

COMPETITIVE TECHNOLOGY PROFILING

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OUTLINE

- Competitive Intelligence
- Technology Assessment and Profiling
- Types of Information
- How to Analyze the Data



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COMPETITIVE INTELLIGENCE

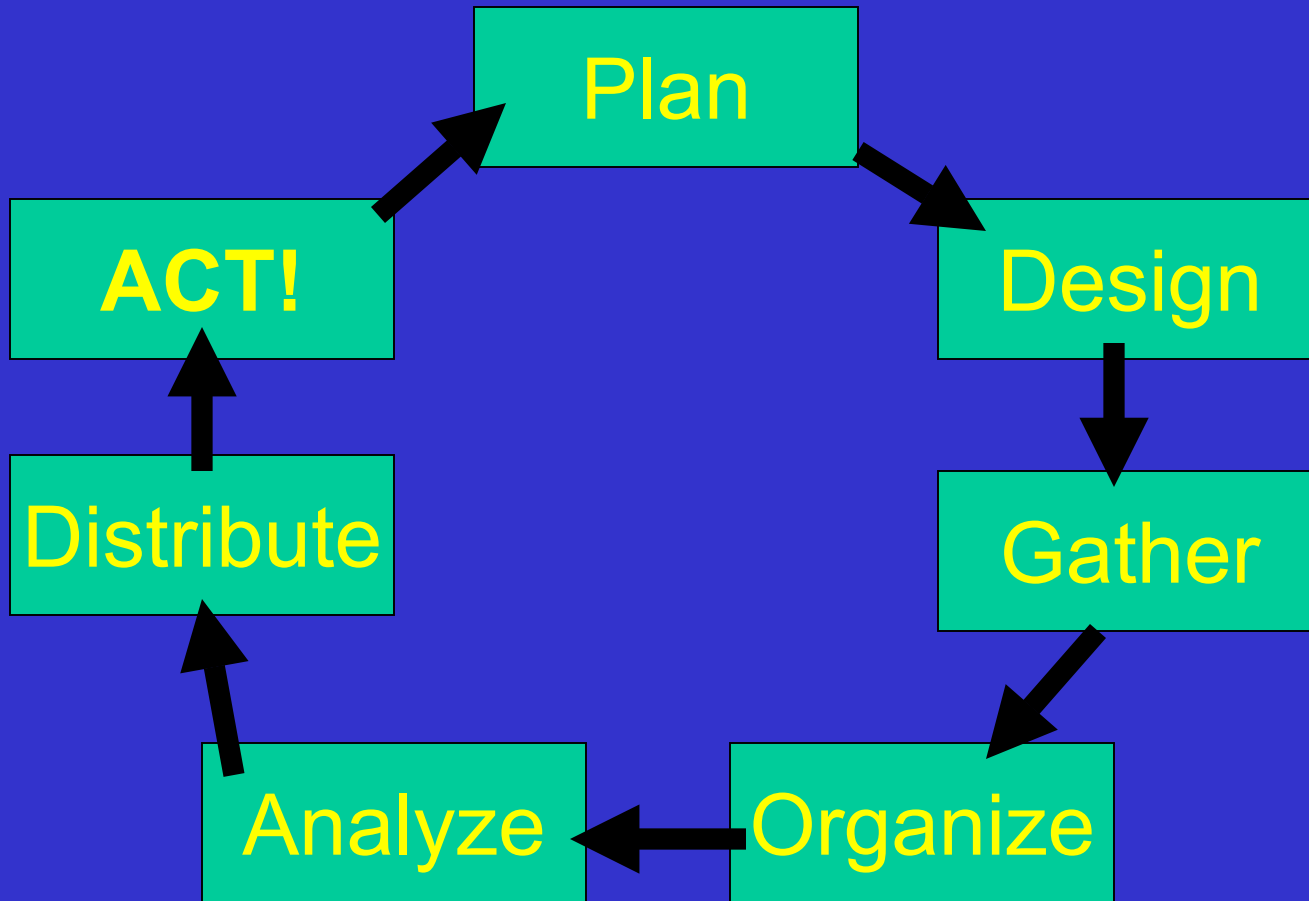
- What is the competition?
- What is the competition doing?
- What does that mean to us and what are we going to do about it?



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INTELLIGENCE CYCLE



COMPETITION

- Who are they?
- Hidden or Latent Competitors
 - Focus on technology



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COMPETITOR PROFILE

- Background Information
- Products and Services
- Manufacturing
- **Technology**
- Management
- Customers
- Financials



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COMPETITIVE PROFILING

- How do your competitors do it?
 - Manufacturing
 - Patented technology
 - Raw materials
 - Alliance
- How else might you do it?



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BE AWARE

- Strengths
 - Keeping pulse of industry
 - Guide strategy
 - Identify weaknesses in competitor
- Weaknesses
 - Become a follower
 - Miss a new arrival



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FOCUS ON THE CUSTOMER

- What does the customer want?
- How much will they pay?
- How can it be made?
- How much does it cost?
- What are the alternatives?



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MARKET ASSESSMENT

- What needs to be changed/improved?
- How important is it?
- What is it worth?
- What are others doing?



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TECHNOLOGY ASSESSMENT

- Why is the product the way it is?
- How can the performance deficiency be remedied?
- What choices are there?
- What is the best choice?



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CRUCIAL QUESTIONS

- Which solution:
 - Fits with our existing raw material base?
 - Fits with our existing manufacturing process?
 - Maintains other needed product properties?
 - Works most economically?



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TECHNOLOGY PROFILE

- Not Necessarily Company Specific
- Pieces of the Process
- External Technology
- Monitor Progress and Trends

- Remember Your Customer



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SOURCES OF INFORMATION

- Patents and Technical literature
- Product brochures
- Trade Shows and Technical Meetings
- Discussions with Customers/Suppliers
- Internal or external experts
- Salesforce
- Other



GATEKEEPERS

- Nodes of Information
- Well connected
- Internal and External
- Sources of Information and Analysis
- Natural Behavior



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SOME ANALYTICAL FRAMEWORKS

- SWOT Analysis
- Porter's Five Forces
- S Curve – Technology Development
- Patent Analysis



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SWOT ANALYSIS

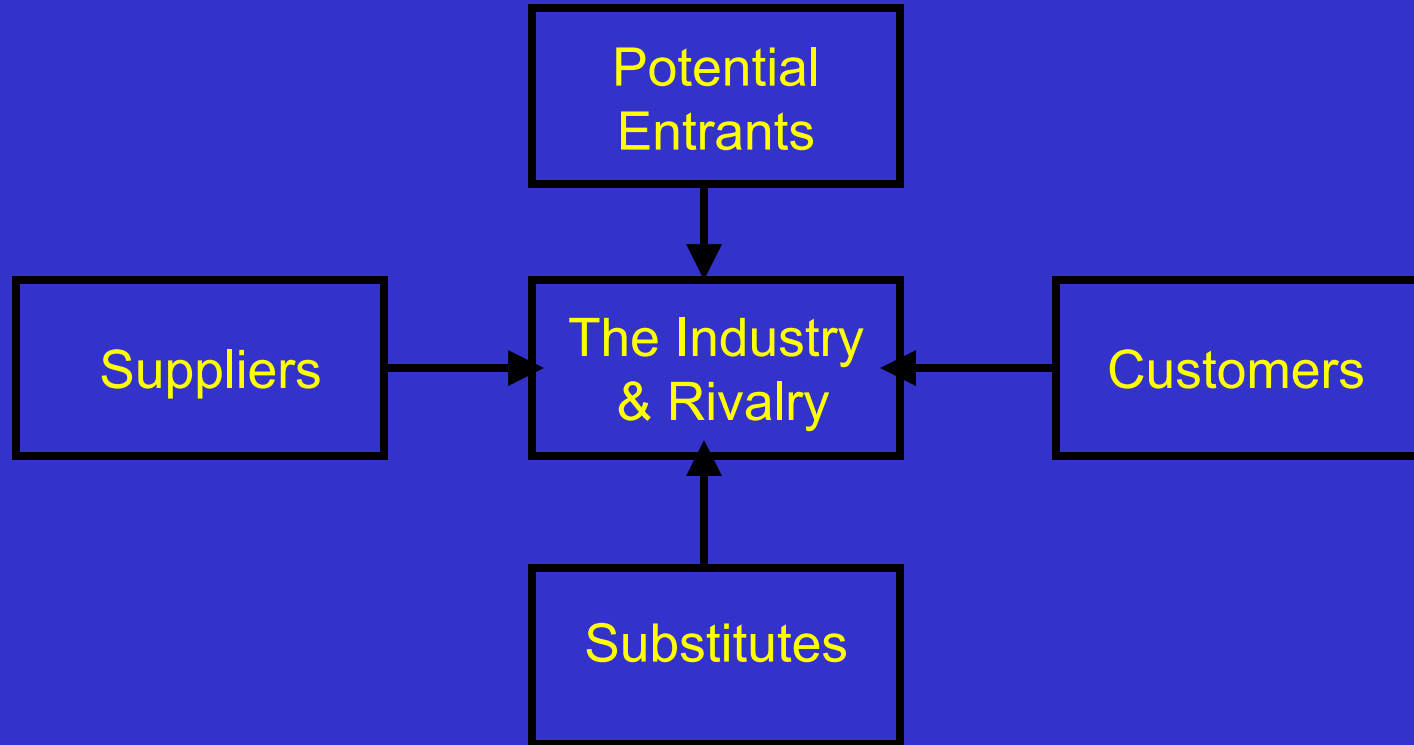
Strengths	Weaknesses
Opportunities	Threats



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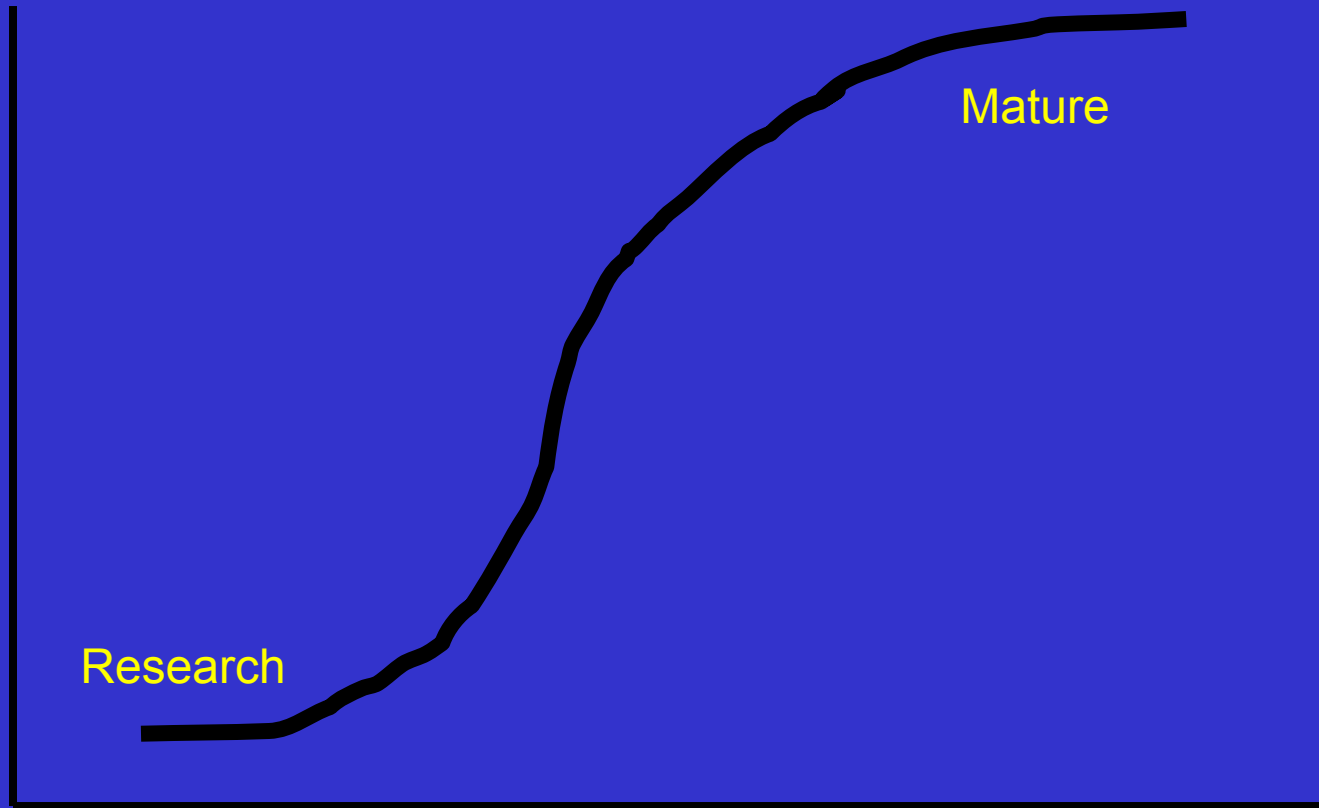
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PORTER'S FIVE FORCES



S-CURVE: TECHNOLOGY DEVELOPMENT

Technology Development



Time



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PATENT ANALYSIS

- Numbers of Patents
- Weighting of Strength
- Trends
- Citation Analysis
- Key Inventors
- Related Technologies (Classification)



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CLOSING THOUGHTS

- Personal relationships – gatekeepers
- Begin with the end in mind
- Ethical and legal behavior
- Society of Competitive Intelligence Professionals (www.scip.org)
- Related technology



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REFERENCES

- Ashton, W. Bradford and Richard A. Klavens, editors, “Keeping Abreast of Science and Technology – Technical Intelligence for Business,” Batelle Press, 1997.
- Coburn, M.M., “Competitive Technical Intelligence- A Guide to Design, Analysis, and Action,” Oxford University Press, 1999.
- Fleisher, Craig S. and Babette E. Bensoussan, “Strategic and Competitive Analysis – Methods and Techniques for Analyzing Business Competition,” Prentice Hall, 2003.
- Porter, Michael, “Competitive Strategy – Techniques for Analyzing Industries and Competitors,” The Free Press, 1980.



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THANK YOU

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