



## ***MGT 514: Technological Entrepreneurship*** ***[3 Credit Hours]***

### **Instructor Information**

**Instructor:** Sul Kassicieh  
**E-Mail:** [sul@unm.edu](mailto:sul@unm.edu)  
**Phone:** 277-8881  
**Office:** ASM 2110

### **Course Information**

#### **Course Description:**

This course has three learning objectives. First is to lead the student into a broader understanding of the data and information that is necessary to build a business as captured in a business plan for a technology company. Second is to create an understanding of strategic thinking and decision making as it impacts new firm creation and early stage growth. The third is to build the right team that can bring knowledge from different aspects of business and technology to propel the company to success.

Specifically the student will develop a deeper understanding of the problems, challenges and issues facing a new firm that is based on an invention or technological advancement. The student will also explore the variety of strategic options typically available to technology-based embryonic firms and to understand the contexts within which it is usually appropriate to choose specific strategies. Finally, the students will be asked to prepare a business plan.

The students in the class will form teams of three; four or five students (note that there is a tradeoff between the added knowledge/effort that more people contribute to a business plan and the added burden of coordinating among a larger number of people). You may work with your friends, but the success of your endeavor will depend on the strength of the team across disciplines.

Through readings from the books as well as other information from the instructor, the course helps the entrepreneurial process through development of an integrated business plan. It provides the aspiring entrepreneur with a framework for selecting, funding, and starting a business. In a highly competitive and ever changing environment, this course provides tools and insights, which improve the chances for success as an entrepreneur.

#### **Course Prerequisites:**

To be able to build a business plan for a technology startup, students will integrate information from the technology areas for a product, process and/or service linking it to marketing, management, operations and financial plans. Students need to define the technology in terms of its capabilities to deliver solutions to the customer. All of this

knowledge is acquired by taking courses in these areas or by practical experience but students who are doing some of these activities for the first time should expect a learning curve. It is highly advisable to form/join a team with different backgrounds that address these issues to reduce the time of the learning curve.

### **Course Objectives:**

- To identify opportunities based on technological innovations.
- To understand the challenges facing a new firm (or a new product in an existing firm) that is based on an invention or technological advancement.
- To experience the excitement and challenge of technology entrepreneurship.
- To develop a knowledge base and elementary skill for the appraisal and development of a significant new technology-based enterprise.
- To know the variety of strategic options typically available to technology-based embryonic firms and to understand the contexts within which it is usually appropriate to choose specific strategies.
- To experience the process of business plan preparation.

## **Textbooks and Supplementary Materials**

### **Required Textbooks:**

Bruce R. Barringer. *Preparing Effective Business Plans: An Entrepreneurial Approach*. 2<sup>nd</sup> edition. Pearson/Prentice Hall, 2014.

Steve Blank and Bob Dorf. *The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company*. K&S Ranch, Inc., 2012.

The instructor will also have other power point presentations that will help the students with specific areas of the business plan.

## **Assessment and Grading**

### **Tracking Course Activity**

UNM Learn automatically records all students' activities including: your first and last access to the course, the pages you have accessed, the number of discussion messages you have read and sent, web conferencing, discussion text, and posted discussion topics. This data can be accessed by the instructor to evaluate class participation and to identify students having difficulty.

### **Instructor Expectations:**

I will give each of you 100% commitment to help you successfully complete my class, however, I expect you also to give a 100% commitment to this class. The class asks you to read the textbooks, use the resources available, ask questions, complete your assignments, work intelligently and consistently with your team, review the feedback that I give you and continuously improve the business plan.

This is not a course where you can leave things to the day before the assignments are due. It is also not a course where you finish one part of the business plan and not reconsider it if you find new information. Business planning is hard work and requires an iterative process of figuring things out but continuously making sure that new information will affect all sections of the plan.

This is a course where working with your fellow teammates is essential. This is a good reflection of how things work in real life. If you slack off, you are hurting your team. You should make sure that you have the time to spend on this course and to put in the time that will make your team effort a success.

Business Planning is an integrated activity. What you do in one section/analysis will have an effect on other analyses/sections. For instance, the market analysis section will have an effect on the financials so this is a team effort and not one where each member on the team works on one part of the plan and then you put it together in one document. The plan should be integrated otherwise it will be fatally flawed.

### Grade Weighting:

1) Deliverable 1	150
2) Deliverable 2	150
3) Deliverable 3	150
4) Deliverable 4	150
5) Final Business Plan	150
6) Presentation	150
7) team members score	100
Total points	1000

### Grading Scale:

Above 950: A  
 901-949: A-  
 870-900: B+  
 840-869: B  
 801-839: B-  
 701-800: C

## Course Expectations & Ground Rules

### Course Expectations:

- *time required (10 hours per week)*
- *students are expected to work and to communicate with one another in this course:*
  - *Doing a complete business plan by oneself is very difficult*
  - *Choose your team carefully: make sure you have discussed goals, work style, ability to work, ability to discuss, how decisions are/ will be made and living by those decisions. This is a partnership that has to withstand the test of differences of opinion and potential problems that arise in every group. Your grade is based on the group assignments.*
- *Team projects: in business planning, teams that assign different sections to different members will end up with four different sections of a plan that does not read well. One cannot work on a section and then attach things together to form the “plan”.*
- *students are expected to keep instructor informed of class related problems, or problems that may prevent the student from full participation*

### **Instructor Drop Policy**

**The instructor may drop a student**, if the student does not complete assignments on time. Falling behind in one deliverable will mean that you have to work harder to catch up and that puts you and your team at a disadvantage.

This course falls under all UNM policies for the last day to drop courses, etc. Please see <http://www.unm.edu/studentinfo.html> or the [UNM Course Catalog](#) for information on UNM services and policies. Please see the [UNM academic calendar](#) for course dates, the last day to drop courses without penalty, and for financial disenrollment dates.

### **Online Library Resources**

UNM's libraries can be accessed electronically at: <http://www.unm.edu/libraries/>.

### **Students with Disabilities**

*The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodations of their disabilities. If you have a disability requiring accommodation, please contact me immediately to make arrangements as well as Accessibility Services Office in 2021 Mesa Vista Hall at 277-3506 or <http://as2.unm.edu/index.html>. Information about your disability is confidential."*

### **Copyright Issues**

All materials in this course fall under copyright laws and should not be downloaded, distributed, or used by students for any purpose outside this course.

<http://www.unm.edu/~counsel/general/copyright.htm>

### **Academic Integrity**

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. Dishonesty is defined as a lack of truth, honesty or trustworthiness. Cheating is defined as influencing or leading by deceit. Deceit is defined as intending to mislead and commonly suggests a false appearance.

A student will be considered to be dishonest if he or she:

- Misrepresents data, results or sources for papers or reports
- Copies another person's work - plagiarism

The students should also be familiar with UNM's [Policy on Academic Dishonesty](#) and the [Student Code of Conduct](#) which outline academic misconduct defined as plagiarism, cheating, fabrication, or facilitating any such act.

Anderson School of Management faculty, staff and students commit to values of trust, honesty, integrity, and accountability. We will not tolerate academic dishonesty. **By enrolling in any course at Anderson, the student accepts the Anderson Academic Honesty Code and affirms the following pledge: I will not lie, cheat, fabricate, plagiarize or use any other dishonest means to gain unfair academic advantage.**

Any violation of the code of conduct will be taken very seriously and appropriate sanctions will be applied. For full text of Anderson's Academic Honesty Code, please visit <http://www.mgt.unm.edu/honesty>

## **Specific Course Requirements**

### **Course introduction**

The focus of this semester is the development of a business plan for a new technology business. The class will divide into teams of three students (more students per team is possible but you should note that there is a tradeoff between the added knowledge/effort that more people contribute to a business plan and the added burden of coordinating among a larger number of people). You may work with your friends, but the success of your endeavor will depend on the strength of the team across multiple disciplines so a variety of backgrounds will enhance your success.

Through readings from the book as well as other information from the instructor, the course simulates the entrepreneurial process through the students' business plan development. The course should enable the student to evaluate his or her own desires and prospects for a career as an entrepreneur. In doing so, it provides the aspiring entrepreneur with a framework for selecting, funding, and starting a business. In a highly competitive and ever changing environment, this course provides tools and insights, which improve the chances for success as an entrepreneur.

You should choose intellectual property (IP) from the following sources:

- a) If you are a technologist that have worked on a research team and you are in this course, you want to check with the other scientists on the research team (your professors, your colleagues, other professors) about their interest in commercializing the technology on which you have worked. This gives you the competitive advantage of knowledge about this area and has a built-in mechanism to feed the new venture with new ideas that will improve the current technology for future versions of your product.
- b) If you are not a technologist OR you have decided NOT to use what you have been working on in a research environment (please rethink this!), then you should look for opportunities elsewhere such as linking with others from engineering, medicine and/or the hard sciences. There are many such groups interested in the UNM Business Plan Competition that could be the link to technologies that you can use (It is expected and in your best interest that you become a founding member of the resulting business: people work harder with a purpose and incentives such as ownership of an equity position in a start-up).
- c) You can look at research organizations such as Sandia National Laboratories, Los Alamos National Laboratory, UNM, NMSU, NM Tech, The Air Force Research Lab or other groups' research. If you can get the technologist interested in being with you on the team, it is a positive sign. You can examine technologies available for licensing at the following sites:

**TechWhiteBoard.com**

[TechWhiteBoard.com](http://TechWhiteBoard.com) is a free source featuring technologies from SIX national laboratories, making information easily available to help entrepreneurs find exciting technology and licensing opportunities, with user-friendly browser capabilities by technology categories.

**Sandia National Laboratories (SNL) Technologies:** If you are interested in Sandia technologies, please examine their web site <https://ip.sandia.gov/search.do> for a list of technologies in areas such as bioscience, computers and IT, energy and environment, materials and nanoscience, microelectronics and sensors among many others.

**Los Alamos National Laboratory (LANL) technologies:**

LANL welcomes interactions with teams in the development of business plans and marketing strategies for selected technologies available for consideration at [LANL's Technology Transfer Division](#): review Fact Sheets at: [http://www.lanl.gov/orgs/tt/license/fact\\_sheets.shtml](http://www.lanl.gov/orgs/tt/license/fact_sheets.shtml).

**UNM Technologies:** Look at <http://stcunm.flintbox.com/> for potential technologies to license.

**NMSU Technologies:** Look at <http://arrowheadcenter.nmsu.edu/ain> for potential technologies to license.

**If your team has an issue and/or questions about technology ideas, innovations and products that can form a basis for their company, please arrange to discuss with Dr. Kasscieh to explore ideas.**

Licensing and Options to license: many organizations are willing to work with you to secure an option on the license. Without an option or a license, you are taking a chance that you might not be able to get that at a later stage.

The team will research and select a business to pursue. The team will research and write a business plan which must be of a quality that is acceptable to a venture capitalist or an experienced private investor.

Teams of 3 (or so) students each will complete this group project. Teams will write a business plan that is at most 20 pages long with 10 extra pages for the appendices (if needed). Note that these are the rules for the UNM Business Plan Competition (BPC). One of the goals of this course is to have you write a business plan that should be entered in the BPC/technology ventures. The BPC has its own rules that students should consult at <http://bizplan.unm.edu>

In addition to the final write-up, each team will make oral presentations (arranged at a time that is convenient to all and set up early in the semester). Actually, getting meaningful feedback from venture capitalists, investors and entrepreneurs is an important part of the process. Learning how to deal with investors, bankers, lawyers, customers,

vendors and/or employees is a great learning experience.

Note most business plans take more than 400 hours (which should be allocated among your team members). The book will explain the different sections of the plan so for instance, the book will recommend that the financial statements should include preformed income statements, balance sheets, and operating cash flow statements.

- For year one, generate *monthly* and year-end income statements and cash flows. Prepare a balance sheet (which balances) for the end of year one.
- For year 2, create *quarterly* income statements and cash flows and end of year balance sheets.
- For years 3-5, prepare *year end* statements of income, cash flow, and balance sheet.
- Evaluation of the project will be comprised of a review of the written and oral presentation and peer appraisals (see below).

### **Caution about group formation**

In forming your groups, please pay attention to the usual warning about making sure you get involved with groups with whom you are compatible in many different ways. This is similar to a partnership/marriage and group members should choose carefully since goals, aspirations, common philosophy and outlook, work habits and many other issues should be considered and agreed upon before committing to a group. Add to that the fact that the business, for which you are writing the plan, might be financially lucrative and you can imagine some of the issues that will arise so it is doubly important that you agree on issues such as ownership, duties, general procedures for decision-making, etc. You should not take the easy way of accepting any group just because they ask. Making sure that you cover this before you commit, saves you a lot of agony and lost sleep later on.

Part of the course grade will come from the confidential *peer appraisal*, which is also part of the course requirements. The grades in the course will depend on the business plan grade and as such, each student will complete a confidential peer appraisal reviewing each team member's contribution to the business plan/investor presentation assignment. The peer appraisal is meant to discourage "free riding" by any member of the group and encourage sharing the significant workload of this assignment fairly. The peer appraisal will concentrate on evaluating whether each team member did his/her share of the work conscientiously, on a timely basis and with a positive outlook. The peer appraisal will be submitted by each team member the same day the final presentations are done.

**Business Plan Presentation.** Your presentations should last 15 minutes and allow 10-15 minutes for questions. These will take place in the last week of class and announce a location well in advance.

### CLASS TIPS:

**Treat Your Studies As You Would Treat Your Job:** Your courses are the primary

reason for you to be at UNM. You have made an investment in your future. To maximize the return on your investment, you should treat your course work as your highest priority.

*Do the work for each class.* There are very few valid excuses for missing deadlines: your team depends on your work. Serious illnesses or emergency injuries are valid excuses. Sleeping in, conflicting assignments or tests, and social commitments are not valid excuses. Just as for your job, you should arrange your personal life and budget your time to meet your college commitments. This is simply part of what it means to become a professional.

*Keep your professor informed.* You made a professional commitment by registering for class and have a standing appointment to attend all class sessions. However, as you would do with any job, if you are unable to attend class you need to inform the professor before the class. Classes missed for invalid reasons will affect your grade.

*Accept responsibility for your own learning.* Whether you are trying to prepare for a class or trying to complete an assignment, the objective is learning something from the process. Don't be surprised, then, if you don't "get it" right away. Take it upon yourself to seek help when you need it. Look for extra reading material. Talk to your professor. Talk to mentors, advisors, etc. When appropriate, discuss the material with your classmates.

*Use the available time and resources wisely.* Dedicate an adequate amount of time and effort to prepare for projects, papers, and exams. UNM has resources you can employ in completing your tasks (faculty, computer systems, library materials, software, and access to the Internet and reference librarians). However, you cannot take full advantage of them unless you have the time. Now is the time to learn this crucial lesson.

*Take pride in your work.* Business leaders know that everything they present to the public reflects on them and their organization. Long-term success comes only to companies and individuals who produce the highest quality products and services, and deliver them in a timely fashion. Every paper, presentation, and project is an expression of the pride you take in yourself and your work. Make every effort to write well, meet deadlines, and take the time to make both the format and the content of your work of the highest quality. This may mean writing more than one draft, double-checking spelling and grammar, or reviewing slides and practicing your presentation more than one time.

*Meet all due dates.* Your boss will not understand if you miss a contract negotiation session because you were up all night. It will not be okay to miss a project implementation date because you had to take your car to the shop. The vice-president will not reschedule the monthly division budget meeting because you could not get a ride to work. Likewise, work that is scheduled to be delivered at a particular time on a particular date will not be accepted late because the printer was busy or because you have a flight to catch. These are not valid excuses. If you have a valid excuse and you inform your professor in a timely manner, an attempt may be made to schedule alternative



arrangements for you, but do not count on it. Expect to lose a number of points for late assignments.

*Demonstrate Respect for yourself and others.* Entrepreneurs make decisions and try to influence others to implement them. Thus if you are going to be an entrepreneur you have to learn how to make others accept and respect you. You must show yourself to be worthy of their respect and show that you respect them. Your professional demeanor sends a message about your leadership ability and develops of dedication. You can earn a lot of credit here for doing some very basic things. Similar to the four P's of Marketing, there are four P's of entrepreneurial behavior:

- *Be prompt.* Professional behavior means being on time for appointments, and meetings.
- *Be prepared.* Unprepared managers have very short careers (or end up in dead-end jobs). To succeed, you need to prepare for each class session. Nothing shows less respect for others than making them wait while you do something you were supposed to have done in advance. If you do not prepare and try, instead, to "fake it," you run the risk of looking foolish and wasting everyone's time with irrelevant comments.
- *Be professional.* Professionalism means being respectful of others and civil to those with whom you disagree (and perhaps dislike). In business, you will often find that you must work with people with conflicting opinions or personal styles. Your ability to work with, tolerate, and effectively interact with these individuals is critical to your success. Finally, you demonstrate a lack of respect for your colleagues or professors when you engage in private discussions while courses or business meetings are in progress.
- *Participate.* Professionalism means keeping up with the discussion. It means contributing. Not everything you say has to be deadly serious, however. As long as it fits, it is okay, even desirable, to inject a little humor every occasionally. Just make sure you do it in a way that is not mean and does not step on anybody's toes.

## **MGT 514- COURSE AGENDA**

### **Module 1: Weeks 1-3**

#### **Context of week's materials**

##### **Assignment:**

##### *Business Plan sections*

We start the course with a chapter on business plans (Barringer chapter 8). The chapter outlines what goes into a business plan. This should guide you as you are trying to form your team. What sections of the business plan can you contribute to and which ones do you need help with. You should try to focus on as complete a team as you possibly can.

##### *Background on entrepreneurship*

You will also read the first three chapters of the book (Barringer chapters 1, 2 and 3) for background information and for general issues regarding entrepreneurship.

### *Intellectual Property*

You should start examining the question of “what intellectual property/technology do I want to work on with my team?” Your questions are

- a) Do I have technological knowledge protected by IP that I can use?
- b) If not, how do I link with a research group that has IP that is ready for commercialization?
- c) Can I find a team that will work with me on this?

### *Opportunity*

Next, you will examine the opportunity. How do you insure that it is worth the time, energy and resources that you put into it to write a business plan and launch the business? Note that when we say write a business plan, the intent is really to start a business and to insure that it is profitable. Why would you write a business plan for a business that has problems with markets or with its financial viability or that you do not have the expertise to create, manage and grow. Business plans that are fictions are not worth the effort since “nothing ventured, nothing gained”

The technical feasibility is the idea of doing some early quick-and-dirty literature and internet searches to figure out questions such as:

1. Does the technology produce solutions to the problem (s) identified?
2. Is the technology better in some way than other competitors?
3. Can the technology be incorporated into a product?
4. Can the product be manufactured in reasonable quantities at a reasonable price?

The business feasibility is the same but the questions are more on the economic side of the market development such as:

- a) Are there enough customers so that the revenues will exceed costs in the near future?
- b) Who are the competitors, what are the bases of their product and do they have market or financial power?
- c) What are the risks of the business?
- d) Does your group have what it takes to compete?

Note that these questions are answered more fully in a business plan but here you are trying in a quick way to establish that this is something worth pursuing so that you write a business plan for a business that has potential for “doing well” otherwise “why should you spend time on it?”

### *Management team.*

Describe your management team and why they will succeed in directing this small startup?

## **Module Objectives**

- 1) Picking a technology from ones for which you have knowledge and IP or trying to figure whether you can license (or get an option to license) from UNM, Sandia, Los Alamos or others.
- 2) Knowing the sections of the business plan and what each section covers
- 3) Starting to think about sections and how to schedule the work on them so that the plan is finished by week 13 or 14 (note: do not leave plan to be finished by week 16 as there are usually many things to be done even when you think you are finished with the plan)
- 4) Starting to think about the formation of your team
- 5) Pursuing the opportunity in quick fashion to insure that your team is not wasting time with writing a business plan for a technology that has technical or business major flaws
- 6) Starting to understand the lay of the land and what needs to be done on the business plan
- 7) Continuing the search for a team for the business plan
- 8) Moving on to examine other technologies if the one considered has major problems.

### **Look at the technology sources for options of technologies that you can work on**

#### **Discussion**

Students should start discussing issues related to forming a team. This discussion should include discussion of which technologies the group is leaning towards and the type of skills that each brings to the table.

Students should also discuss issues related to group dynamics: a) goals of group, b) structure of group and who is responsible for what sections of plan, c) schedules, d) overall philosophy in business, e) time commitments, f) UNM Technology Business Plan competition, g) other issues that insure the partnership is on solid grounds and that future problems/disagreements are avoided by up front discussion or by a method to resolve these issues amongst the group

Students should try to finalize the forming of a team. The group must also start to narrow the gap and make a choice on the technological basis for the business plan.

Students should put in writing some of the agreements on issues such as: a) the goals of group, b) positions in the company and the major responsibility for functional areas in the company, c) a plan with deadlines that coincide with the deadline in the syllabus, d) the overall philosophy of the company, e) other issues that insure the partnership has covered all bases in its agreements

Note: A business plan should be one document rather than 4 sections written by 4 different people who patch the links in one or two sentences. It should tell one story from the beginning to the end so when we talk about major responsibility of a section, we do not mean who will write it but rather who is the lead who will take responsibility for it

while others are helping and trying to research their sections and making sure that everyone in the team is on the same page. If you are not on the same page, it will show in the plan.

### **Wrap Up**

The issues outlined above still do not produce a business plan but they are essential to insure that you are on the right path.

### **Working Ahead**

By end of week 4, you should have a team, agreements among the team members and a technology or a set of technologies that produce(s) a product for which you will write a business plan.

**Deliverables due end of week 3:** should include

- a) The names of team members
- b) The technology you are going to work on and your plan for licensing or getting an option on the license from the technology source,
- c) the technical and economic feasibility of the technology: this should be brief but should show that you have done some preliminary work to insure that you have a viable business idea to pursue as a business (see above for questions that need to be answered for the feasibility study),

### **EVALUATION**

**Deliverable 1 will be evaluated as follows:**

Ability to identify strengths and weaknesses and to find solutions	25%
Completeness of information	25%
Accuracy in Analysis of information	25%
Convincing conclusions	25%

---

### **Module 2: Week 4-6**

#### **Lean Startup**

In this section, your team will work on the lean startup methodology where you answer questions posed by the Owner's Startup Manual book and by the Udacity videos.

The field of entrepreneurship has experienced a major shift in the last decade. Its importance to world economies has become a central theme. The business planning approaches used by entrepreneurial firms to get funding from investors and to plan their future have gone through many changes and improvements in required analysis that was necessary for investors, business strategists and entrepreneurs. The latest variation on the theme of business planning is the use of business model generation (see last page for figure outlining the canvas used in business model generation) and lean startup methodologies and these have stressed the streamlining of the processes to include more than planning by focusing more on building a business rather than ONLY planning its activities.

Building a company from an idea requires the founders to engage in more than planning. They are going to generate the business model and modify it to discover, validate and create their customers. It involves testing the hypotheses about market segments to gain insight into the link between a value proposition and revenue. The main focus of this module is examining that link to build a viable business.

You will be getting your hands dirty talking to customers, partners, competitors, as you encounter the chaos and uncertainty of how a startup actually works. You'll work with your team to learn how to turn a great *idea* into a great *company*. You'll learn how to use a *business model* to brainstorm each part of a company and *customer development* to get out of the classroom to see whether anyone other than you would want/use your product. Finally, based on the customer and market feedback you gathered, you would use *agile development* to rapidly iterate your product to build something customers would actually use and buy.

### **Lean StartUp**

Building a company from an idea requires the founders to engage in more than planning. They are going to generate the business model and modify it to discover, validate and create their customers. It involves testing the hypotheses about market segments to gain insight into the link between a value proposition and revenue.

You will be getting your hands dirty talking to customers, partners and competitors to develop your market and gather what customers would actually use and buy.

### **Assignment:**

#### **Week 4**

Read *The Startup Owner's Manual*, page 1-53

Watch the Udacity course "**How to Build a Startup:** " *Lectures 0, 1, 1.5a and 1.5b, 2 and 3*

and do what they recommend

#### **Week 5**

Watch the Udacity course lectures 4-8

Read: *The Startup Owner's Manual*, page 53-84, 195-199

and perform what they recommend

#### **Week 6**

Read: *The Startup Owner's Manual*, pages 227-256, 277-342

And do what they suggest

Deliverables:

- What is your product or service?
- How does it differ from an idea?

- What IP do you have?
- Why will people want it?
- Who's the competition and how does your customer view these competitive offerings? Where's the market?
- What's the *minimum feature set*?
- What's the Market Type?
- What is the Market Size?
- What was your inspiration or impetus?
- What assumptions drove you to this?
- What unique insight do you have into the market dynamics or into a technological shift that makes this a fresh opportunity?
- Who's the customer? User? Payer?
- How are they different? Why do they buy?
- How can you reach them?
- How is a business customer different from a consumer?
- What are your Customer Segments?
- Does your Value Proposition match those Customer Segments?
- What did you do to test customer segments, value proposition, channel and revenue model of the hypotheses?
- How do you Get, Keep and Grow customers?
- What is your revenue model?

## EVALUATION

**The 2<sup>nd</sup> deliverable is due at the end of week 6 and will be evaluated as follows:**

Ability to get information from customers	34%
Completeness of information	33
Convincing conclusions	33%

## Module 3: week 7-9

### Technology/product description

### Market and competitors information

#### Context of module's materials

In this section, your team is going to accomplish two major tasks:

- Describe the technology/product so that you are able to understand what it does, how it provides a value to a set of customers and how do your product do it compared to your competitors.
- Analyze the industry, the market, and the competitors and devise a marketing plan that propels the company to success

### *Technology Description:*

We start with a reading (Van Wyk, R, “Management of Technology: New Frameworks,” *Technovation*, Vol. 7 (1988), pp. 341-351) that will help you in understanding the product and what it does. This helps you in being able to ask questions when you talk to potential customers or to analyze differences with competitors.

### *Industry, market and competitor analysis:*

For your business to succeed, you need to analyze the market (customers: how many, how do you get to them, others that provide similar solutions, what differentiates your product from theirs). This really goes to the heart of “if you are going to make money at this, you need to bring in revenue”. Revenue comes from customers and your ability to get customers depends on your work to convince them that this has “value”. How do you get to customers, how do you reflect value, how do you deliver the products, etc. are part of the industry, market and competitor research and analysis that you need to do.

### *Marketing Plan:*

Advertising, promotion, channels of distribution, etc. should be part of your plan.

## **Module Objectives**

- 1) Know the product well enough to be able to explain the benefits to customers, to differentiate it from competitors and to figure out your position in the market as far as suppliers and substitutes.
- 2) Analyze the industry in which you operate
- 3) Analyze your competitors and their strengths and weaknesses from the technology/product perspective as well as from the market share and financial capability perspective
- 4) Analyze your customers: who are they and how do you get them to buy?
- 5) Define your marketing plan

## **Reading Assignments:**

Van Wyk, R, “Management of Technology: New Frameworks,” *Technovation*, Vol. 7 (1988), pp. 341-351

Any marketing and marketing research book. This is where the recommended supplementary text by Steve Blank on the “four steps to the Epiphany” will help. Instructor can suggest others as well.

See set of slides entitled “Market Research 2012” on Dropbox.

Barringer Chapters 4-7.

## **Discussion**

Understanding the product, its capabilities and its performance characteristics are important for the team and their ability to project the potential of the product to address

the needs of the customer. This understanding will help in your market research activities. Market research activities are essential to the success of the venture: you should be fully aware of the market dynamics, you should involve your customers (a statistically representative sample is essential) and you should depend on primary research and NOT depend on assumptions or reports of the existence of the problem only. The existence of the problem is the starting point after which you need to utilize good market research tools (market research books are numerous, pick one from the library or buy one if you do not have one) and analyze your market accordingly. The more you can establish this point in your work, the better the business plan and the more likelihood that you will have a solid business plan.

Note: a business plan should be one document rather than 4 sections written by 4 different people who patch the links in one or two sentences. It should tell one story from the beginning to the end so when we talk about major responsibility of a section, we do not mean who will write it but rather who is the lead who will take responsibility for it while others are helping and trying to research their sections and making sure that everyone in the team is on the same page. If you are not on the same page, it will show in the plan.

In market analysis, everyone should be involved with the lead person in charge of the activity but the ability of the team to understand the product and the market (industry, customers, competitors, etc.) is necessary. You already have done some of this in module 2 as part of the lean startup methodology but this should complete the market picture for you.

If you have any doubts or questions, please chat with the instructor about issues or to set up a conference call.

### **Discussion Questions:**

**1) Why is the product important for the potential customer? Discuss the important appropriate aspects of its functionality, performance, size, method of operation, material used or structure as compared to the competing products on the market?**

**2) Who are your customers, how do you define them in clear unambiguous descriptors that will allow you to survey/question some of them to get important information about your market composition, size, etc...**

### **Working Ahead**

Next module will start delving into the financials. Your revenues and costs depend on your market research and analysis of customers and when you can expect revenues. Your other activities such as payment for the management team and workers, advertising, operations, etc. should define your costs. That should help you in defining your cash flow, income and balance sheet statements.



**Deliverables:**

By end of week 9, you should be able to deliver the next deliverable.

**Deliverable 3: due at end of week 9** should include

- a) Mark

**Market Analysis section of business plan:**

The professional investor's viewpoint is business oriented as opposed to technically oriented. He may appreciate the technology and understand it, but he is more interested in whether you can satisfy a need with a large market. The tendency is to praise the technology and not worry as much about the business aspects. It is okay to brag, but the investor must first assume that what you have to offer works or it is a moot point to continue. If the business side looks sound, he will come back and verify the technology. After all, the name of the game is to make lots of money, not to have a better mousetrap that works but doesn't make money for the investors.

Industry Description

There are plenty of internet and library resources that can help you here. You are interested in questions such as:

- What industry are you in?
- How big is it and what is the projected growth?
- Are there any significant trends? For example, shifts in demand, new regulations, large customer base, etc.
- What are its primary characteristics? For example, is it dominated by a few large companies or it is widely segmented. Is it regulated or subject to a lot of restrictions?

Target Markets--Customer Identification

Once you have a product or service to offer, there have to be enough customers willing to purchase such that you make a profit.

- Who are your customers? Classify them by homogeneous groups and discuss their characteristics. If there are multiple markets, discuss them in order of importance. Most products are either geared for individual consumers or for industrial applications. If a need exists in both segments, the product will usually be engineered differently. For example, a food processor for home use is less durable than one for restaurants.
- Describe the purchase decision process. How do they buy similar products or services now? Will you change any aspect of this? Is the item in the lower price range where they buy based upon price and delivery? Is it based on service and reliability? Is it a hard technical sale where you have to go through the R&D or engineering department first? Is it a large ticket item that has to go through the capital budgeting process that may take a year or longer to decide?
- Are there any special customer or regulatory requirements that have to meet (e.g. FDA approval)?

- What is the impact on the customer? Will they have to buy other items to change over to your new System? Will they have to change their work habits, hire or fire employees, or change their organizational structure?

### Market Size and Trends

The difficulty of writing this section depends upon the availability of market information, how large and established the market is, and whether you are replacing an existing product or service or are creating a whole new market. The target markets have to be sufficiently well defined so that the market numbers obtained aren't too general. Published information tends to be very broad and readily available only for the large industries.

You need the published information to give you the big picture, but there is nothing better than having a list of customers that are clamoring for your product or service and are willing to say so (either in a letter or purchase order). You can often buy professionally prepared market surveys, but their information may still not be as specific as you need. Those where the data isn't readily available otherwise can be fairly expensive. **There is no substitute for directly doing your own market survey. Your ideas may sound great until you have to convince someone to buy it.** Obtaining feedback early on may save you time, money, and embarrassment later.

### Competition

Even if you have a proprietary product, you will likely have competition of one kind or another. If not directly, you may compete against other choices for customers to spend their limited funds. Underestimating the competition can be very naive. The better you do in business (make money), the more competition you can expect.

- Describe and compare competing products or services according to price, performance, service, warranties, and any other pertinent features. Analyze the advantages and disadvantages of each and discuss why they aren't meeting certain needs. How do you compare? Use a chart or table if appropriate.
- Identify who your competitors are and analyze their strengths and weaknesses. How are they perceived in the marketplace? What are their respective market shares? Discussions with potential customers and suppliers may prove useful. Try to find out as much as you can about their operations. If they are a large publicly held company, the information may be available in brochures and annual reports to their shareholders. If you have good contacts in the industry, they may be willing to obtain sales brochures and interview sales representatives to gather data that you otherwise may be unable to get. Knowing and scouting out the other teams is common practice in any competitive sport.
- What do you expect will be the competition's reaction to you? Will they seek to destroy you at any cost? Large diversified companies have been known to sacrifice profits in one area to lessen the chance for newcomers. How will you handle their response to you?
- Will you be taking away sales from existing suppliers or will you be capturing part of a new and expanding market?

### Market Reaction

Describe any interaction that you have had with customers. This obviously depends upon your stage of development. If you are at the stage of writing a formal business plan and are trying to raise capital or are spending your own money on product development, you had better find out what the market thinks before going much further. You may think that your product is better than what is currently available, but, it may not be improvement enough for customers to change or it may affect some other part of a cycle that can't be changed.

- What customers have been contacted and what was their response? If you have already begun selling, summarize those activities.
- If you have done a market survey, how was it done?

### Ongoing Market Evaluation

The market will change over time. You have to establish a definite program to continually monitor and evaluate the market for input into the ongoing planning process. It is important to assess customer reactions and identify new customer needs. This information will help you plan for product improvements, plan for production, and develop new products.

## ***MARKETING PLAN***

### Overall Marketing Strategies

Describe the Company's philosophy on how it is going to reach the customers and what image you want customers to have of the Company. Only provide the guiding Philosophy as the detail will be discussed below. Look at any industry, pick some companies, and ask yourself what you think of them. Most companies try to create a distinguishing feature to make them stand out in the crowd. Once again as in the section on objectives, try not to be too general. "We want to be the best" doesn't give you anything to hang your hat on.

This could be based upon selection, quality, method of customer contact, price, location, specialization, convenience, warranty, etc.

### Distribution

How are you going to complete the cycle from production to customer purchase? You may have more than one method for a given market or you may have a different method in different markets. It could be one step, direct sales, or it could be multiple steps; jobber, distributor, broker, exporter, wholesaler, and retailer. Another possibility is OEM, original equipment manufacturer. You could produce an item that is sold to another that puts his label on it and in turn sells it under his name or incorporates it into his product.

### Promotion and Advertising

Depending upon the product or service and the markets, this item can be a substantial cost of marketing. It is not unusual for consumer products in a competitive

market to require an advertising and promotion budget of up to eight percent or more of sales. The budget should include consideration of the following: trade shows, advertisements in magazines and newspapers, brochures and product information sheets, direct-mailings, samples, sales aids, point-of-purchase displays, news releases, guest lecturing, and the use of advertising agencies.

### Pricing

The price must be acceptable to purchasers, consider competition, allow market penetration, maintain market position and provide a profit. This obviously means that you have to know your costs and survey the market. The introductory price may be high if you have patent protection, it is unique, is in demand, or the market can bear it. You may need to recover substantial development costs. The price will probably come down as the product matures and competition increases.

Investors like to see high profit margins although return on investment has more influence. Discuss the sensitivity of pricing and volume. There is an optimum range. Lower prices may mean more volume but it also lowers profit margins. Higher prices will likely lower the volume but the profit margin is higher. One choice may lead to higher overall gross profits. Also include a discussion on credit policies, discounting, volume purchases etc.

### Geographical Penetration Targets

The introduction or expansion of a new product line or service can seldom be done nationally or globally without substantial resources. There should normally be a test market established close to home with controlled expansion from there. How far and how fast depends upon the method of distribution, inventory requirements, and internal limitations (e.g. production, working capital).

Describe the restrictions on market introduction and expansion. Provide a plan for overcoming these problems with a schedule of market penetration.

### Warranty and Service

This problem is often ignored in the planning stages because there is too much excitement about the technology and the potential markets. The product is new so you aren't thinking about it breaking. Depending upon the product, the cost of providing warranties and a field service team to back it up may be prohibitive. Worrying about this problem is important from the very beginning back in the original design.

- Describe the warranty and compare it to that of your competition.
- Discuss the importance of a warranty and service in the purchase decision.
- How will service be handled?
- Discuss the costs.

### Priorities

Since everything can't be done at once and because there are limited resources, briefly discuss marketing priorities as it relates to product introduction, applications, market penetration, and marketing activities.

### Sales Activities

This section discusses the process of selling your product or service from a manpower standpoint and analyzes the various steps. This information is useful for making sales estimates in the next section.

- How are you going to sell your product or service? For example, direct sales team, direct mail, sales agents, brokers.
- How will you identify prospective customers, both on a general basis (companies), and on a specific basis (the decision-maker)?
- How will you schedule the sales efforts?
- Summarize the expected level of effort; the starting point and how it will be increased.
- Analyze the overall effectiveness of the sales effort. How many contacts can be made? What is the efficiency? What is the success rate of making sales?
- Discuss the expected order size and probability of repeat sales.
- Describe the incentive rate structure for sales people.
- Summarize the basis for making the above estimates.

### Market Penetration and Sales Estimates

This section forms the basis of the income projections for the pro forma financial statements. The answers here must be derived by carefully analyzing the previous marketing sections to determine what sales are possible. This must then be compared with resources to ensure compatibility. It is very easy to identify a billion dollar industry and assume initial sales of millions of dollars that grow to hundreds of millions by year five. The tough part is to develop a credible explanation on how you can do it with ten employees operating out of someone's garage. The point is, market projections have to make sense and you have to plan out a scenario that is credible. It may be ambitious, but it has to be realistic.

Later sections in the Plan deal with operations; for example, timetable, plant set-up, capital equipment, inventory, manpower requirements, marketing plan, design and development plan, etc. These sections have to correlate with projected sales. First calculate the market parameters and then develop the rest of the plan around that. Come back and adjust sales if other sections dictate limitations. For example, your product may require six months of field tests for FDA approval, plant set-up may take five months, the customer order cycle may take nine months from first contact to final installation.

It is common to develop sales projections for at least five years. This is often broken down monthly for the first year, quarterly for the second and third years, and annually thereafter. Present the sales projection summary in a table format by product and by geographic area. This coincides with what you have to do in financial projections.

## **EVALUATION**

**The deliverable 3 will be evaluated as follows:**

Ability to describe product and how it satisfies market needs	20%
Ability to contrast with competitors	20%
Market analysis	20%
Accuracy in Analysis of information	20%
Convincing conclusions	20%

---

**Module 4 – Weeks 10-12**

**Operations of business section**

**Financial projections**

**Assignment**

Barringer Chapters 9-11

You can use many aids to help you in building your financials. For instance the spreadsheet from U of Colorado is a complete and good one (you can find it at <http://leeds-faculty.colorado.edu/moyes/bplan/html/spTools.html>)

Also, see my presentation on the UNM Business Plan Competition. It has great advice on business planning (It is called UNM Business Plan Competition)

**Context of week's materials**

*Operations*

The new business will need to produce the product so that you may sell it. You have options here that range from “contract manufacturing” to “producing it in your plant”. Each one of these options has strengths and weaknesses and affect your cash as well as your need for investment.

*Financial projections*

Investors are putting in some money, your team is putting in work as well as some investment and the main goal of everyone is to generate a “satisfactory” rate of return (note: satisfactory is in the eye of the beholder and coincides with risk, higher risk requires higher return and typically investments in technology startups is a high-risk proposition).

**Module Objectives**

- 1) Analysis of issues related to production: how will the product be made? Its cost and how can you control quality, delivery, etc.
- 2) Projecting the financials for the five years
- 3) Figuring out the investment needed
- 4) Calculating the return on investments
- 5) Figuring out the milestones for the investor
- 6) Examining options for exits

The financial statements: there are many options to use Excel spreadsheets that have been developed by someone else. I like the one by the University of Colorado  
<http://leeds-faculty.colorado.edu/moyes/bplan/html/spTools.html>

But there are plenty of these out there if you want to use others.

Note on using spreadsheets: a spreadsheet can calculate correctly any set of numbers that you enter so the calculations will always be right and the financials will balance but there is a difference between mathematical accuracy and business accuracy. The sheets will balance but they can be wrong in NOT reflecting the true transactions of the business as developed in other sections of the plan so make sure the numbers make sense from a business justification perspective and the spreadsheet will insure that mathematical accuracy is preserved.

### **Discussion**

Students should start making sure that the business plan is getting towards completion. If there are loose ends at this point, they should be tightened and you should be planning to put the final touches on the plan shortly.

This is the time to step back and question the justification of things done in all of the sections and making sure that they mesh well (one business plan and NOT four or five sections cobbled together).

There are still a few other things to get done and those depend on the business area that you are working on but at this point you should have the major parts of the plan well in hand.

Example of other issues that you need at the end of the module to keep in mind:

- a) The executive summary: the two pages at the beginning of the business plan that serve as the gateway to your plan. This should be a summary of the major points in the plan.
- b) Risk factors: what could go wrong here despite your efforts to analyze the product, markets, and financials?
- c) Other issues: expansion in the future, other product areas that you could get into after the success of the first product, etc.: these obviously depend on the type of product you have and other factors.

### **Discussion Questions:**

**1) How will you produce enough of the product to meet your demand at a reasonable cost? What are your options and how do you evaluate them?**

**2) How do you insure that the financial analysis that you generate reflects reality and can be justified? Discuss the important aspects of comparable information as well as the concept of using information from the plan to generate these numbers?**

**Deliverable 4: due at end of week 12** should include:

- a) The operations section of the business plan: as described below
- b) The financial projections section of the business plan: as described below.

## ***OPERATIONS***

Depending upon the nature of your product or service, this section can be longer and you may need a production/manufacturing specialist if you don't have the resources or experience internally. For the purposes of this plan, however, it is only necessary to provide a summary of the operations plan.

### Geographic Location

Discuss the geographical location of the company's headquarters in terms of the advantages and disadvantages in relation to wage rates, labor unionization, labor availability, proximity to key resources and customers, transportation, taxes, utilities, and zoning. If there are any problems identified with the location, describe how the Company will handle this. If there are additional locations or plans for others, provide a summary of the location analysis.

### Facilities and Equipment

If the facility and equipment are in place, summarize the key parameters and discuss their functions. If they are yet to be acquired, provide a detailed analysis of the requirements for plant and office space, storage and land areas, special tooling and other capital equipment, and utilities. It may be useful to provide a budget and acquisition schedule in a table format. First describe what will be necessary to get up and running and then future requirements for growth on an annual basis. This section concentrates on the manufacturing process. If yours is a service application it is still appropriate to discuss the logistics of providing the service, the people, location, etc.

### Manufacturing Process

Describe the manufacturing process from start-up to the requirements projected in the plan in each of the following key areas:

**Labor**--How many people for which functions, when, and their costs? Use a table format if applicable.

**Processes**--Briefly describe what it will take to set up and manufacture. Is it assembly line, one-of-kind production, etc.?

**Materials and Purchasing**--What kind of materials, costs, availability, volume discounts, subassemblies? What are inventory requirements, lead-times, etc.? Provide a list of suppliers.

**Seasonal variations**--If demand is cyclical, describe how you will handle this problem.



Quality Control--Describe the need and level of QC required. Will it be a separate department?

Overhead--What items will be a part of overhead? Is waste a problem?

#### Make or Buy Decision

Should you make it yourself or subcontract? Someone else may be able to do it cheaper and easier. They may have excess capacity and have already amortized their equipment. They may also be willing to carry some inventory. This could cut your start-up costs substantially. Be careful of quality control. You may not like to be dependent upon others. There may also be proprietary secrets to protect.

#### Production Estimates

It may be handy to summarize all of the costs identified above in one table.

#### Labor Force and Training

Are there enough people available where and when you need them to do what you need done? If not, where will you find them and how will you train them?

### ***FINANCIAL STRATEGIES AND SUMMARY***

The important aspect of this section is to communicate the financial viability of the venture and what the investment requirements are. This is done through pro forma (estimated) income statements, cash flow statements, and balance sheets. The horizon for planning is typically five years.

Pro forma financial statements merely summarize and quantify all of the information presented so far in the Business Plan. It is done in a format that is generally accepted and understood by accountants and financial people. Others such as an accountant can assist you in their preparation, but the generation of the numbers and assumptions have to come from the management team who understand the product, the business and the markets. You are the ones that have to explain them and live by them.

#### Financial Strategies

What are the management's strategies and philosophies for accomplishing the financial objectives of the Company?

Investment--How much equity investment are you looking for, from what sources, and by when? What kinds of partners are you looking for? Are you planning to go public, now or later? If now, you will still probably need some investment money to prepare for the offering. If later, when and under what circumstances? Will you look for government grants to fund any of the R & D? Are you considering an R & D limited partnership? How much of the Company are you willing to sell?

Debt--What types of debt financing are you willing to use and what is the planned limit on the debt to equity ratio? Are you willing to provide personal guarantees?

Exits from the investment--Most professional investors are not only looking for growth and great return on their money, they also want to be able to realize the gain and move on. It is very difficult to sell out of a privately held company. There may be securities law restrictions, valuation is tricky, fellow shareholders may not want you to sell, and the market is limited when trying to sell a large block of ownership without selling the whole business. Consequently, professional investors include exit provisions in their contracts. You may want first chance to buy them out or you may want to sell some stock when they do so you can take that vacation you deserve.

#### Historical Financial Information (if applicable)

Provide a summary of the current financial status of the Company. If you have an operating history, include information and analysis of at least the last three years. If it is good, so much the better. Historical numbers must support financial projections or include an explanation why. If the past is bleak, explain why and what is being done about it.

#### Pro Forma Financial statement summaries

Prepare detailed financial forecasts based upon the information resented in the previous sections. They have to correlate. It doesn't count if you take industrial averages and make gross assumptions as to direct costs, G & A, marketing, etc. Don't pick a bottom line and work towards what you think investors want to see. If you did the rest of the plan diligently, this part will be easy. Prepare them monthly for the first year, quarterly for the next one or two years, and annually thereafter up to a total of five years. Summarize this information annually in a tabular format for presentation in this section. A sample format is shown at the end of this section. Include the detailed information with all of the assumptions in the appendix.

There are different schools of thought on how many financial scenarios to present. Personal computers and spreadsheet programs have created a nightmare for business plan readers. Don't overdo it. We suggest that you do a detailed plan for the most likely case, what you think you can live with. Then if necessary, discuss contingency plans if things are worse than expected, and present a brief pie-in-the-sky scenario if it is really possible (be aware of space limitations as well: investors will not read 40 page appendices).

#### Pro Forma Income Statement

This statement shows management's **best justification given the market research** on how much can be sold, what it will cost, and how much profit there can be if things go as planned. It is a representation of income and expenses over a period of time. Sales figures come directly from the marketing section, direct costs from the operations section, general and administrative costs come from the management and organization section and then are supplemented with logical estimates that are an extension of what it will take to support what is in the plan, R & D costs come from the technology section, and marketing costs come from the marketing section.

Once this is done, compare the results with what you can find for the industry to make sure that you are not way out of line. If there are big differences, try to explain why. Don't do it in the reverse. That is, don't look up averages and then blindly follow them for your projections. Also remember that the information you find may only be averages. You don't want to be just average.

How much profit should you make? The answer is, as much as you can. What will an investor believe? There are many opinions on this. If you know any professional investors, ask them for guidance. We offer the following suggestions based upon our experiences. Anything below 15 percent net profit before taxes is not very exciting. If it isn't very risky and the return on investment is good, then it may be okay. They would rather see 20 to 25 percent; at 30 percent they would love you if it held up to scrutiny; and anything above 30 percent they would look at skeptically. If your best analysis shows a high percent then go for it, but be willing to field questions that will back it up.

### Pro Forma Cash Flow Statement

The purpose of this statement is to track the inflow and outflow of cash. The net result shows projected cash requirements. The income statement is more often prepared on the accrual basis (where transactions are organized when they occur as opposed to when cash changes hands) and there are many cash transactions that are not reflected on the income statement. The cash flow statement converts the information from the income statement to a cash basis and combines this information with the other cash basis transactions that are not shown on the income statement.

The cash flow statement should first be prepared and analyzed without showing investment or debt financing to determine cash requirements. Then prepare a scenario of investment and debt financing which the management prefers to achieve to include in the Plan.

### Pro Forma Balance Sheet

The balance sheet reports the financial status of the Company at a given point in time. It shows what the total assets are, what you still owe others for them, and how much is owned by the shareholders. By definition, assets always equal liabilities plus owners' equity. The balance sheet will reflect the changes shown in the income and cash flow statements. There are many ratios that can be derived from the balance sheet and analyzed to check the health of the Company. The most common are debt to equity, working capital current ratios, return on equity, and inventory turnover.

### Summary Table

A sample format is shown on the following page that can be used to present a summary of the detailed financial projects that are in the appendix. It combines all three statements in a quick reference format.

## **EVALUATION**

**Ability to define an operational plan** 20%

Ability to link financials to other parts of plan	20%
Financial projections	20%
Ability to justify financial requirements	20%
Convincing conclusion on exits	20%

## Module 5: Weeks 13-16

This is the time to wrap up the business plan and work on the final presentation but we need to deal with the issue of the Management Team: who are they, what do they bring to the company and why should investors trust their money to the team.

### **Management section of business plan:**

The management team will be responsible for taking a good idea and turning it into a successful business. Professional investors say they would rather invest in an "A" management team with a "B" product rather than vice-versa. Although the expression has become trite, it is true. People at all levels make a difference. The team must be committed with a proper balance of technical, managerial and business skill, and experience in order to accomplish the objectives.

#### Key Management

What are the key management roles? Who is filling them now? Provide a brief description of all key players. Discuss their experience and why they fit in, especially if any have worked together before.

#### Compensation and ownership

Finding good people is hard enough, keeping them may prove to be harder. Key players expect to have a piece of the action, especially in start-up ventures. They can't be too greedy or investors will be skeptical. It is usually anticipated that they will get paid less at first than what they could receive from a big company, but they will make it up in the end by participating in the success of the Company.

State the salary that is to be paid to each key person and compare it to the industry and what he received at his previous job. What ownership do they have and what has been promised to them in the form of stock options, bonus plans, etc.?

Describe the compensation philosophy for the rest of the Company. Also, discuss any stock and bonus plans either already in use or anticipated.

#### Hiring Plan

It is expected that you may not have the full management team put together yet and those on board now will have to cover more than one base. They can't do it forever, especially if you expect to grow. Describe your plans for filling these key positions. What are the qualifications required and how will you find the right people?

#### Organizational Structure

Discuss the management's philosophy on structure and management techniques. Provide organizational charts for now and for strategic points of change as the Company grows. This clearly shows who reports to whom and who is responsible for what. You may be able to control everything now, but as the Company grows you will have to delegate and adapt.

### Board of Directors

Ultimate responsibility for the Company and the action of management rests with the Board of Directors. They are elected by shareholders to protect their investment. They in turn hire the managers to follow the direction set by the Board. Management is responsible for daily operations.

Establishing and properly utilizing the Board should not be taken lightly. Investors will probably want representation on the Board. It is important to have some Board members that are not too close to the daily operations or management so that they can provide a nonbiased opinion. Some positions may be filled with people because of their contacts and importance within the industry. Close consultants to the Company, like lawyers and accountants shouldn't generally be on the Board. You get their advice anyway. It is better to get other input.

Who are the current Board members and what are their qualifications? Also identify any proposed new Board Members.

### Supporting Professional Services

Attorneys, accountants, bankers, and consultants, are all important to the success of the venture. Describe current and proposed relationships.

### Current Stock Ownership

Describe the ownership structure of the Company.

- How many of each type of share is authorized and issued?
- Provide a list of shareholders, their holdings, and what they paid for it.
- Are there any stock options?

Note: As you are work on the plan, you will find that you need to make changes to this part (possibly many times). All this deliverable is trying to do is to get you to make some decisions and think about others as you build the rest of the plan so that when you get to the final business plan, you have a good management section in the plan.

Once that is done, we are ready to finalize the plan.

There are still a few things to do:

- a. Executive summary
- b. Introduction of Company
- c. Risk factors
- d. Table of contents
- e. Title page and disclaimers

f. Presentation

**TITLE PAGE AND DISCLAIMERS**

The important part of the title page is to identify who to contact and how to reach them if an investor is interested. This part is often left out in the confusion or hidden elsewhere in the document. You may have included a business card that could easily get separated from the Plan. The Plan should be dated and numbered. It is a good idea to keep track of the number of plans in circulation and who has them. The following statement is often included on the title page:

**PROPRIETARY AND CONFIDENTIAL**

Reproduction, transmission or dispersal of this document in any form, without prior written consent of an officer of this firm, is prohibited. Recipients of copies of this plan are urged to return them to the Company immediately after use.

In addition to the statements on the title page, a second page should be included that summarizes the purpose of the document and includes appropriate disclaimers. The main reason for this is to avoid any complications with securities laws. A sample of these disclaimers follows:

PURPOSE OF BUSINESS PLAN: THE PURPOSE OF THIS BUSINESS PLAN IS TO DESCRIBE THE COMPANY, ITS OBJECTIVES AND STRATEGIES, AND TO DETERMINE THE INTEREST OF QUALIFIED INVESTORS. THIS IS NOT AN OFFER TO SELL ANY TYPE OF SECURITY. THE UNDERLYING SECURITIES OF THE FIRM HAVE NOT BEEN REGISTERED OR APPROVED BY ANY STATE OR FEDERAL AGENCY.

CONFIDENTIALITY: THE INFORMATION CONTAINED IN THIS PLAN IS PROPRIETARY AND CONFIDENTIAL. IT IS BEING SUBMITTED TO PROSPECTIVE INVESTORS WITH THE EXPRESS UNDERSTANDING THAT IT, AND COPIES OF IT, WILL NOT BE RELEASED TO THIRD PARTIES WITHOUT THE WRITTEN PERMISSION OF AN OFFICER OF THE COMPANY. NO PERSON IS AUTHORIZED TO GIVE ANY INFORMATION OR MAKE ANY REPRESENTATION THAT IS NOT CONTAINED IN THE ATTACHED BUSINESS PLAN.

RISK: THIS VENTURE INVOLVES A HIGH DEGREE OF RISK AND SHOULD BE REGARDED AS HIGHLY SPECULATIVE. THERE IS NO ACTIVE MARKET FOR THE SECURITIES OF THE FIRM. ALTHOUGH MANAGEMENT IS CONFIDENT OF THE BUSINESS POTENTIAL OF THIS VENTURE, THERE IS ABSOLUTELY NO GUARANTEE OF SUCCESS. ALL PROJECTIONS ARE THE BEST ESTIMATES OF MANAGEMENT.

ALL INTERESTED POTENTIAL INVESTORS ARE URGED TO CONTACT THE VERIOUS OFFICERS AND DIRECTORS OF THE COMPANY TO VERIFY OR CLARFIY THE INFORMATION CONTAINED IN THIS DOCUMENT. DISCUSSION OF THE SALE OF THE FIRM'S SECURITIES ARE PROHIBITED UNTIL ALL APPLICABLE STATE AND FEDERAL SECURITIES LAWS HAVE BEEN COMPLIED WITH.

The above notes should provide the necessary information if it is being given to venture capitalists. However, if it is to be given to private individuals, you should consider adding the following notes:

Resale of the securities discussed in this document may not be made unless the securities are registered under the Securities Act of 1933, as amended, or unless the resale is exempt from the registration requirements.

Neither the delivery of this document at any time, nor any sale of securities, shall under any circumstances create an implication that the information contained herein is correct as of any time subsequent to its date.

Offers and sales of securities will only be made to persons who have the knowledge and experience to evaluate the merits and risks of the investment and who have the economic means to afford the illiquidity of the securities.

The information set forth herein is believed by the Company to be reliable. It must be recognized, however, that predictions and projections as to the Company's future performance are necessarily subject to a high degree of uncertainty and no warranty of such projections is expressed or implied hereby.

All corporate documents relating to this investment will be made available to interested parties and/or their representative upon proper request to the Company.

The Company shall be under no obligation whatsoever to sell or issue any securities referred to in this document except pursuant to a duly executed stock purchase agreement between the Company and the purchaser thereof.

## **EXECUTIVE SUMMARY**

This is the single most important section of the Plan for presentation purposes. It is similar to your first impression upon meeting someone. Most investors don't have time to read a 50 page document before determining their interest. The summary should be one or two pages long and concisely state the key points of the Plan.

The investor is primarily interested in market opportunity, financial viability, and what makes you so special. The first paragraph should briefly describe the Company and the background of the entrepreneurs. Next, the product or service and what is unique about it should be explained. Identify the market and why there is opportunity available. Summarize the size, trends, growth rate, and expected sales by year five. Lastly, state your financial goals and investment requirements.

The investor should be able to understand the overall concept and know what to expect from the plan based upon what is in the summary. If the type of venture fits into their investment strategy, the summary should be strong enough to make him want to read on and confirm his interest.

## **TABLE OF CONTENTS**

There are no surprises here. Prepare a standard Table of Contents that isn't too detailed but includes enough to help readers find their way around the document.

## **INTRODUCTION OF THE COMPANY**

### History of the company

- When was the company formed?
- What is the legal structure?
- Who are the key players?
- Summarize the main accomplishments to date and give a brief description of what is currently in progress.

### Define the Business

- What business are you in?
- Briefly describe the product or service/
- Briefly describe the market.

All of this information will be covered in more detail in later sections so don't overdo it here.

### Competitive Advantages or Distinctive Competence

Why will you succeed and beat-out your competition? Good intentions help, but you must convince skeptical investors why they should risk their money. They aren't interested in the "me too" approach with a slightly different twist. There has to be a need with a substantial market that you can satisfy better than anyone else. This is where the technology can be touted, but do it in terms of business concepts.

- The new machine will work twice as fast as the nearest competitor in an area where speed is valued at a premium.
- The cost savings to the customers will be X. He can recapture the capital cost within two years.
- Our unit can replace three existing units, is more reliable, and will be less expensive to maintain.

### Objectives

Now that you have identified your competitive advantages in the market, what specifically are you going to do? State this in concrete, achievable terms. Given one concept, two people can perceive it differently. It is hard enough to get a diverse management team to agree on how to proceed, let alone adding in the views of investors. In order to find a good fit with the right investors, the entrepreneurs have to be honest with themselves in what they want out of the deal and how they want to do it.

Objectives should define expected end results in terms that are discrete and measurable. The statement, "I want to be filthy rich in five years" is too general to be of much use. Here are some examples of typical objectives:

- Sales goals in dollars per year or market share by a given year.
- Return on investment of X percent.
- Set up X distributors within a given timetable.
- Go public by year X.
- Breakeven by year X.
- Production of X units within a given timetable.
- Develop the business for sale to another company by year X.

Many of the operating objectives will have to be modified over the years. That's okay as long as management recognizes this and plans for it. Objectives should be aimed for realistically and monitored through time. It's a lucky shot if you do better than what you were aiming for. If you



aren't, reaching your objectives, something should be done about it before it is too late. It may be time for a midcourse correction rather than end up at the wrong destination.

## **ANALYSIS OF RISK FACTORS**

Any investment has some degree of risk. A risk disclosure section in a private placement memorandum or prospectus for a start-up company going public would scare anybody. If you thought things were actually that bad you would be crazy to invest. The reason that so many warnings are put in is to cover yourself in case things do go badly and some disgruntled investors sue to recover their money.

The business plan described in this guide is for internal planning purposes and for use as a tool to attract professional investors like venture capitalists. You don't have to warn them like you have to for the general public. The purpose of this section then is to realistically look at the risks involved with this venture and to let the reader know that you have considered them and have a plan to handle them.

The worst thing that you can do is to intentionally hide an important problem. Depending upon when it is discovered and how serious it is, the impact could range from ruining the investment deal to being sued.

Identify and discuss the critical assumptions in the business plan and the major problems that have to be overcome in order to make the venture a success. Describe your plan to overcome these problem areas. The following list suggests areas to consider:

### Corporate Risks

Management--You may not have all of the key players on board yet and the positions may be difficult to fill properly. Existing management may be somewhat inexperienced.

Lack of operating history--You are attempting something that the Company has not specifically done before, either in developing new products or substantially expanding existing product lines. If IBM needs another \$10 million for expansion, you don't have to ask if they know what they are doing or have they done it before.

Venture partners may not cooperate--The venture may depend upon jointly working with several other companies that don't come across when needed.

Insurance and legal--obtaining insurance is becoming more difficult and the cost of a lawsuit is staggering.

### Financial Risks

Investment--The Company may not be able to secure all of the necessary financing and will therefore be unable to meet expectations.

Projections--The income and cost estimates are subject to substantial variation due to many unknown and uncontrollable influences.

### Market Risks

Customer acceptance--The product or service may not be accepted as well in the market place as first anticipated.

Price sensitivity--The price that customers are willing to pay may be less than expected.

Competition--The reaction by competitors may be worse than planned for.

Distribution--There may be unforeseen difficulties with shipping, packaging, and distributors.

#### Technical Risks

Patents--They may be invalid, you may be infringing on other technology, and applications may fail.

Product development--You may not be able to solve all of the problems which could lead to a product with reduced capabilities or to an impractical design.

Competition--Other technology may be developed that makes your technology obsolete faster than you can keep up.

Costs--Estimates to develop the product may be understated.

Production--Conversion from a prototype to full-scale production may not be possible.

#### **For the presentation:**

Please look at the power point slides entitled “Presenting the Business Plan” that outlines the basic requirements and advice for presentations.

## EVALUATION OF BUSINESS PLAN

Business Name: \_\_\_\_\_ Date \_\_\_\_\_

Owner/Founder's Name: \_\_\_\_\_

Content	Excellent	Good	Fair	Poor	Bad
Strength of the product idea	5	4	3	2	1
Value proposition of the business	5	4	3	2	1
Thoroughness, accuracy, and depth of environmental and competitor analysis	5	4	3	2	1
Market analysis and marketing plan	5	4	3	2	1
Internal structure – team, organization, board of directors	5	4	3	2	1
Potential for cash flow and accuracy of financial projections	5	4	3	2	1
Opportunities for growth and/or an exit or harvest strategy	5	4	3	2	1
Delivery	Excellent	Good	Fair	Poor	Bad
Organization of presentation	5	4	3	2	1
Strong conclusion	5	4	3	2	1
Professionalism of presentation	5	4	3	2	1
Use of visual aids, slides, webpage, product prototype or handouts—well designed and integrated	5	4	3	2	1
Use of time/length of presentation (15 minutes maximum)	5	4	3	2	1
Handling of potential investor's questions	5	4	3	2	1
<b>Overall Evaluation</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

Comments and Justification for Ratings: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Team Based Learning: Peer Feedback

Your Name \_\_\_\_\_ Team # \_\_\_\_\_ Company  
 Name \_\_\_\_\_

Please assign scores that reflect how you really feel about the extent to which the other members of your team contributed to your learning and/or your team’s performance. This will be your only opportunity to reward the members of your team who worked hard on your behalf. (Note: By giving everyone pretty much the same score you will be unfair to those who did the most and helping those who did the least.)

Instructions: In the space below please rate each of the other members of your team. Each member's peer evaluation score will be the average of the points they receive from the other members of the team. To complete the evaluation you should:

- 1) List the name of each member of your team in the alphabetical order of their last names (do not include yourself);
- 2) Assign an average of ten points to the other members of your team (Thus, for example, you should assign a total of 50 points in a six-member team; 60 points in a seven-member team; etc.) and note, you are not rating yourself; and
- 3) Differentiate some in your ratings; for example, you must give at least one score of 11 or higher (maximum = 15) and one score of 9 or lower.
- 4) Additional Feedback - In the last column of the table, briefly describe your reasons for your scores and in particular the reasons for your highest and lowest ratings. These comments -- but not information about who provided them -- will be used to provide feedback to team members.

Team Members	Scores (0-15)	Comments and Justification for Score Assigned:
1.		
2.		
3.		
4.		
5.		