

MARKETING TECHNOLOGY

A MARKET IS...

1. Sellers and buyers bargaining over the terms of exchange for goods or services

or

2. Potential customers with similar needs or desires and sellers offering various products or services that satisfy those needs or desires.

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MARKET POSITION IS IMPROVED IF THE TECHNOLOGY:

- Satisfies customer needs or desires
- Enhances competitive position
- Achieves revenue growth and enhances profitability

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MARKETING DEFINITIONS

- A job or part of a company
- Activities concerned with customers
- Business philosophy —the marketing concept

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MARKETING CONCEPT



TECHNO LOGY MARKETING PROCESS

Identify Markets

Promote the Technology

Sell the Technology



GENERAL MARKET CHARACTERISTICS

A MARKET IS GENERALLY CHARACTERIZED PRIMARILY BY EFFECTIVE DEMAND WHICH CAN BE MET BY AVAILABLE SUPPLY.

A MARKET CAN BE CREATED BY MAKING <u>LATENT</u> DEMAND INTO EFFECTIVE DEMAND AND COUPLING IT WITH AVAIL-ABLE SUPPLY (e.g., of "technology").



THE MARKET FOR TECHNOLOGY **IS DERIVED FROM WHAT TECHNOLOGY IS EXPECTED TO "DO."**

- **GENERATE PROFITS**
- **CREATE REVENUES**
- **CREATE JOBS**
- STIMULATE ECONOMIC GROWTH •
- **EXPAND HORIZONS** •
- **ENHANCE IMAGES**
- **BE FUN**



TECHNOLOGICAL INNOVATION AND TECHNOLOGY TRANSFER

CAN

PRIME MARKETS

CREATE REVENUES -----► INDUSTRY

GENERATE PROFITS ------► INDUSTRY

STIMULATE ECONOMIC GROWTH-----------------------GOVERNMENTS

ENHANCE IMAGES AND PRIDE

→ INDUSTRY, GOVERNMENTS

BE FUN-------EVERYONE!



LOCUS OF INNOVATION

- SMALL PRIVATE ENTERPRISE
- MEDIUM-SIZE PRIVATE ENTERPRISE
- LARGE-SCALE PRIVATE ENTERPRISE
- GOVERNMENT AGENCY (FEDERAL AND OTHER)
- **PUBLIC ENTERPRISE**



THE LARGE ENTERPRISE AND ITS GROWTH (HYPOTHETICAL CASE)

ANNUAL SALES DECLINE IN SALES (OBSOLETE PRODUCTS) PRICE REDUCTIONS (COMPETITIVE PRESSURES) GROWTH OBJECTIVE

\$2,000,000,000

17 - 11

8% PER YEAR

4% PER YEAR 10% PER YEAR

SIMPLY TO MEET ITS OBJECTIVES, ASSUMING NO GENERAL INFLATION, THIS FIRM NEEDS TO GENERATE \$440,000,000 OF NEW REVENUES.

SOURCES OF SUCH ADDED REVENUES:

- PRESENT PRODUCTS AND SERVICES
- NEW PRODUCTS IN PRESENT LINES OF BUSINESS
- WHOLLY NEW LINES OF BUSINESS
- ACQUISITION OF OTHER FIRMS



INDUSTRY ANALYSIS

Industry Size

- Industry Growth Rate
 - Key Growth Factors
 - Industry Life Cycle

INDUSTRY LIFE CYCLE

	Criteria	Embryonic	Growth	Mature	Aging		
	Growth Rate	high	high	stable	low		
	Product Line	narrow	expanding	status quo	shrinking		
	Competitors	few	many, increasing rapidly	shakeout, with few remaining	few		
	Technology	innovative	performance- based	seeking production efficiency	no change		
@	Type of Manager	entrepreneur	manager	administrator	opportunistic		

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COMPANY PROFILES

MAJOR COMPANIES		ANNUAL SALES VOLUME (\$000)	GROWTH RATE	STRENGTHS	WEAKNESSES		
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NO ONE WILL RESPOND TO A "TECHNOLOGY" IF ---

- -ITS EXISTENCE IS UNKNOWN TO THEM
- -IT IS NOT MADE RELEVANT TO THEIR NEEDS AND OBJECTIVES
- -SUCH "TECHNOLOGY" CANNOT BE REPLICATED IN THEIR OWN SETTING
- CONCLUSION: APPROPRIATE DATA AND INFORMATION ARE A PREREQUISITE TO THE TRANSFER OF A "TECHNOLOGY."

AND THE "PRICE" MUST BE RIGHT!



Geilman Research Associates, Inc.

DATA AND INFORMATION REQUIREMENTS TO SUPPORT TECHNOLOGY TRANSFER

- IS SCIENTIFIC DATA ENOUGH
- SCIENTIFIC DATA PLUS PERFORMANCE DATA
- MARKET DATA
- ECONOMIC DATA

LABORATORY-GENERATED MATERIAL ROLE OF THE PROTOTYPE(S) TEST RESULTS SPECIFICATIONS AND PERFORMANCE FEEDBACK FROM THE OPERATING ENVIRONMENT COSTS — CAPITAL AND OPERATING RELIABILITY DATA INTENSITY AND LONGEVITY OF USE MARKET PROJECTIONS AND ANALYSES



EXAMPLE A

LICENSE OF PATENTS AND KNOW-HOW RELATED TO A PROCESS FOR TREATING STEEL IN SUCH A MANNER AS TO IMPROVE THE QUALITY AND UNIFORMITY OF SHEET, COIL AND SHAPES.

LICENSOR:

NATIONALIZED EUROPEAN STEEL PRODUCER.

POTENTIAL LICENSEE: U.S. STEEL PRODUCER.



DATA AND INFORMATION REQUIREMENTS (PARTIAL LISTING)

LICENSOR:

- PROFILES OF ALL MAJOR U.S. STEEL PRODUCERS.
- PROFILES OF MAJOR SUPPLIERS OF PROCESS EQUIPMENT TO THE U.S. STEEL INDUSTRY.
- ECONOMIC VALUE OF THE TECHNOLOGY TO INDIVIDUAL STEELMAKERS AND TO THE U.S. INDUSTRY AS A WHOLE.
- INFORMATION ON COMPETITIVE PROCESSES, IF ANY.

LICENSEE:

- PATENTS AND BACK-UP.
- PERFORMANCE STATISTICS.
- CAPITAL AND OPERATING COSTS, IN BOTH ABSOLUTE AND RELATIVE TERMS.
- TERMS AND CONDITIONS FOR THE LICENSE.
- VALUE ADDED PROJECTIONS.
- INFORMATION ON COMPETITIVE PROCESSES, IF ANY.



EXAMPLE B

SALE OF ALL RIGHTS (WORLDWIDE) **INCLUDING A PATENT, PATENT APPLICATIONS, AND KNOW-HOW ASSOCIATED** WITH A NEW LIGHTWEIGHT COMPOSITE FIBROUS MATERIAL OF EXCEPTIONAL **TENSILE STRENGTH.**

SELLER:

INDEPENDENT INVENTOR (U.S.)

POTENTIAL BUYER: LARGE, INTERNATIONAL (U.K.) PRODUCER OF TIRES AND OTHER **RUBBER PRODUCTS EMPLOYING CORD WHICH** MUST BE LIGHT AND STRONG.



Geliman Research

DATA AND INFORMATION REQUIREMENTS (PARTIAL LISTING)

SELLER:

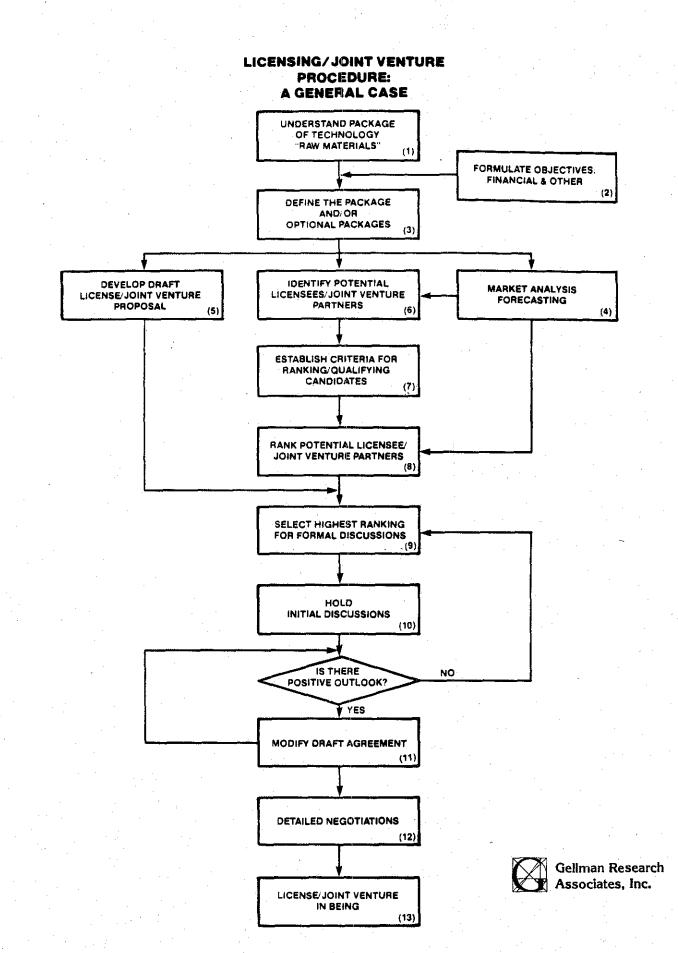
- WHO ARE THE POTENTIAL BUYERS OF THE TECHNOLOGY?
- WHAT REVENUE CAN I EXPECT AND IN WHAT FORM?
- HOW CAN I ASSURE THE TECHNOLOGY WILL BE FULLY EXPLOITED?
- HOW GOOD IS THE "PRODUCT," IN PHYSICAL AND ECONOMIC TERMS?
- WHAT VALUE DOES THIS TECHNOLOGY HOLD FOR EACH POTENTIAL BUYER?

BUYER:

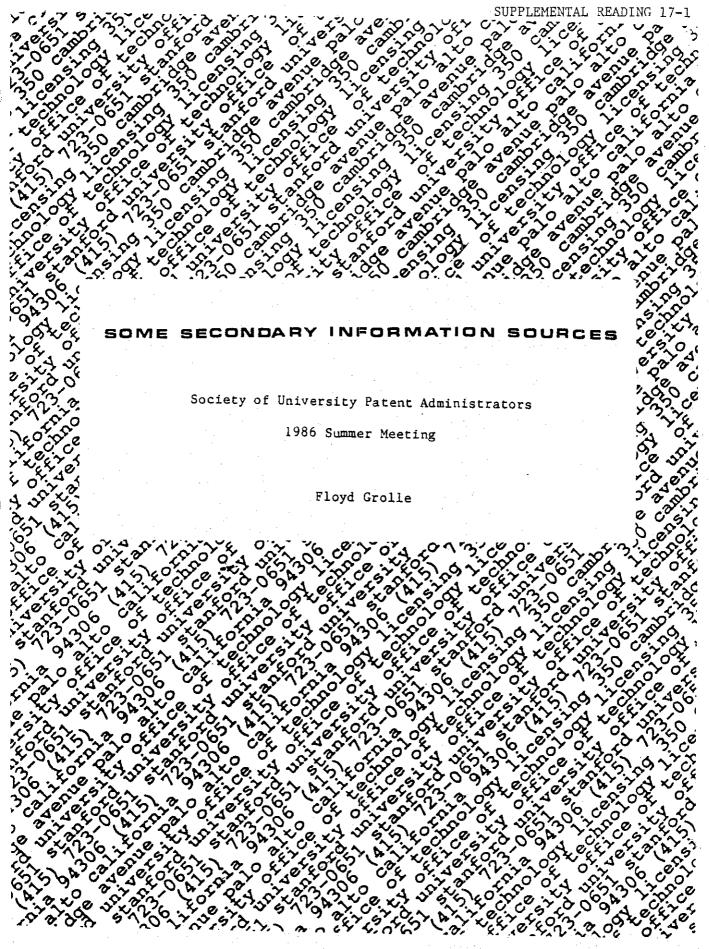
- PERFORMANCE SPECIFICATIONS COVERING THE WIDEST RANGE OF APPLICATIONS.
- CAPITAL INVESTMENT AND PRODUCTION COST DATA AND COMPARISONS WITH ALTERNATIVES.
- MARKET ANALYSIS SHOWING EXTENT AND SIZES OF VARIOUS MARKETS IN ALL COUNTRIES OF INTEREST.
- ANALYSIS OF POTENTIAL LICENSING, SUB-LICENSING, AND MATERIAL SALES INCOME.
- PATENTS AND BACK-UP INFORMATION.



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SUPPLEMENTAL READING FOR UNIT 17



PREFACE

The purpose of this handout is to provide some leads to where market, technical, and other business information can be located in the universe of available information.

These leads can help in determining the market size/potential of an invention or project. They are generally known as <u>secondary data sources</u>. The information has been assembled/ collected/tabulated by organizations for a myriad of purposes. Most often, the data is not specific for the invention of immediate concern to the licensing group. By synthesizing or fusing data from several sources, a "first look" or "quick and dirty" often provides the licensing group with "gut feel" as to how or whether to proceed and how to structure a proposal to a prospective licensee.

Comprehensive market studies may not be appropriate because of manpower, budget, or time constraints. If budget dollars are available, such first looks can be developed on short notice by many commercial market research groups. The studies/ data can be useful in gaining perspectives of the business plan of a perspective licensee. There is no all inclusive answer to cover every situation ... each must be contemplated considering the needs and resources at hand.

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