INTELLIVISION

HISTORY AND PHILOSOPHY

SNAPSHOT - MAY 9, 1977

SINGLE -CHIP DEDICATED VIDEO GAMES HAD PEAKED IN 1976

FAIRCHILD HAD INTRODUCED PROGRAMMABLE GAME - BADLY TIMED.

ATARI INTRODUCED VCS FOR 1977 MARKET.

BIGGEST QUESTION IN INDUSTRY WAS WHETHER MARKET WOULD PEAK IN 1977 OR 1978.

CONCEPT AT MATTEL WAS THAT HOME VIDEO GAMES SHOULD

- HAVE RICH GRAPHICS
- PROVIDE LONG LASTING GAME PLAY VALUES

NO SYSTEM ON THE MARKET PERMITTED THAT KIND OF SOFTWARE.

MY TASK - DEVELOP HARDWARE FOR THAT KIND OF SOFTWARE.

NATIONAL HAD FUNCTIONING BREADBOARDS OF A NEW CHIP SET.

MATTEL HAD HAD CONVERSATIONS WITH NATIONAL.

MATTEL INTRODUCED FIRST 2 HANDHELD GAMES - FOOTBALL AND AUTO RACE.

COMPETITIVE CHIP SETS

TWO MORE CHIP SETS WERE SEEN AT JUNE 1977 CES

NATIONAL'S SET

ELEGANT
$46.00

GENERAL INSTRUMENT'S SET

NO GRAPHICS RAM
$25.00

MOS TECHNOLOGY'S SET

ELEGANT BACKGROUND

NO MOVING OBJECTS

TWO MONTH HALT - FALL 1977

BY LATE AUGUST, WE HAD

TALKED NATIONAL DOWN TO SIMPLER CHIP SET FOR $33.00
TALKED GI UP TO ACCEPTABLE SET FOR $30.00

WE DECIDED TO GO WITH NATIONAL

"HANDSHAKE" MEETING BECAME "SCARE MATTEL INTO POSTPONING PROJECT" MEETING

ALL MATTEL WORK ON VIDEO GAMES WAS ORDERED SHUT DOWN.

RAY WAGNER AGREED TO RECONSIDER WHEN WE GOT AN AWAITED REPORT FROM GI.

TWO MONTHS LATER

GI REPORT WAS PRESENTED
PROJECT WAS REVIEWED
PROJECT WAS RE'INSTATED - USING GI CHIP SET

SNAPSHOT - FALL 1978

HAD SELECTED SYLVANIA TO MANUFACTURE MASTER COMPONENT.

WAS APPARENT CHIP SET WOULD NOT MAKE '78 CHRISTMAS MARKET.

TI OFFERED TO DESCRIBE THEIR CHIP SET.

GI AND TI SETS WERE DIFFERENT BUT ROUGHLY EQUIVALENT.
STIC AND 9918 BOTH IN FIRST SILICON THAT WEEK.

TI BELIEVED IN NEED FOR SYSTEM STANDARDIZATION AS DID WE.

TI WAS DEVELOPING COMPUTER (99/4)
MILTON BRADLEY WAS DEVELOPING COMPATIBLE VIDEO GAME.
JOINING FORCES WAS STRONGLY CONSIDERED.

BUT WE WALKED AWAY

TI SYSTEM ARCHITECTURE NOT ACCEPTABLE TO MATTEL.
TI WAS UNWILLING TO MODIFY ARCHITECTURE.

SNAPSHOT - JANUARY 1. 1979

ELECTRONICS HAD BECOME A DIVISION OF THE TOY DIVISION - MARKETING AND ENGINEERING ONLY.

HANDHELDS GAMES WERE GOING STRONG.

VERY SMALL INTELLIVISION STAFF.

- 3 ELECTRICAL ENGINEERS PLUS 3 OR 4 AT GI.
- 1-2 MECHANICAL DESIGN ENGINEERS.
- 1 SOFTWARE ENGINEER PLUS 3 OR 4 AT APH.
- 1 PURCHASER (PART-TIME)
- MISC. SUPPORT PEOPLE (PERHAPS 6-8)
- MANUFACTURING BY SYLVANIA.

STILL NO STIC OR RAM CHIPS

TO THE MARKET PLACE

DEC. 3, 1979	ROLL OUT TO TEST MARKET IN FRESNO PRODUCT DELIVERED IN RENTED TRUCK (ALONG WITH 10000 FORTUNE COOKIES) RESPONSE WAS GREAT - EVEN AFTER CHRISTMAS
AUGUST 1980	NATIONAL DISTRIBUTION STARTED
DECEMBER 1980	PRODUCT NOT MOVING - PEOPLE DON'T KNOW ABOUT INTELLIVISION ENTER GEORGE PLIMPTON SALES TURNED AROUND IMMEDIATELY

INTELLIVISION FINALLY WAS A REALITY IN THE MARKET PLACE.

HARDWARE DESIGNED FOR SOFTWARE, NOT VICE VERSA

DESIGNED FOR THE HOME ENVIRONMENT - NOT ARCADES OR BUSINESS

VIDEO GAMES (ENTERTAINMENT) WILL ALWAYS BE THE HEART OF HOME SYSTEMS BUT ARE DEAD ENDED AS A STAND ALONE PRODUCT.

VIDEO GAMES PROVIDE BEST BASE FOR HOME COMPUTERS

FRIENDLY, NON THREATENING

REALLY ARE COMPUTERS OF A LIMITED CLASS.

} ° already accepted by consumer
} ° primary use of system.

MODULAR ARCHITECTURE PERMITS UPGRADE TO COMPUTER

MASTER COMPONENT WAS CONFIGURED FOR EXPANSION BUT NO COST FOR THIS WAS PERMITTED.

HOME COMPUTER IS NOT A HOBBIEST OR BUSINESS COMPUTER

FOR NON-COMPUTER PEOPLE - THE WHOLE FAMILY.

SHOULD NOT REQUIRE KNOWLEDGE OR USE OF COMPUTER LANGUAGE.

PREPROGRAMMED SOFTWARE WILL BE USED PREDOMINANTLY.

CONVENIENT, FULLY COMPUTER CONTROLLED MASS STORAGE IS ESSENTIAL.

MASS AUDIO STORAGE IS IMPORTANT FOR FRIENDLY INTERFACE AND MANY APPLICATIONS.

Should be architected around game play, not vice versa

DATA FLOW INTO HOME (VIDEOTEX) IS A MAJOR PART OF THE NEAR TERM FUTURE HOME

VIDEO GAMES, PROPERLY INTERFACED, PROVIDE THE BEST MEANS OF BRINGING VIDEOTEX INTO THE HOME.

MATTEL HAS BEEN (MAYBE STILL IS) IN A UNIQUE POSITION TO MAKE THE HOME REVOLUTION HAPPEN IN A VALID WAY.

THE KEYBOARD COMPONENT PROGRAM

CONCEPT - EXPAND MASTER COMPONENT INTO VALID HOME COMPUTER.

PRIMARILY FOR NON-COMPUTER PEOPLE

PRE PROGRAMMED SOFTWARE PRIMARILY

OPTIONAL BASIC CARTRIDGE FOR THOSE WHO DO WANT TO WRITE PROGRAMS.

BUILT IN STORAGE MEDIUM TO MAKE IT A VALID COMPUTER.

CASSETTE WAS ONLY ECONOMICALLY VIABLE MEDIUM.

START-STOP ONLY AUDIO CASSETTE UNACCEPTABLE.

TOO SLOW

TOO CUMBERSOME

TOO UNRELIABLE

DEVELOPED FULLY COMPUTER CONTROLLED DRIVE

HIGH SPEED SEARCH TO RECORDS

HIGH SPEED DATA TRANSFER

ERROR DETECTION AND CORRECTION

AUDIO AS WELL AS DIGITAL TRACKS

16K DECLES OF MEMORY

40 X 24 ALPHANUMERIC DISPLAY CAPABILITY

Full typewriter-like keyboard

KEYBOARD COMPONENT MILESTONES

JANUARY, 1979	-	UNDER PRESSURE OF CUSTOMERS, DECIDED TO ACCELERATE DEVELOPMENT OF KEYBOARD COMPONENT - OBJECTIVE: HOME UNITS AVAILABLE BY CHRISTMAS, 1979, EVEN THOUGH THEY WOULD BE EXPENSIVE.
AUGUST, 1979	-	FIRST BREADBOARD ENTERED INTO SEARS MARKET RESEARCH PROGRAM AGAINST ATARI AND APF - OURS WORKED FINE -BOTH OF THE OTHERS HAD HARDWARE PROBLEMS BUT WORKED.
DECEMBER,1979	-	HAD PRODUCTION DESIGN WORKING UNITS, BUT HAD DECIDED ON A SIGNIFICANT INTERNAL ARCHITECTURAL CHANGE.
SEPTEMBER, 1980	-	TEST MARKET IN FRESNO - WITH NO AVAILABLE SOFTWARE. (BASIC WAS AVAILABLE A FEW DAYS LATER).
FIRST HALF, 1981	-	STRUGGLES TO DEVELOP PRODUCTION PROCEDURES AT TECHNICOLOR
FALL, 1981	-	FIRST MARKETS OPENED IN SEATTLE AND NEW ORLEANS - STILL ALMOST NO SIGNIFICANT SOFTWARE.
JUNE, 1982	-	FINALLY ORGANIZED FOR A VALID EMPHASIS ON SOFTWARE DEVELOPMENT.
AUGUST, 1982	-	TERMINATED THE PROGRAM.