

## Electronic Career Research

**Acknowledgements:** Developed by Palmerino Mazzucco, Faculty of Mesa Community College, Mesa Arizona

**Approximate Time Required:** 2 hours

### **Equipment and Tools**

- Arizona High Tech Directory or similar (A similar document should be available in each state.)
- Phone book, yellow pages
- Sunday edition of major local or state newspaper
- Department of Commerce brochure of high tech industries in the region
- Internet connection (Most local libraries have internet access)

**Individual Activity:** This activity is to be completed individually.

### **Learning Objectives**

1. Learn to locate, gather, and organize information about high tech industries doing business in a city or state of choice that employ technicians and engineers.
2. Identify major segments of the electronics industry present in the city or state of choice.
3. Identify major markets of the electronics industry present in your city or state of choice.

### **Performance and Task Procedures**

A student entering the field of electronics or technology should be familiar with high tech industries present within their own state or in the city of the state in which they plan to live. As they educate themselves about technicians and engineers job opportunities available in that state, career choices can be made to make them marketable within a community where they wish to reside. Understanding the makeup of high tech industries in your region will help guide you as to where you go to school and where you might live when you graduate. Often the type of education you require or the job you seek does not exist in your city or state requiring you to either change schools or move to a new city to gain employment. It is common for students to discover that often the educational opportunities in a particular region support the industries around it making it possible to graduate and find jobs in same state you attended school.

This assignment explores high tech industry within the city or state of your choice and helps you better understand and classify major segments of the electronic industry present and identifies the major markets present within a particular city or state of your choice. This type of information is critical for new students seeking a career in the field of electronics or simply a career change.



To perform this activity, you must first identify which state or city you wish to research. Choose a large city where you go to school and wish to work, or choose a city and state you wish to explore for future employment opportunities. Remember, the larger the city and state you choose, the greater the chance high tech industries are present. If you focus too small or choose the wrong region, you could have trouble finding data and completing the report. Example: If you desire to design and build snow mobiles for a living, it might be difficult to find educational opportunities and a job in Hawaii after graduation.

Region to be researched: \_\_\_\_\_

(City, State, Province etc.)

The focus of this assignment will be gathering data about high tech industries present in your region of choice. The type of information gathered and tabulated will include the company name, location, type of business, product or services offered, number of employees, years in business, phone numbers, web sites, major segment, and major market of company. Other data can be included if important information outside the scope of this lab is discovered.

From the theory studied in your learning modules you discovered the following:

**5 major market segments of electronics:**

1. Components
2. Computers
3. Communications
4. Control & Monitoring
5. Instrumentation and Measurement

**6 major markets of electronics identified:**

1. Business/Office
2. Medical
3. Industry-Factory plants
4. Consumer & Entertainment
5. Government
6. Military

Attempt to locate as many of the resources listed below to help you collect information on companies in high tech electronics industry in your region of choice.

Each different resource analyzed in your research provides something different to consider. Some simply help identify company names, locations, and phone numbers while others can provide more detailed information and consolidate information in one resource. Which resources provide the most information will depend on the region you research.



### **Resource 1: High Tech Directory**

Go to your public library and request a copy of the “High Tech Directory” for the region you are researching. The High Tech Directory is filled with up- to-date information about industries doing business in the region of choice. This text is an incredible resource of information. Information within this book is very well organized and contains company names, addresses, emails, phone numbers, number of employees, type of business, business market they operate in, number of years in business and information about products and services offered to the community. This publication is organized in alphabetical order listing of companies.

Scan through the High Tech Directory and fill in the names of 10-15 companies or more that you might recognize along with any valuable information provided. Place your findings in Table 1. Expand to include names of any major companies you didn’t know had businesses operating in your region of choice as well as several interesting smaller companies that catch your interest. Scan the directory to identify any market segments and major markets of electronics that may dominate the region you are researching.

### **Resource 2: Yellow Pages**

If researching a region outside where you currently live, you may have to visit the local library to see if a phone book for that region is available. The Department of Commerce in that region may send you a copy or direct you to where you can get a copy.

In the Yellow Pages, go to the electronics, engineering, or manufacturing section. Locate and document important information related to companies listed, phone numbers, or addresses of industries you identify as high tech electronics industries. This is all the information the yellow pages typically provides. You can use this information to call companies and ask them to send you more information about their business. Continue your research.

### **Resource 3: Sunday Newspaper**

Review the employment section of a major city newspaper such as the Los Angeles Times, New York Times, or similar. This type of paper is generally available at most local libraries. Scan the Employment section under categories such as electronics, trades, manufacturing, electrical, engineering or technical. Clip out as many job opening ads as possible related to the electronics industry in your region. Paste these clippings on a separate piece of paper and keep this as part of your final report. Document the names of these companies in Table 1 included with this drill down activity and fill in as much data on these companies as possible.

Quite often newspaper information is only a starting point to identify industries looking for employees, salary, job locations and job descriptions being advertised.



#### **Resource 4: Commerce Department**

The Commerce Department of any particular city or town is an excellent source of information about what industries are doing business there. Simple e-mails, phone calls, or visits can be made to obtain brochures and information that provide names of high tech industries and often statistics and tables of data that might include salary, job descriptions, and statistics regarding jobs and industry present. Be sure to investigate this rich resource of material if you are having trouble locating material using other resources. This information often is available via the internet.

#### **Resource 5: Internet Research**

Depending on your success with the first several resources, you may seek more information. Search the internet using search engines such as Google.com or Yahoo.com to locate web pages for several of the companies you have discovered using any resources from this activity. Try to obtain as much information on the internet as possible to help you complete as much information in Table 1 as possible.

#### **Resource 6: Employment Agencies**

If you still need more research information, go back to the yellow pages, and search under temp agencies, job agencies, or employment agencies. This type of firm specializes in matching employers with employees who meet job experience or educational requirements. You can interview an employment agency about companies that do business in their market, the types of jobs they often need to fill, and the type of work. Agencies can be an excellent resource of detailed company information if you tell them you are a student doing research about high tech industries in the region. Be creative and use the agency to fill in missing data in your Company Information Table.

#### **Deliverables**

Deliverables for this Drill Down include:

1. Answers to the drill down activity questions
2. Company Information Table with a minimum of 10-15 companies listed. Include as much data gathered as possible. It is understood some categories could remain empty if the material cannot be located. The more companies you identify, the more understanding you will have about the region you are investigating.
3. A formal oral and/or written report presented as if you were presenting to a group of engineers or technicians. Remember all papers must be written in your own words. Words copied exactly as they are written must be placed in quotations and referenced. Failure to do so is deemed as academic plagiarism and is a serious offense. Be sure to include a conclusion and a summary paragraph.

### Scoring or Grading Criteria

It is the instructor's decision whether to grade this activity or not. The following criterion may be helpful. Reports should exhibit the following characteristics:

- Concise, to the point, and easily understood by other students
- Well written: grammar errors, poor sentence structure, etc. to be reviewed

### Drill Down Activity Questions

The answers to the two questions presented will help you understand any major market segments and major electronic markets present in your region. It can help new students understand and make solid choices about future education and employment opportunities upon graduation. This is definitely something to consider before investing in your education.

1. Rank the top three (3) major market segments in your region in order of importance.
2. Rank the top three (3) major market markets present in your region in order of importance.



Company Information Table

Company Name	Location	Phone	Email	Years in Business	# of Employees	Segment	Market	Product/ Service



Company Name	Location	Phone	Email	Years in Business	# of Employees	Segment	Market	Product/ Service