



Wollo University
Kombolcha Institute of Technology
School of Mechanical and Chemical Engineering
Department of Industrial Engineering

Course: Entrepreneurship for Engineers
Chapter two: Creation of New Ventures

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Kombolcha

2. Creation of new ventures

2.1 Entrepreneurial plan

- ✓ *A written document describing the nature of the business, the sales and marketing strategy, and the financial background, and containing a projected profit and loss statement.*
- ✓ *The purpose of a Business Plan is to identify, describe and analyze a business opportunity and/or a business already under way, examining its technical, economic and financial feasibility. Moreover, it should serve as a business card for introducing the business to others: banks, investors, institutions, public bodies or any other agent involved, when it comes time to seek cooperation or financial support of any kind.*
- ✓ *Note: Detailed plan will be discussed in part seven: business planning*

2.2 Ideas Versus Opportunities

- ✓ *“The process of how ideas come into existence, is, an inherent aspect of entrepreneurial narrative” (Gartner 2007). Opportunity is a key theme of entrepreneurship (Short, Ketchen, Shook, & Ireland,2009).*
- ✓ *According to Sarasvathy and Venkataraman (2001) an entrepreneurial opportunity Consists of four elements: (1) New ideas or innovations; with (2) one or more ends, which are either subjective aspirations or objective goals. (3) Beliefs about things favorable to the Achievement of those ends and (4) possible implementations of those ends through the creation of new economic artifacts.*
- ✓ *In other words, entrepreneurial opportunity consists of a set of ideas, beliefs and actions that enable the creation of future goods and services in the absence of current markets for them (Venkataraman,1997).*

2.2 Ideas Versus Opportunities

Externally Stimulated Opportunity Recognition



Internally Stimulated Opportunity Recognition



Figure 4 -Opportunity recognition sequences in entrepreneurial venture creation
(Bhave,1994)

2.2 Ideas Versus Opportunities

Opportunity Development—(From idea to business concept) involves uncertainty. However uncertainty gradually decreases as time goes—As the entrepreneur becomes aware of the opportunities through time and strategic and tactical approaches to overcome challenges.



Opportunity development and uncertainty (Moenaert & Souder, 1990)

2.3 Commercialization of Technology based innovation

- ✓ Technology transfer entails an agreement and presupposes a payment and, therefore, the commercialization of knowledge is inherent to this process.(Hamidia1 ,2011; Rast ,2012 and Chilana ,2015).
- ✓ The technology transfer can be defined as an agreement in which technology flows from an entity that owns the technology (the provider) to an entity seeking the technology (the receiver).(López and Mauricio ,2018)
- ✓ “Technology commercialization is the process of converting ideas into businesses and consequentially, jobs,” says Shad Sleeth, assistant director of Bradley University’s Technology Commercialization Center.
- ✓ “CT plays a critical role in economic development, as it effectively transfers ideas from the mind or the laboratory to the marketplace.

2.3 Commercialization of Technology based innovation

Primary sources of new technology are universities, laboratories or Research and Development divisions within private-sector companies in which knowledge is the primary outcome (*Cindy Patterson,2009*).

However, to have social and economic impact, additional value must be created. Commercialization is the process through which such value is infused into an innovation by coupling the innovation with the business development necessary to build a revenue- and job-producing entity.” (*Cindy Patterson,2009*).

2.3 Commercialization of Technology based innovation

1. Opportunity

This phase consists of identifying the scientific and commercial value of the discovery. For many inventors and scientists, the scientific value may be more straightforward than revealing the commercial value.

The commercial value is simply that there is a market and customers who are willing to pay for your technology—that it meets a need, either real or perceived. Key steps in this process include cultivating a professional network in your field of expertise, research and documentations an integral part of the protection of your innovation. Keep detailed records and do not make public disclosures concerning your idea. Sharing your idea without proper “non-disclosures” may jeopardize the future protection of your concept.

2.3 Commercialization of Technology based innovation

- 2. Protection:** Once a meticulous description of the discovery is complete, a patent, trademark or copyright protection process can be initiated.
- ✓ A *patent* gives you the exclusive right to prevent others from making and selling your invention.
 - ✓ *Trademarks* offer protection for brands, symbols, logos and colors.
 - ✓ *Copyrights* protect original works of authors, composers, programmers and screenwriters. In some cases, acquiring a patent may take longer than the window of opportunity for commercialization will allow.

2.3 Commercialization of Technology based innovation

3.Business Case and Commercialization Plan

This step determines if the innovation or discovery is truly feasible. “**Will the dogs eat it?**” a phrase that could describe the development or creation of the business case. It involves a comprehensive analysis of the industry and market, creating the value proposition, and close identification of the customer. It is imperative to hone in on the customers’ needs and expectations , as it will impact everything from product features to the distribution plan.

It needs to document the business operations, policies, legal structure of the business, marketing and growth plans, financials, and the team needed to make your venture a success. The next *Steps*, is to provide detailed feedback on commercialization plans and informal networking between innovators and investors.

2.3 Commercialization of Technology based innovation

3. Building the Team and Securing Capital

- ✓ Investors need to be assured that you have the necessary expertise to execute your plan. In this phase, “you have typically exhausted your *friends, family and fools network* and need additional funding to move forward,”
- ✓ “You will need to prove to investors that you can make progress on your commercialization plan in a specified amount of time.” Ownership issues and partnership opportunities need to also be considered and outlined for the investors.
- ✓ It can connect any business to angel investors, venture capital funds and other state and federal grant opportunities.

2.3 Commercialization of Technology based innovation

4. Executing the Plan and Developing the Product

- ✓ preparation for starting the business or executing your commercialization plan. This phase includes the deal-making negotiations of selling the technology to an existing business or the start-up process of a new business venture.
- ✓ Roughly, the start-up process includes finding a physical location to operate your business, hiring personnel, physically organizing your business workflow, stocking supplies, developing prototypes and general administrative organization.
- ✓ At every step along the way, the business development plan will need to be reviewed, modified and refined. As new businesses grow, they collectively create significant jobs.

2.3 Commercialization of Technology based innovation

What are the typical steps in the process? The typical process is summarized in [“The 8 Steps of Technology Commercialization”](#):

- ✓ Step 1: [Research](#)
- ✓ Step 2: [Invention disclosure](#)
- ✓ Step 3: [Assessment](#)
- ✓ Step 4: [Patenting](#)
- ✓ Step 5: [Identifying potential licensees](#)
- ✓ Step 6: [Negotiation](#)
- ✓ Step 7: [Licensing](#)
- ✓ Step 8: [Revenue & commercialization](#)

❖ *Note: these steps can vary in sequence and often occur simultaneously (University of Texas at Austin, Office of Technology Transfer,)*

2.4 Formation, development & Growth of Technology based new enterprises

2.4.1 Formation of technology based enterprise

- ✓ Enterprise can be formed based on either based on the commercial registration and licensing law 980/2016 of Ethiopia. (available online).
- ✓ According to this commercial code part two no person shall obtain any kind of business license without being registered in commercial register at place where his business head office is located.
- ✓ Founders or members of the business organization shall before signing the memorandum and article of association apply to registering office and get verification that an other person has not occupied the name of the business organization.

2.4 Formation, development & Growth of Technology based new enterprises

2.4.1 Formation of technology based enterprise

- ✓ Business organization shall attain legal personality up on registration.
- ✓ The business organization shall be publicized in news paper having nationwide circulation at the time of establishment.
- ✓ Commercial registration shall be cancelled if the business person abandons his business for any reason; if court decision is passed; registered using false information, violation of proclamation and regulations, working without business license after commercial registration.

2.4 Formation, development & Growth of Technology based new enterprises

2.4.1 Formation of technology based enterprise

According to cooperative Councils of Ministers Regulation No. 106/2004 to Provide for the implementation of Cooperative Societies Proclamation No.147/ 1998. Primary cooperative society shall be established by voluntary individuals who live or work in the same area or engaged in the same profession. Number of members establishing the society shall not be less than ten. The appropriate authority shall, taking into account the economic efficiency, determine the least number of establishing members through directives issued by itself.

2.4.2 Development and growth of technology based enterprise

- ✓ Manufacturing enterprises development is more challenging than trade and service sector. Because they require more technical skills, infrastructure, conducive business environment, technology, working premises, market support.
- ✓ Enterprise can grow from Micro to small; from small to medium, from medium to large and or very large
- ✓ The following table describes the meaning and development stage of micro, small and medium enterprises in Ethiopia.

2.4.3 Definition of Micro, Small , Medium Enterprises (MSME) In Ethiopia

The definition of micro and small enterprise varies among different countries of the world depending on their level of development and other contextual factors.

Definition of Micro and small Enterprises in Ethiopia

Level of the enterprise	Sector	No. employee	Total asset
Micro	Industry	≤ 5	≤ 100000 (\$6000 or E4500)
	Service	≤ 5	$\leq 50,000$ (\$3000 or E2200)
Small	Industry	6-30	$\leq$ birr 1.5 million (\$9000 or E70000)
	Service	6-30	$\leq$ birr 500,000(\$30000 or E 23000)

Source : Micro and small enterprise development Strategy of Ethiopia , 2010

Medium	manufacturing	31-100	1,500,000-20,000,000 ETB
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Source: (FeSMEDA, Regulation 373/2016)

2.4.4 Growth Stages of Micro, Small , Medium Enterprises (MSME)

- ❖ Stage of enterprise development differs from country to country.
- ❖ In Ethiopia the micro and small enterprises development strategy,(2010,2013) describes that micro enterprise pass through three growth stage and same works for small enterprise.
- ❖ The first stage is Startup, the second is growth stage and the third is maturity stage and then finally it will be graduating to medium startup enterprise. This can be summarized in the table below

2.4.4 Growth Stages of Micro, Small , Medium Enterprises (MSME) In Ethiopia

Growth stage of Enterprise (MSE Strategy,2010,2013)			
N.o	Level of enterprise	Growth stages	Description
1	Micro Enterprise	startup	ጥቃቅን ኢንተርፕራይዞችን ለመመሥረት ፍላጎት ያላቸው ሰዎች እና ከተለያዩ የትምህርት ተቋማት በየደረጃው የሚጠበቅባቸውን ትምህርት በማጠናቀቅና በቡድን፣ በማህበር እና በግለሰብ በሕግ አግባብ ተደራጅተው የራሳቸውን ቁጠባና ከተለያዩ የፋይናንስ ተቋማት ብድር በመውሰድ ወደ ሥራ የገቡትን የሚያካትት ነው። የምሥረታ /ጀማሪ ደረጃ ኢንተርፕራይዝ ሕጋዊ አቋም ይዞ የማምረትና አገልግሎት የመስጠት ተግባር የሚጀምርበት ነው ።
		Growth	አንድ ኢንተርፕራይዝ የሚሰጠውን ድጋፍ ተጠቅሞ በገበያ ላይ በዋጋ፣ በጥራትና በአቅርቦት ተወዳዳሪ ሲሆንና ትራፋማነቱ በቀጣይነት ሲረጋገጥ ነው። በዚህ ደረጃ ያለ ኢንተርፕራይዝ በምሥረታ ደረጃ ከነበረው ቀጥሮ የሚያሠራው የሰው ኃይል ቁጥርና የጠቅላላ ሀብት መጠን ዕድገት ይኖረዋል። በተጨማሪም ኢንተርፕራይዙ የሂሳብ አያያዝ ሥርዓት የሚጠቀም ይሆናል።
		Maturity	በገበያ ውስጥ ተወዳዳሪና ትርፋማ ሆኖ የገበያ ድርሻውን ለማሳደግ ተጨማሪ ኢንቨስትመንት በሥራ ላይ ካዋለና ለዘርፉ የተቀመጠውን ትርጓሜ መሥፈርት ሲያሟላና ወደ ጀማሪ አነስተኛ ወይም ሌላ ከፍ ወዳለ የዕድገት ደረጃ ሲሸጋገር ወይም በአለበት ደረጃ ጥቃቅን ኢንተርፕራይዝ በመሆን በገበያ ውስጥ ተወዳዳሪና ትርፋማ ሆኖ የሚቀጥል ሲሆን ነው ።

2.4.4 Growth Stages of Micro, Small , Medium Enterprises (MSME) In Ethiopia

Growth stage of Enterprise (MSE Strategy,2010,2013)			
N	Level of enterprise	Growth stages	Description
2	Small Enterprise	Startup	አነስተኛ ኢንተርፕራይዞችን ለመመሥረት ፍላጎት ያላቸው ሰዎች እና ከተለያዩ የትምህርት ተቋማት በየደረጃው የሚጠበቅባቸውን ትምህርት በማጠናቀቅና በቡድን፣ በማህበር እና በግለሰብ በሕግ አግባብ ተደራጅተው የራሳቸውን ቁጠባና ከተለያዩ የፋይናንስ ተቋማት ብድር በመውሰድ ወደ ሥራ የገቡትን የሚያካትት ነው። የምሥረታ /ጀማሪ ደረጃ ኢንተርፕራይዝ ሕጋዊ አቋም ይዞ የማምረትና አገልግሎት የመስጠት ተግባር የሚጀምርበት ነው ።
		Growth	አንድ ኢንተርፕራይዝ የሚሰጠውን ድጋፍ ተጠቅሞ በገበያ ላይ በዋጋ፣ በጥራትና በአቅርቦት ተወዳዳሪ ሲሆንና ትራፋማነቱ በቀጣይነት ሲረጋገጥ ነው። በዚህ ደረጃ ያለ ኢንተርፕራይዝ በምሥረታ ደረጃ ከነበረው ቀጥሮ የሚያሠራው የሰው ኃይል ቁጥርና የጠቅላላ ሀብት መጠን ዕድገት ይኖረዋል። በተጨማሪም ኢንተርፕራይዙ የሂሳብ አያያዝ ሥርዓት የሚጠቀም ይሆናል።
		Maturity	በገበያ ውስጥ ተወዳዳሪና ትርፋማ ሆኖ የገበያ ድርሻውን ለማሳደግ ተጨማሪ ኢንቨስትመንት በሥራ ላይ ካዋለና ለዘርፉ የተቀመጠውን ትርጓሜ መሥፈርት ሲያሟላና ወደ ታዳጊ መካከለኛ ሲሸጋገር ወይም በአለበት ደረጃ አነስተኛ ኢንተርፕራይዝ በመሆን በገበያ ውስጥ ተወዳዳሪና ትርፋማ ሆኖ የሚቀጥል ሲሆን ነው ።
3		Medium startup	ለአነስተኛ ኢንተርፕራይዝ የተቀመጠውን የሰው ሃይልና ጠቅላላ ሀብት መጠን የመብቃት የዕድገት ደረጃ በማለፍ ወደ ኩባንያ ደረጃ የተሸጋገረ የኢንተርፕራይዝ የዕድገት ደረጃ ማለት ነው