTEMS  
TODAY**

## TODAY – IN BRIEF

ADAM OSBORNE – DIED IN INDIA IN 2003

AT AGE 64 – HE WAS KEYNOTE

SPEAKER AT TCF IN 1981

OSBORNE COMPUTER NAME BOUGHT  
BY SWEDISH FIRM & STILL MARKETS  
COMPUTERS UNDER THAT NAME

KAYPRO – ANDY KAY IN HIS 80'S STILL

SELLS COMPUTERS - KAY COMPUTER

WEB SITE SHOWS 3 WINDOWS XP  
MODELS & A SERVER – FOR SMALL  
LOCAL MARKET – STILL STRESSES  
RUGGEDNESS & HIGH RELIABILITY

**COMPAQ** – NOW PART OF **HP**

**IBM** – SOLD PC BUSINESS TO CHINESE  
COMPANY & NOW BACK TO  
CONCENTRATING ON **MAINFRAMES**



AS ALAN KAY [NOT “ANDY” KAY OF  
KAYPRO] SAID SO EARLY IN THE  
COMPUTER ERA,

“THE BEST WAY TO PREDICT  
THE FUTURE IS TO INVENT IT!”

SO STAY IN CONTROL  
AS MUCH AS POSSIBLE  
IN YOUR COMPUTER  
ACTIVITIES

**& SO IT  
GOES!**

**STAY TUNED!!!**