

PRODUCT INNOVATION

Future Product Needs Based on Joint Marketing/ R&D Initiatives

In June 1987, ITL Marketing division identified 3 product opportunities SATURN, VISA and DAY which would require considerable collaboration between the Marketing and R & D division.

The objective of SATURN is to acquire an understanding from a consumer perspective of the array of product taste, sensory and physical characteristics that would appeal to, and create preference within, various segments of the smoking population. At present work on SATURN is focusing on consumer reactions to novel tastes and flavours in cigarettes.

VISA addresses potential product opportunities that capitalize on the increasing restrictions (both social and legislative) that a smoker faces on the use of cigarettes. The majority of the work in this area is concentrated on producing a subjectively acceptable low visible sidestream cigarette.

DAY explores potential alternatives to conventional cigarettes that credibly offer the elements of traditional tobacco pleasure with a greater level of "safety". Based on results from Focus groups, which were used to select the product concept with the most consumer appeal and credibility, an exploratory research program has been initiated within the R&D division to develop a DAY product.

401056/85

FUTURE PRODUCT NEEDS BASED
ON JOINT MARKETING / R & D INITIATIVES

- IN JUNE 1987 MARKETING IDENTIFIED 3 PRODUCT OPPORTUNITIES
FROM THE RESULTS OF THE FIRST ROUND OF THE VIKING CONSUMER
SURVEYS.

- THESE WERE: DAY
SATURN
VISA

- DAY WILL BE PRESENTED SEPARATELY AND WILL NOT BE DISCUSSED
NOW.

401056/86

PROJECT SATURN

THE OBJECTIVE OF SATURN IS TO ACQUIRE AN
UNDERSTANDING AND DEFINITION FROM A CONSUMER PERSPECTIVE
OF THE ARRAY OF PRODUCT TASTE, SENSORY AND PHYSICAL
CHARACTERISTICS THAT WOULD APPEAL TO AND CREATE PREFERENCE
WITHIN VARIOUS SEGMENTS OF THE SMOKING POPULATION.

401036787

PATIONALE FOR SATURN

- 1 - HOMOGENIZATION OF CANADIAN CIGARETTES
 - BLAND, UNIFORM TASTE
 - NARROW TAR SPECTRUM.

- 2 - BILL C-51 WILL REDUCE OUR ABILITY TO MAINTAIN BRAND / PRODUCT DIFFERENTIATION.

- 3 - EXISTING PRODUCT SEGMENTS ARE FILLED.
 - THE ONLY WAY TO INCREASE MARKET SHARE IS BY FURTHER DIFFERENTIATION VIA INNOVATIVE PRODUCTS.

401036788

INITIAL WORK WILL CONCENTRATE ON THE FOLLOWING AREAS:

1 - "DIFFERENT" TASTE

TO SEARCH FOR AND DEVELOP UNIQUE TASTES THAT ARE ACCEPTED BY THE SMOKER AS A) SIGNALS FOR AMELIORATION AND / OR B) AS A BENEFIT OF THEIR OWN.

2 - ENHANCED AROMA

AROMAS THAT ARE DIFFERENT FROM STANDARD CANADIAN SMOKES WILL BE SOUGHT. SINCE AROMA AND TASTE ARE STRONGLY LINKED, THE EXECUTION OF THE AROMA AND TASTE EXERCISE WILL BE SIMILAR.

3 - ENHANCED TASTE

THIS AREA COVERS ALL SENSORY IMPROVEMENTS THAT WE MIGHT ACHIEVE, SUCH AS: REDUCED IRRITATION, BETTER TASTE, MORE TASTE, IMPROVED AFTER-TASTE.

401036789

EXECUTION

INTERNAL SCREENING

- POTENTIAL FLAVOURS OBTAINED FROM:
 - FLAVOUR HOUSES
 - SOUZA CRUZ
 - BAT HAMBURG
 - 3 & 4
- CIGARETTES INJECTED WITH DIFFERENT LEVELS OF FLAVOURS AND SCREENED INTERNALLY.
- MOST PROMISING CANDIDATES SELECTED FOR EXTERNAL TESTING.

EXTERNAL TESTING

- DESIGN, SELECT AND PREPARE CONCEPT BOARDS.
- PREPARE CANDIDATE FLAVOURED CIGARETTES USING PILOT-PLANT FLAVOUR BOX.
- CARRY OUT QUALITATIVE EXTERNAL TESTING.

401036790

QUALITATIVE TESTING METHODOLOGY

FOCUS GROUP TESTING IS LONGITUDINAL OVER 3 DAYS PER ROUND.

- 3 GROUPS OF 10 SMOKERS PER DAY (1 REG, 2 KS)
- 2 OR 3 CONCEPTS AND 2 MATCHING PRODUCTS PER GROUP PER DAY.
- TAKE HOME PACKAGE OF EACH PRODUCT IS DISCUSSED ON THE NEXT DAY.
- ON DAY 3 THERE IS A DISCUSSION / SUMMARY AND EXPOSURE TO ADDITIONAL CONCEPTS / CIGARETTES.
- MOST CONCEPTS ARE MATCHED TO 2 DIFFERENT PRODUCTS AND MOST PRODUCTS TO 2 DIFFERENT CONCEPTS.
- EACH SMOKER IS EXPOSED TO 5 PRODUCTS AND AT LEAST 5 CONCEPTS.
- IN TOTAL 10 PRODUCTS AND 12 CONCEPTS ARE ASSESSED IN 3 DAYS.

401036791

PROGRESS

1ST ROUND FOCUS GROUP - JULY 1988, TORONTO.

7 PRODUCTS TESTED WITH 11 CONCEPTS.

<u>FLAVOURS</u>	<u>LEVELS (PPM)</u>		<u>RESULTS</u>
	<u>KS</u>	<u>REG</u>	
PINEAPPLE	1000	2000	- NO DISTINCT FLAVOUR - AMELIORANT, SMOOTH, MILD REDUCED AFTER-TASTE.
STRAWBERRY	2000	2000	- VERY DISTINCT FLAVOUR - MILD, SMOOTH, COULD BE OCCASIONAL BRAND.
MOUNTAIN MAPLE	1000	1000	- UNACCEPTABLE TASTE.
OSMANTHUS	100	100	- STRANGE, UNIDENTIFIABLE TASTE - CLEAN AFTER-TASTE - OVERALL REJECTION OF PRODUCT.
ELDERBERRY	100	-	- NO DISTINCT FLAVOUR - AMELIORANT, REDUCED AFTER- TASTE, GOOD AROMA.
PLAYER'S SPECIAL BLEND LIGHT			- VERY ACCEPTABLE TO YOUNG MALES FOR REGULAR SMOKING.
BORKUM RIFF (5% BORKUM RIFF IN CIGT. BLEND)			- VERY ACCEPTABLE TO YOUNG MALES AS OCCASIONAL SMOKE - TOO STRONG, HARSH FOR FEMALES, OLDER MALES.

401036792

2ND ROUND FOCUS GROUP - SEPTEMBER 1988, TORONTO.

TO BE TESTED:

VANILLA

SPERMINT

TROPICAL FRUIT

STRAWBERRY (550 & 100 PPM)

ELDERBERRY (100 & 200 PPM)

OSMANTHUS + MAPLE BARK

BORKUM RIFF WHISKY

401036793

BATCo document for Province of British Columbia 29 October 1999

Project VISA

VISA addresses the opportunity for a product that capitalizes on the increasing restrictions (both social and legislation) that a smoker faces on the use of cigarettes.

401036/94

BROAD SOLUTIONS TO VISA

- REDUCED SIDESTREAM
- ENHANCED AROMA
- NICOTINE ALTERNATIVE PRODUCTS

CONSTRAINT : REMAIN CONVENTIONAL IN FORM AND USAGE.

401036795

PRODUCT CRITERIA

1. LOWEST POSSIBLE VISIBLE SIDESTREAM - SCIENTIFICALLY
- PERCEIVED AS ACCEPTABLE
2. IN LINE WITH CURRENT MARKET PRODUCTS - BIOLOGICAL ACTIVITY
- OTHER NOXAE
3. BOTH MAINSTREAM AND SIDESTREAM SMOKE ARE VERY SUBJECTIVELY
ACCEPTABLE
- MS : SMOKING QUALITIES
- SS : AROMA, IRRITATION, ETC.
4. SMOKING QUALITIES OF MAINSTREAM SMOKE ARE CONSISTENT WITH
THE IDENTIFIED ENDORSING BRAND - DU MAURIER
- 13.9 (4 MG)

401036796

STRATEGIES FOR REDUCING SIDESTREAM

- 1) SPECIALTY PAPERS - MgO
- 2) LOW DENSITY TOBACCO RECIPES - 20 cg/cc
- 3) LOW PERMEABILITY PAPERS / LOW DENSITY RECIPES - 5 c.u. / 21 cg/cc [BAT]
- [4) TOBACCO TREATMENT - DAY]

ADOPTED ITL STRATEGY FOR VISA

SPECIALTY PAPERS - ECUSTA 35% MgO

LOW DENSITY TOBACCO RECIPE - 15% - 30% DIET INCLUSION
24 - 19 cg/cc DENSITY

401036797

PROGRESS

SAMPLES

1ST STAGE

- 2 K.S. CIGARETTES (S1 AND S3) WITH TAR DELIVERIES OF 5 AND 9 MG MADE WITH ECUSTA MGO PAPER AND 15% DIET INCLUSION.
- SIDESTREAM REDUCTIONS RELATIVE TO CONTROL ARE 50% FOR TAR AND 40% FOR NICOTINE AS MEASURED BY FISHTAIL.

COMMENTS

- GOOD MECHANICS, SMOOTH, NO OFF-TASTE
- TASTE LEVEL & STRENGTH TOO LOW FOR 9 MG.
- CO TOO HIGH
- AMES ACTIVITY SHOULD BE DECREASED
- GREATER REDUCTION IN S/S REQUIRED

2ND STAGE

- 2 K.S. CIGARETTES (NS2 & NS4) WITH TAR DELIVERIES OF 8 AND 14 MG WITH ECUSTA MGO PAPER AND 30% DIET INCLUSION.
- SIDESTREAM REDUCTIONS RELATIVE TO CONTROL ARE 55-60% FOR TAR AND 35% FOR NICOTINE AS MEASURED BY FISHTAIL.
- OPTICAL DENSITY REDUCTION IN SIDESTREAM OF 70%.

COMMENTS

- SMOOTH, CLEAN TASTE BUT TOO MILD FOR TAR LEVEL
- HIGH DRAW EFFORT, LOW MOUTHFUL OF SMOKE
- CO TOO HIGH
- AMES ACTIVITY ACCEPTABLE

401036798

FOCUS GROUPS & IN-HOME TRIAL - JUNE 1988

FORMAT - 8 ENGLISH GROUPS (TORONTO) AND 6 FRENCH GROUPS (MONTREAL)
 - 10-12 PARTICIPANTS PER GROUP SEGREGATED BY SEX AND TAR LEVEL.

<ul style="list-style-type: none"> - 2 FEMALE (TORONTO ONLY) - < 5 MG - 1 EACH MALE & FEMALE - 8-12 MG <li style="padding-left: 100px;">->13 MG - 1 EACH MIXED MALE & FEMALE - QUIT < 5 YR. <li style="padding-left: 40px;">NON-SMOKERS - NEVER SMOKED 	}	EXPOSED TO	{	<ul style="list-style-type: none"> 1. REDUCED SIDESTREAM WITH TEST PRODUCTS S1 (5 MG) AND NS4 (14 MG). 2. ENHANCED AROMA WITH SATURN TEST PRODUCT (STRAWBERRY). 3. NICOTINE ALTERNATIVES - CONCEPT ONLY.
--	---	---------------	---	---

- NON-SMOKERS CONDUCTED SEPARATELY FROM SMOKERS ON A DIFFERENT DAY.

GENERAL REACTIONS - SMOKERS & NON-SMOKERS

- UNDERSTANDING OF TERM "SECOND-HAND SMOKE": SPONTANEOUSLY DEFINED AS SIDESTREAM PLUS EXHALED MAINSTREAM.
- NO UNDERSTANDING OF TERM "PASSIVE SMOKING".
- POSITIVE RESPONSE TO BOARDS CLEARLY ILLUSTRATING AND EXPLAINING BENEFIT (MID-TECHNOLOGY) AND WITH KNOWN BRAND ENDORSEMENT.
- CONCERN ABOUT ADDITION OF FURTHER CHEMICALS/ADDITIVES TO ACHIEVE GOAL.
- NO REAL LINGUISTIC OR TAR LEVEL DIFFERENCES IN REACTIONS.
- DIFFERENCES BETWEEN SMOKERS AND NON-SMOKERS DUE TO DIFFERENCES IN ATTITUDES TOWARD SMOKING IN GENERAL.

401036799

FOCUS GROUP & IN-HOME TRIALSPECIFIC REACTIONS (FOR NON-SMOKER GROUPS VOLUNTEERS SMOKED TEST PRODUCTS DURING SESSIONS)1. REDUCED SIDESTREAM

- S1 (5 mg) 50% SS REDUCTION
NS4 (14 mg) 60% SS REDUCTION
- BOTH GAVE OBVIOUS AND ACCEPTABLE
SS REDUCTIONS
- TRIGGERED ENHANCED PERCEPTION OF
EXHALED MAINSTREAM
- MORE EXPLICIT CONCERN OVER CHEMICALS
- SMOKING EXPERIENCE (SMOKER GROUPS
ONLY) AGREES WITH IN-HOUSE: TOO
MILD FOR TAR LEVEL. S1 BETTER
THAN NS4
- ACCEPTABLE AS AN INITIAL SOLUTION.

2. ENHANCED AROMA

- SATURN TEST PRODUCT
STRAWBERRY
- NOTICEABLE PLEASANT AROMA
- ACCEPTABLE AS NOVELTY
- ITEM SOCIAL/OCCASIONAL USE
- UNACCEPTABLE IF SCENT
CAN BE TASTED
- MIGHT BE COMBINED WITH
REDUCED SIDESTREAM

3. NICOTINE ALTERNATIVES

- CONCEPT ONLY
- ACCEPTABLE AS RJR TYPE IF
INHALATION/EXHALATION/
RITUAL REMAIN
- UNACCEPTABLE AS FAVOR

OVERALL REDUCED SIDESTREAM WAS SEEN AS THE MOST CREDIBLE INITIAL SOLUTION

- CLEAR SOCIAL BENEFIT PERCEIVED BY SMOKERS BUT REQUIRES IMPROVED PRODUCT CHARACTERISTICS
RELATIVE TO OWN BRANDS.
- LESS CLEAR SOCIAL BENEFIT PERCEIVED BY NON-SMOKERS DUE TO ENHANCED PERCEPTION OF
EXHALED MAINSTREAM SMOKE BUT STILL REGARDED (GRUDGINGLY) AS A MINOR BENEFIT.

401036800

NEXT STEPS

SAMPLES

1. 20% DIET INCLUSION LEVEL
 - S1 (15% DIET & 50% SS REDUCTION) WAS AS ACCEPTABLE FOR SIDESTREAM AS NS4 (30% DIET & 60% SS REDUCTION) AND MORE ACCEPTABLE THAN NS4 FOR MAINSTREAM.
2. USE STEM FOR FUTURE COST EFFECTIVENESS.
3. COMPARE E.P. WITH NON E.P. PAPER TO IMPROVE MECHANICS AND TASTE LEVEL OF MAINSTREAM.
4. EXAMINE NEW ECUSTA SUBMISSIONS
 - LATEST PAPER WITH NEW MgO FORMULATION IS SUBJECTIVELY SUPERIOR TO PREVIOUS PAPERS (LESS CARRY OVER OF PAPER TASTE).
5. USE COD/DDF FILTER TO REDUCE CO/TAR RATIO.

TESTING

NEXT FOCUS GROUP PLANNED FOR OCTOBER/NOVEMBER 1988.

401056801