

9

INDUSTRIAL ARTS: REFRIGERATION AND AIRCONDITIONING (ENTREPRENEURSHIP)

This instructional material was collaboratively developed and reviewed by educators from public and private schools, colleges, and/or universities. We encourage teachers and other education stakeholders to email their feedback, comments, and recommendations to the Department of Education at action@deped.gov.ph.

We value your feedback and recommendations.

**Department of Education
Republic of the Philippines**

**Technology & Livelihood Education – Grade 9
Industrial Arts: Refrigeration and
Air-conditioning - (Entrepreneurship)
Learner’s Material
First Edition, 2014**

Republic Act 8293, section 176 states that: No copyright shall subsist in any work of the Government of the Philippines. However, prior approval of the government agency or office wherein the work is created shall be necessary for exploitation of such work for profit. Such agency or office may, among other things, impose as a condition the payment of royalties.

Borrowed materials (i.e., songs, stories, poems, pictures, photos, brand names, trademarks, etc.) included in this book are owned by their respective copyright holders. Every effort has been exerted to locate and seek permission to use these materials from their respective copyright owners. The publisher and authors do not represent nor claim ownership over them.

Published by the Department of Education

Secretary: Br. Armin A. Luistro FSC

Undersecretary: Dina S. Ocampo, Ph.D.

Development Team of the Learner’s Material

Consultant: Rosendo R. Rafael, Howard Mark N. Plete and Clodualdo V. Paiton

Authors: Marlon B. Ocampo Glenn Dennis V. Bautista

Editor: Lando T. Guzman

Reviewers: Dr. Fely L. Manuel, Joel G. Castillo, Lino A. Olit, Arnel Anonical,
Dr. Romeo Vicmudo, Marvin A. Mendoza, Dr. Orly E. Manuel
and Merham N. Abelardo

Subject Specialists: Albert Erni, James Julius M. Liquigan, Owen S. Milambiling

Management Team: Lolita M. Andrada, Jocelyn DR Andaya, Bella O. Mariñas
and Jose D. Tuguinayo Jr.

**Department of Education-Instructional Materials Council Secretariat
(DepEd-IMCS)**

Office Address: 5th Floor Mabini Building, DepEd Complex
Meralco Avenue, Pasig City
Philippines 1600

Telefax: (02) 634-1054 or 634-1072

E-mail Address: imcsetd@yahoo.com

ENTREPRENEURSHIP

Personal Entrepreneurial Competencies	1
Introduction	1
Objectives	1
Pre-assessmentt	2
Learning Goals/Targets.....	4
What to Know	4
What to Process	5
What to Reflect On and Understand.....	9
What to Transfer.....	10
ENVIRONMENT AND MARKET.....	14
What to Know	14
What to Process.....	18
What to Transfer	21

PERSONAL ENTREPRENEURIAL COMPETENCIES

INTRODUCTION

The ultimate aim of education is human development. Education should enable the learner to formulate a constructive outlook towards life and make a decision which suits the well-being of the society and the individual as well. Now that the globalization process has emerged, the introduction of Technology and Livelihood Education offers a list of alternatives. It has four major areas, which includes Home Economics, Agri-Fishery Arts, Information and Communication Technology and Industrial Arts.

This course is about Refrigeration and Air conditioning Technology which is one of the disciplines under Industrial Arts. Refrigeration technology was originally intended for food preservation. But given the nature of technology, Refrigeration technology has crossed over to many other industries. Today, domestic refrigeration technology has pronged out into industrial refrigeration, commercial refrigeration and transport refrigeration which aims to continually provide comfort and improvement in the lives of the people.

The study of refrigeration is activity-based, process oriented, student-centered, environmental based and life oriented. This module will guide the learners like you in the proper use of tools and materials in refrigeration technology, proper work culture in the laboratory, performing mensuration and calculation relevant to refrigeration technology, maintaining tools and materials for quality and quantity, and interpreting schematic diagrams in refrigeration technology.



OBJECTIVES

At the end of this module, the learners are expected to:

- prepare an action plan that addresses the area of development and strength based on your PEC's;
- generate business ideas based on existing industry needs that relates to your career choice while at the same time provide services that meet the demands of the market;
- perform the tasks expected of a refrigeration repair specialist assistant.
- perform the tasks expected of a tester; and

- demonstrate understanding of concepts and underlying principles of process and delivery in the exploratory course in refrigeration and air conditioning.



PRE-ASSESSMENT

Directions: Read and study the questions below and choose the answer that identifies your awareness about each question. Write the letter of your choice in the answer sheet provided and support your answer by writing an explanation about your choice.

1. How familiar are you with “Personal Entrepreneurial Competencies” of a Refrigeration and Air conditioning Specialist?
 - a. I have never heard of it nor have I heard of PEC’s, but don’t know what they are.
 - b. I have some ideas what they are, but do not know when or how to use them.
 - c. I have a clear idea what they are but have not used them.
 - d. I can explain what they are, what they do for me, and how to use them.

Explanation: _____

2. Have you generated business ideas in establishing a refrigeration and air conditioning shop before?
 - a. I have neither thought of nor presented one.
 - b. I have thought of one, but have never presented one.
 - c. I have thought of one but have not designed one.
 - d. I have both thought of and presented a business plan.

Explanation: _____

3. How familiar are you with the task of a “refrigerator repair specialist assistant”?
 - a. I have never heard of it
 - b. I have heard of it, but do not remember what it does.
 - c. I have some ideas what it does, but not too clearly.
 - d. I know what it does, and can explain what service it provides.
 - e. I know what it does, when to perform its task, and can do it to maintain a refrigeration system.

Explanation: _____

4. How familiar are you with the testing tools in refrigeration system?
- I have never used it, or tried it and I cannot really do anything with it.
 - I can do simple reading of its gauges and perform simple diagnosis using it (e.g., short circuit, under charged unit).
 - I can manipulate multiple tools and instruments and create a list of comprehensive diagnosis of the system.
 - I can easily use precision tools and equipment to create a list of comprehensive diagnosis of the system for professional quality output.

Explanation: _____

5. For each of the following concepts and principles, place a check mark in the cells that describe your experience.

Concept and Principles	Have seen a video of a technician	Have seen an actual performance of a technician	Have read about it	Have written a journal on it.
Use of Tools and Equipment in RAC Technology				
Maintenance of Tools and Equipment				
Safety Rules and House-keeping in RAC Technology				
Mensuration and Calculation				
Reading and Interpreting of Schematic Diagram				

Explanation: _____



LEARNING GOALS/TARGETS

I invite you to look at the objectives of this module and reflect on each one. Once you have finished organizing your thoughts you can start writing your own learning goals/targets in your notebook based on the stated objectives.



WHAT TO KNOW

Personal Entrepreneurial Competencies

Traits Board

Directions: In each metacard, using crayon or colored pens, draw your answers to the following questions:

- Square A: What are my strengths?
- Square B: What are my challenges or limitations?
- Square C: What are the rules I live by?
- Square D: What are my values?
- Square E: What do I expect from people around me?
- Square F: What do I hope to accomplish ten years from now?

A	B	C
D	E	F

Important Entrepreneurial Traits

Hard Working: Running a business requires a lot of energy and drive. This involves the ability to work for long hours when necessary, to work intensely in spurts and to cope with less than a normal amount of sleep.

Self-Confident: To succeed, entrepreneurs have to believe in themselves and in their ability to achieve the goals they have set for themselves. This is often shown by a belief that “if you want something badly enough and are prepared to work at it, you’ll usually get it”.

Builds for the Future: The goal for most successful business people is to build a secured job and income for themselves which is based on their own abilities. This means entrepreneurs understand that it may take several years to build up business income to a reasonable standard.

Profit-Oriented: Interest in generating money is a clear indicator of an entrepreneur’s suitability for being a business owner. This means recognizing that business comes first. Once profits are generated, the entrepreneur can make decisions about how the profits can be used – to expand the enterprise or for personal use.

Goal-Oriented: Success in business depends upon being able to set realistic goals or targets and to work with determination to achieve them. This ability to set goals (for things the person thinks are worthwhile) and to work to achieve them is fundamental to being an entrepreneur.

Persistent: All businesses have their problems and disappointments. Being persistent in solving a problem is one of the keys to being a successful entrepreneur.

Copes with Failure: All business ventures inevitably contain disappointments and failures as well as successes. Coping with failures involves recognizing these failures, learning from them and seeking new opportunities. Without this characteristic, early failures may end a person’s attempt at self-employment.

Responds to Feedback: Entrepreneurs are concerned to know how well they are doing and to keep track of their performance. Obtaining useful feedback and advice from others is another important characteristic of entrepreneurs.

Demonstrates Initiative: Research shows that successful entrepreneurs take the initiative and put themselves in positions where they are personally responsible for success or failure.

Willing to Listen: The successful entrepreneur is not an inward looking person that never uses outside resources. Self-reliance does not exclude the ability to ask for help when needed from such people as bank officials, accountants and business advisers. Being able to listen to the advice of others is a key characteristic of an entrepreneur.

Sets Own Standards: Setting standards of performance and then working to achieve them is another indicator of a successful entrepreneur. These standards can be income, quality, sales or product turnover. Most entrepreneurs want to do better each year, to set and achieve higher standards from year to year.

Copes with Uncertainty: Being an entrepreneur is much more uncertain than employment. This uncertainty is about sales and turnover, but it often also exists in other areas such as material delivery and prices, and bank support. An ability to cope with this uncertainty without becoming too stressed is a necessary trait of being an entrepreneur.

Committed: Starting and running an enterprise demands total commitment by the entrepreneur in terms of time, money and lifestyle. It has to be a major priority in the entrepreneur's life.

Builds on Strengths: successful business people based their work upon the strengths they have, such as manual skills, interpersonal skills, selling skills, organizational skills, writing skills, knowledge of a particular product or service, knowledge of people in a trade and ability to make and use a network of contacts.

Reliable and Has Integrity: The qualities of honesty, fair dealing and reliability in terms of doing what one has promised to do are essential traits of an entrepreneur.

Risk-Taker: Being an entrepreneur involves some risks. Entrepreneurs have the ability to take measured or calculated risks. Such risks involve working out the likely costs and gains, the chance of success and the belief in oneself to make the risk pay off. Entrepreneurs may be considered risk avoiders when they reduce their risks by having others assume part of the risk. Those who assume the entrepreneur's risk may be bankers, suppliers and customers. **(Source: Localized Know About Business)**

You should review the entrepreneurial characteristics listed on the board. Give attention to the importance of these personal entrepreneurial characteristics to succeed in business.



WHAT TO PROCESS

Entrance, Exit, and Extra Tickets

Directions: Write down your honest responses to the questions written on each ticket.

Entrance Ticket

What are the traits and competencies of a successful entrepreneur that you know?

Exit Ticket

“The three best things I learned today are...”

Extra Ticket

If you were to start all over again, what else you want to think, say, and act?

Role Playing

Directions: Group yourselves into five small groups. With your specific case studies or assignments, you have to role play and discuss the activities you have performed. After your group performances, you will be guided with the questions below for processing.

1. What happened? What were the challenges or issues met? How do entrepreneurs decide or face the matters on hand?
2. How would one arrive at his/her decision?
3. What are the easy or difficult decisions made by each of the characters? Describe the feelings before, during and after conversations.
4. What are the traits and competencies you have noticed and not noticed?

Case Study 1

You are an entrepreneur who has a two-year experience in running a computer café business while your competitor has been in the same business for more than six years.

You will be meeting in a conference sponsored by a computer operators club in one hotel in the metropolis. Decide on what to discuss and converse with each other.

Case Study 2

For the past two years without hearing things from this person, while you are having a tea break, he/she approaches you, telling that he/she was one of your friends in your community; he/she initiated the conversation with reminiscing the past that leads to ease conversation and finally, introduction of his/her product which hooks your interest.

As a vendor, convincingly discuss your product with your friend and convince him/her to order your product.

Case Study 3

One entrepreneur and his/her associate or colleague while on break in one private office

You tell him/her your new business undertaking which you consider will be a guaranteed success. Discuss the matter with him/her.

Case Study 4

One entrepreneur and board members in a cooperative

You wish to expand your business in ready to wear (RTW) garment. You badly need a loan. Persuade or convince them to grant your loan.

Case Study 5

One entrepreneur and a mayor in a rural or urban municipality

You were approached by your mayor to organize a fair for a feast day. Discuss your proposed activities and other details.

Oral Presentation Rubrics

Oral Presentation Rubric			
	Very good (has no more than three minor errors) 3pts	Satisfactory (has four to seven errors) 2pts	Poor (has more than seven errors) 1pt
1. Gave an interesting introduction			
2. Presented clear explanation of topic			
3. Presented information in logical manner			
4. Used complete sentence			
5. Offered a concluding summary			
6. Spoke clearly, correctly, distinctly, and confidently			
7. Maintained eye contact			
8. Maintained acceptable posture.			
9. Utilized audio-visual aids			
10. Handled questions and comments			
Total			
Grand Total = /30			



WHAT TO REFLECT ON AND UNDERSTAND

Write shop

Directions: Write a story from the viewpoint of a successful RAC Service Center. Describe how he/she succeeded against challenges and difficulties in life.

Writing Rubrics

Directions: The paper will be given one of the three scores: P, A, or B. The presenter will present the paper with these descriptors in mind:

Criteria	Descriptions
Proficient	Can easily complete process <ul style="list-style-type: none"> • has no more than three minor errors (mechanics, word choice, sentence structure) • captures message fully
Approaching	Take some efforts to complete process <ul style="list-style-type: none"> • has four to seven minor errors (mechanics, word choice, sentence structure) • captures message partially
Beginning	Cannot complete process <ul style="list-style-type: none"> • has more than seven errors (mechanics, word choice, sentence structure) • does not capture message



WHAT TO TRANSFER

Research and Investigate

Directions: Conduct a research with an entrepreneur engaged in refrigeration and air conditioning servicing and investigate his/her successful traits or competencies. You will be rated using the criteria below:

Rubrics for Term or Research Paper

Qualities & Criteria	Poor (0-80)	Good (80-90)	Excellent (90-100)
Format/Layout (15%) <ul style="list-style-type: none"> • Presentation of the text • Structuring of text • Requirements of length, font and style followed. 	Followed poorly the requirements related to format and layout.	Followed, for the most part, all the requirements related to format and layout. Some requirements were not followed.	Closely followed all the requirements related to format and layout.
Content/Information (50%) <ul style="list-style-type: none"> • All elements of the topics were addressed 	The essay was not objective and addresses poorly the issues referred in the proposed	The essay was objective and for the most part addressed with in depth analysis most of the issues referred in the	The essay was objective and addressed with in depth analysis all the issues referred in the

<ul style="list-style-type: none"> The information is technically sound Information based on careful research <p>Coherence of information</p>	<p>topic. The provided information was not necessary or not sufficient to discuss these issues.</p>	<p>proposed topic. The provided information was, for the most part, necessary and sufficient to discuss these issues.</p>	<p>proposed topic. The provided information was necessary and sufficient to discuss these issues.</p>
<p>Quality of Writing (25%)</p> <ul style="list-style-type: none"> Clarity of sentences and paragraphs No errors and spelling, grammar and use of English Organization and coherence of ideas 	<p>The essay was not well written, and contained many spelling errors, and/or grammatical errors and/or use of English errors. The essay was badly organized, lacked clarity and/or did not present ideas in a coherent way.</p>	<p>The essay was well written for the most part, without spelling, and/or grammatical errors. The essay is for the most part well organized, clear and presented ideas in a coherent way.</p>	<p>The essay was well written from start to finish, without spelling, and/or grammatical errors. The essay was well organized, clear and presented ideas in a coherent way.</p>
<p>References (10%)</p> <ul style="list-style-type: none"> Soundness of references 	<p>References were not appropriately used and cited.</p>	<p>Most of the references were appropriately used and cited.</p>	<p>All of the references were appropriately used and cited.</p>

Communicate (Memoir or journal making)

Directions: Create a memoir or journal of a successful entrepreneur engaged in refrigeration and air-conditioning servicing highlighting his/her traits and competencies. Be sure to provide details about how he/she succeeded challenges and difficulties.

Criteria	Descriptions				Value
	1	2	3	4	
Display/Parts	All parts were not clearly labeled.	Some parts were clearly labeled	Most parts were clearly labeled.	All parts were clearly labeled	
Mechanics and Spelling	There were many mistakes in mechanics	There were several mistakes in mechanics	There were minor mistakes in mechanics	There were no mistakes in mechanics	

	and/or spelling.	and/or spelling.	and/or spelling.	and/or spelling.	
Presentation	The journal was presented as very difficult for the audience to understand	The journal was presented as difficult for the audience to understand	The journal was presented as less difficult for the audience to understand	The journal was presented as easy for the audience to understand	
Layout	Layout was confusing. Components were inconsistent and information was missing.	Layout was somewhat organized. Most of the components were not organized. Partial information could be located	Layout was almost organized. Most components were consistent within the publication. Almost all information could be located.	Layout was well organized. There was consistency in its components that allowed the readers to easily locate information.	
				Total	
Student's comments: _____					
Teacher's comments: _____					

Post Personal Entrepreneurial Competencies (PECs) Inventory

Directions: Encircle the number which corresponds to what extent the statement applies to you.

Legend: 5=Always 4=Usually 3=Sometimes 2=Rarely 1= Never

1. I have the physical stamina to work long hours.	1	2	3	4	5
2. When making a decision, I try to think of all alternatives I can before choosing one.	1	2	3	4	5
3. I have a clear value proposition that I can articulate.	1	2	3	4	5
4. I have a clear vision on how my work will make a difference.	1	2	3	4	5

5. I look for things or information that need to be done	1	2	3	4	5
6. I actively seek out and ask for help from others.	1	2	3	4	5
7. I have a budget that I follow and regularly updated	1	2	3	4	5
8. I am prepared for the emotional strain of running my own business.	1	2	3	4	5
9. I believe that every decision has many solutions.	1	2	3	4	5
10. I always negotiate to create win-win agreements.	1	2	3	4	5
11. I know my life purpose and can easily articulate it when someone asks.	1	2	3	4	5
12. When starting a new task, I solicit information before going ahead.	1	2	3	4	5
13. I have willingness and ability to talk to others.	1	2	3	4	5
14. I do not let uncertainty stop or hinder me from moving into action.	1	2	3	4	5
15. I shall never do anything that would possibly give me a loss.	1	2	3	4	5
16. Decision- making mostly involves step-by-step method.	1	2	3	4	5
17. I am an effective listener.	1	2	3	4	5
18. I plan a big project by breaking it down into smaller tasks.	1	2	3	4	5
19. I like to think creatively and innovatively.	1	2	3	4	5
20. I have a genuine care for others.	1	2	3	4	5
21. In any significant undertaking I assess the risks, rewards, and obstacles and understand the probability for success when I move forward.	1	2	3	4	5
22. I view failure as a learning experience and am not too discouraged by it.	1	2	3	4	5
23. When making decision, I use my first idea.	1	2	3	4	5
24. I have the ability to encourage and motivate others.	1	2	3	4	5
25. The more specific I can be, the more chances I have to succeed.	1	2	3	4	5
26. I have the ability to identify opportunities and generate ideas suitable to the opportunities.	1	2	3	4	5
27. I enjoy the company of good and deserving friends so that I can get their opinion on my work.	1	2	3	4	5
28. When a problem arises, I usually figure out a way to solve it.	1	2	3	4	5
29. Even If I fail in my effort, I shall learn something.	1	2	3	4	5
30. When making decision, I try to figure out what the results of my action will be.	1	2	3	4	5
31. I know what my bottom line is before entering negotiations and am willing to walk away if it is not met.	1	2	3	4	5
32. I have a written plan and goals that I follow through for my work.	1	2	3	4	5
33. I enjoy attending exhibits, fora, and conventions.	1	2	3	4	5
34. I like to listen with others	1	2	3	4	5
35. I shall never do anything that would possibly give me a loss.	1	2	3	4	5

Entrepreneurial Skills Scoring Sheet

Rating of Statements	Score	Entrepreneurial Skills
$\frac{\quad}{(1)} + \frac{\quad}{(8)} + \frac{\quad}{(15)} + \frac{\quad}{(22)} + \frac{\quad}{(29)} = \underline{\quad}$		A. Resilience or Coping Skills
$\frac{\quad}{(2)} + \frac{\quad}{(9)} + \frac{\quad}{(16)} + \frac{\quad}{(23)} + \frac{\quad}{(30)} = \underline{\quad}$		B. Decision Making Skills
$\frac{\quad}{(3)} + \frac{\quad}{(10)} + \frac{\quad}{(17)} + \frac{\quad}{(24)} + \frac{\quad}{(31)} = \underline{\quad}$		C. Negotiation Skills
$\frac{\quad}{(4)} + \frac{\quad}{(11)} + \frac{\quad}{(18)} + \frac{\quad}{(25)} + \frac{\quad}{(32)} = \underline{\quad}$		D. Planning and Goal Setting Skills
$\frac{\quad}{(5)} + \frac{\quad}{(12)} + \frac{\quad}{(19)} + \frac{\quad}{(26)} + \frac{\quad}{(33)} = \underline{\quad}$		E. Opportunity and Information Seeking
$\frac{\quad}{(6)} + \frac{\quad}{(13)} + \frac{\quad}{(20)} + \frac{\quad}{(27)} + \frac{\quad}{(34)} = \underline{\quad}$		F. Interpersonal and Partnering Skill
$\frac{\quad}{(7)} + \frac{\quad}{(14)} + \frac{\quad}{(21)} + \frac{\quad}{(28)} + \frac{\quad}{(35)} = \underline{\quad}$		G. Engaging Risk and Reality
Total Score = $\underline{\quad}$		

ENVIRONMENT AND MARKET



WHAT TO KNOW

Anticipation/Reaction Guide

Directions: Read the statements below and decide if you AGREE or DISAGREE with each statement. Write your answer underneath the "Anticipation" column. At the end of your lesson, write your answer underneath the "Reaction" column. Compare your answers? What did you learn?

Anticipation

Statement

Reaction

1. _____

Not all business ideas are good opportunities

1. _____

- | | | |
|-----------|--|-----------|
| 2. _____ | Business opportunities are viable and guarantee return on investment | 2. _____ |
| 3. _____ | SWOT analysis is a tool in assessing business ideas and opportunities | 3. _____ |
| 4. _____ | Competencies are important in assessing ideas and markets | 4. _____ |
| 5. _____ | Irritations are good sources of business ideas and opportunities | 5. _____ |
| 6. _____ | Selecting a site is a major requirement In putting up small business | 6. _____ |
| 7. _____ | Experience is a must in starting an enterprise | 7. _____ |
| 8. _____ | Human want or need is the chief reason for continuous improvement of service | 8. _____ |
| 9. _____ | Business plan is an indispensable tool in any business undertaking | 9. _____ |
| 10. _____ | Ideas and places are products | 10. _____ |

Environmental Scanning and Opportunity Seeking

Stretching your imagination, applying creativity, and looking at technological innovations are strategies in scanning and assessing business ideas and opportunities.

Also, competencies such as knowledge, skills, and attitudes of a prospective entrepreneur are requirements of and driving forces behind successful entrepreneurship.

How can you get ideas for a business? Hobbies and interests, irritations, franchise, complaints, surveys, challenges, multimedia and others are sources of ideas. Similarly, creativity as source of idea denotes as the ability to design, form, make or do something in a new or different way. To be creative, you have to encourage more ideas, and keep your minds and eyes open.

However, the very reason why we generate ideas and opportunities, it is because we want to respond to the needs and satisfy the wants of our customers. Need is something that is generic and is required by every person for his/her health and well-being of his/her mind. On the other hand, human want is specific in nature; it exists if a person is not yet satisfied with a particular object, idea or, event.

To generate ideas for product selection and marketing, conducting a SWOT analysis can help to identify the strengths, weaknesses or challenges, opportunities, and threats.

The table below is a sample of SWOT analysis of a proposed craft material.

Internal forces	External forces
<p>Strengths</p> <ul style="list-style-type: none"> • Cheap and adequate raw materials • Small overheads 	<p>Opportunities</p> <ul style="list-style-type: none"> • Availability of alternative raw material • Supportive government policy
<p>Weaknesses</p> <ul style="list-style-type: none"> • Lack of capital • Inadequate equipment for production 	<p>Threats</p> <ul style="list-style-type: none"> • Raw material shortages • Too many competitors

Based on the examples listed in the table, strengths are internal favorable assets, gains, and requirements of the enterprise while weaknesses are shortcomings, challenges which the business is experiencing at present or since the time the business started. On external forces, threats are situations or things happening beyond the control of the enterprise while opportunities are chances or hopes that are available at present or in the incoming future.

Analyzing the illustration in the previous page, helps an entrepreneur become aware of the possibilities of preventing problems and challenges from arising.



Planning and Strategizing

Directions: Make a SWOT analysis of refrigeration and air-conditioning shop in your locality. Present your output in the class.

Internal forces	External forces
Strengths <ul style="list-style-type: none">•••	Opportunities <ul style="list-style-type: none">•••
Weaknesses <ul style="list-style-type: none">•••	Threats <ul style="list-style-type: none">•••

It is very important that ideas and opportunities be assessed once they are identified to ensure their feasibility. At the same time assessing business opportunities also means, determining risks and rewards.

Reflecting on the factors enumerated below, can help one arrive at a clear understanding of how to take advantage of business opportunities.

Industry and market. These involve the needs and wants of the consumers. These also include determining the size and scope of the market, site selection, and correct product pricing.

Also, collecting information from both primary and secondary sources, such as libraries, government agencies, chamber of commerce, interviewing customers and/or conducting survey are needed in identifying/seeking opportunities.

Personal goals and competencies of the entrepreneur

Personal goals and desirable traits of would-be entrepreneur are requirements before venturing into any business. These will enable him/her to prepare and endure challenges and difficulties that will come along his/her way.

Competition

Healthy competition in terms of pricing, marketing strategies, and varied product lines are said to attract opportunities between and among vendors, vendee, supplier, and manufacturer. Thus, the ultimate goal of competition is for the buyer to choose quality products that will satisfy consumer needs and wants.

Capital and Technology

Taking advantage of technology and having access to capital are vital aspects in identifying business opportunities. The rise and fall of foreign exchange rate and other requirements do not attract investors.

Environment

Environment for example, refers to physical, political, economic, geographical, and legal contexts. Physical is the actual picture of the location which, as much as possible is strategic or accessible to customers and suppliers. The image of the community or country has something to do with political state and the judiciary system.

Feasibility Study and Business Plan

Lastly, the process of identifying or seeking business opportunities is referred to as a feasibility study or business plan.

A business plan should satisfy five main questions, namely: a) where is your current location; b) your idea on the project or business; c) what you want to do; d) how you propose to go about it?; and e) is the project worthwhile?



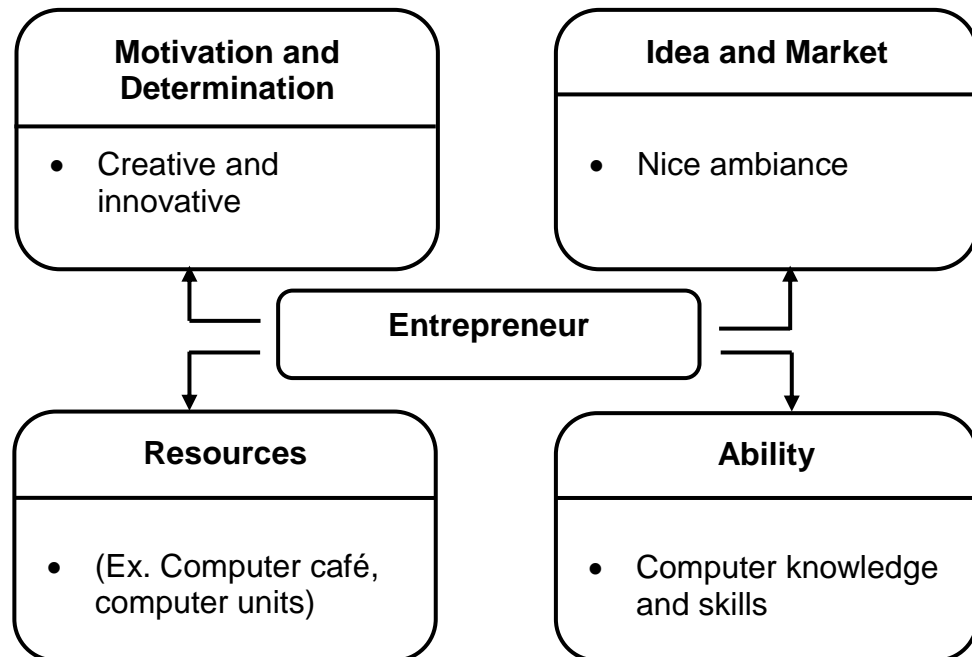
WHAT TO PROCESS

Motivation, Abilities, Ideas and Resources (MAIR) Framework

Directions: Group yourselves into four working groups. Choose an idea or product or service, to apply the questions being asked by the exercise.

Ask each group to choose a reporter to present their answers to the class.

MAIR FRAMEWORK



Note: The framework is adapted from Gibb, A.A. (1981)



Business idea

Directions: Using the article, if you are Mr. Boltron, why your business failed? What should you have done before you started the business?

Boltron's Hardware Store

Mr. Boltron was a young school teacher in a small town. After moving to the community, Mr. Boltron made many friends, was apparently well-liked and took part in many community activities. Mr. Boltron wanted to make more money so he thought he would start a business. He was encouraged by his wife to try a way of life that would bring more income than teaching.

Mr. Boltron heard through a friend that a stock of hardware was for sale in a town. The owner of the store had died. For 2,000 cash, Mr. Boltron could buy an inventory of hardware items. Investigating the possibilities in his town, he could rent a vacant store between two retail businesses. One of these businesses was a feed store, and the other was a long established hardware store owned by a smart middle-aged businessman. Although a local banker told Mr. Boltron not to leave his job as a school teacher, he quit his teaching job, took his savings of 5,000 and entered the hardware business.

Upon opening his store, Mr. Boltron placed a sign in the window stating: “Open for business – Hours are six a.m. to ten p.m. The owner will also do business outside of regular business hours.” Mr. Boltron thought that in this way he could compete with the established hardware store next door.

During weekdays, Mr. Boltron’s hardware store was the only place of business in town to stay open after six p.m. During the long hours the hardware store was kept open, Mr. Boltron didn’t make too many sales.

The only customers Mr. Boltron attracted were a few poor credit risks, who purchased small items from the new hardware store on credit rather than paying cash in the other hardware store. Mr. Boltron soon discovered that his stock was down, that he had no cash with which to purchase new stock, and he couldn’t borrow more money to keep the business going.

With competition from the established hardware next door, Mr. Boltron’s business lasted only eighteen months. There had never really been much of a chance for success. The market for hardware items in the town was too small to support two hardware stores. Even the best manager could not have made a success of Boltron’s Hardware. Mr. Boltron wished he had checked things more carefully before he started the business. Maybe the pay for teaching wasn’t so bad after all. *(Source: Know About Business Module)*

Question and Answer about Market information

Q: What is a market?

A: A market is composed of people, who need, want, or buy product or service.

Q: What should entrepreneurs know about potential customers?

A: Their characteristics or profile, wants, preferences in terms of location of the market, and capability to buy products or services.

Q: Where can customer information be located?

A: Information of customer can be found from various government and non-government agencies, media, and by conducting survey or interview.

Q: What is the marketing concept?

A: Determining the needs and wants can be done through market research, analyzing the competitive advantages is the effect of sound and doable marketing strategy, selecting specific customer or target market, and determining how to satisfy him/her through managing marketing mix (products, promotion, price and place)

Q: What is market research?

A: Market research includes identifying trends and fashions that may affect sales, customer buying preferences, determining local economic situations, and monitoring competitors’ activities through survey and interview.

Q: What is a marketing strategy?

A: Addressing customer’ needs or wants can be done through analyzing customer’s buying capabilities and preferences by designing a product or service offering and managing a marketing mix.

Q: What is target marketing?

A: Identifying specific customers, their profile and buying capacity.

Q: What is marketing mix?

A: Marketing mix includes effective product strategies, marketing decision, distribution and price policies.

Customers’ information should be gathered and analyzed to constantly check for possible change of behaviors.



WHAT TO TRANSFER

Research and Investigate

Directions: With the guidance of your teacher, conduct a simple market survey of your sample new service. After conducting a survey, make a simple business plan for your refrigeration and air conditioning service.

Sample Survey Questionnaire

Questions	Responses
1. What do you like most about our new product?	
2. What changes would most improve our new product?	
3. What do you like most about competing products currently available from other companies?	
4. What changes would most improve competing products currently available from other companies?	

5. If our new product is available today, why would you use it instead of competitor's product?	
6. What would make you more likely to use our new product?	
7. Overall, are you satisfied with your experience of using our new product?	



Simple Business Planning

Directions: After conducting a survey, make a simple business plan for your refrigeration and air conditioning services. Use the template below for your information and guidance.

Simple Business Plan				
Name of Business: _____				
Legal Form: _____				
Address and Contact Number: _____				
Brief description of the business idea				
Product or service: _____				
Customers: _____				
Owner/s: _____				
No. of jobs to be created: _____	Startup capital			
Sources of capital: _____	Investment: _____			
	Savings: _____			
	Total: _____			

Business Idea and Market

Description of the business idea:

Description of the market:

Marketing Plan Promotion	Marketing Plan Product Specification (size, quality)	Marketing Plan Price	Marketing Plan Place

Description and sketch of site

Remarks: