**Lecture 7**

**Creativity and Innovation**

**Creativity** is the ability to develop new ideas and to discover new ways of looking at problems and opportunities.

**Innovation** is the ability to *apply* creative solutions to those problems and opportunities to enhance or enrich people’s lives.

Creativity is *thinking* new things and innovation is *doing* new things. In short, entrepreneurs succeed by *thinking and doing* new things or old things in new ways. Simply having a great new idea is not enough; transforming the idea into a tangible product, service, or business venture is the essential next step.

**Types of Innovation:**

1. Incremental innovation
2. Radical innovation

**Incremental innovation** is a series of small improvements or upgrades made to a company's existing products, services, processes or methods. E.g. Improvement on the RAM and increasing it to 4 Mbs etc.

**Radical innovation** blows up the existing system or process and replaces it with something entirely new. Impact of radical innovation is huge. E.g. Introduction of television on mankind, LED is a breakthrough innovation for the lightening industry in 20th century.

**Entrepreneurship**

Having defined innovation and creativity we can redefine entrepreneurship as:

* *Entrepreneurship* – the result of a disciplined, systematic process of applying creativity and innovation to the needs and opportunities in the marketplace.
* Entrepreneurs connect their creative ideas with the purposeful action and structure of a business.

**Failure: Just Part of the Creative Process!**

Some of the statistics are:

* For every 3,000 new product ideas:
  + Four make it to the development stage.
  + Two are actually launched.
  + One becomes a success in the market.
* On average, new products account for 40 percent of companies’ sales!!
* Creativity is an important source for building a competitive advantage.

**Can We *Learn* to Be Creative?**

It is a skill and can be learned. With the right training and exercise you can learn how to generate creative ideas.

By overcoming paradigms (set of pre-conceived ideas about any object) and by suspending conventional thinking long enough to consider new and different alternatives!

**Creative Thinking**

Research into the operation of the human brain shows, that each hemisphere of the brain processes information differently and that one side of the brain tends to be dominant over the other. The human brain develops asymmetrically, and each hemisphere tends to specialize in certain function.

Entrepreneurship requires *both* left-and right-brained thinking.

* **Right-brained** thinking draws on *divergent* reasoning, the ability to create a multitude of original, diverse ideas.
* **Left-brained** thinking counts on *convergent* reasoning, the ability to evaluate multiple ideas and to choose the best solution to a problem.

**Barriers to Creativity**

The number of potential barriers to creativity is virtually limitless—time pressures, unsupportive management, pessimistic coworkers, overly rigid company policies, and countless others. Perhaps the most difficult hurdles to overcome, however, are those that individuals impose on themselves.

* **Searching for the one “right” answer**

It is not unusual for this one-correct-answer syndrome to become an inherent part of our thinking. In reality, however, most problems are ambiguous. Although everyone has the capacity to be creative, not everyone develops that capacity. Depending on the questions one asks, there may be (and usually are) several “right” answers.

* **Focusing on “being logical”**

Logic is a valuable part of the creative process, especially when evaluating ideas and implementing them. However, in the early imaginative phases of the process, logical thinking can restrict creativity. Focusing too much effort on being logical also discourages the use of one of the mind’s most powerful creations: intuition.

* **Blindly following the rules**

Sometimes, creativity depends on our ability to break the existing rules so that we can see new ways of doing things.

* **Constantly being practical**

Suspending practicality for a while frees the mind to consider creative solutions that otherwise might never arise.

* **Viewing play as frivolous**

A playful attitude is fundamental to creative thinking. There is a close relationship between the “haha” of humor and the “aha” of discovery. Play gives us the opportunity to reinvent reality and to reformulate established ways of doing things.

* **Becoming overly specialized**

A common killer of creativity is **myopic thinking**, which is narrowly focused and limited by the status quo. Because experts are so immersed in what they know, they often are victims of myopic thinking. That’s why creative companies include *non-experts* in creative problem solving or idea generation sessions; they are free to ask questions and offer ideas that challenge the status quo and traditional solutions that experts “know” cannot work but often do.

* **Avoiding ambiguity**

Ambiguity can be a powerful creative stimulus; it encourages us to “think something different.” Being excessively detailed in an imaginative situation tends to stifle creativity. Ambiguity, however, requires us to consider at least two different, often contradictory notions at the same time, which is a direct channel to creativity. Ambiguous situations force us to stretch our minds beyond their normal boundaries and to consider creative options we might otherwise ignore.

* **Fearing looking foolish**

Creative thinking is no place for conformity! New ideas rarely are born in a conforming environment. People tend toward conformity because they don’t want to look foolish. The fool’s job is to whack at the habits and rules that keep us thinking in the same old ways. In that sense, entrepreneurs are top-notch “fools.” They are constantly questioning and challenging accepted ways of doing things and the assumptions that go with them.

* **Fearing mistakes and failure**

Creative people realize that trying something new often leads to failure; however, they do not see failure as an end. It represents a learning experience on the way to success. Failure is an important part of the creative process; it signals entrepreneurs when to change their course of action.

* **Believing that “I’m not creative”**

Successful entrepreneurs recognize that “I’m not creative” is merely an excuse for inaction. *Everyone* has within him or her potential to be creative; not everyone will tap that potential, however. Successful entrepreneurs find a way to unleash their creative powers on problems and opportunities.