

Entrepreneurship and IP Strategy
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Lecture 28
Industrial Design - Business

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A very warm welcome in the third module of week 6 of the course, Entrepreneurship and IP Strategy titled, Industrial Design-Business. Now, we will see a few examples here and we will try to understand how industrial design and business is related. Now, check this example of a Coca Cola bottle. Now, this you can see as this design is as old as like 1915 and it is like a masterpiece in industrial design.

It was like a deliberation was going on there when in 1915 that, that bottle suppliers, they had been asked to design a new bottle that would be distinctive and instantly recognizable. So, to make something unique related to the bottle, all that bottles suppliers were there that they all have been challenged and it was asked that something unique.... unique should be prepared. Now, this design whatever you are seeing, it is designed by Mr. Dean.

And what he has, how he has got the inspiration for this kind of design is like that he has concentrated on a image of a cocoa pod. So, it is like that cocoa pod image he just gone through an encyclopedia and that become the inspiration for him. And he has based on that design there of a cocoa pod, he designed this bottle shape. And we know that this is like a unique feature of Coca Cola bottle.

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Now, if you see the second example. Now, this example, if you see, it is designed by a London-based industrial design, Mr. Bergne. Now, if you see it is a simple table lamp and that concept it was launched somewhere in 2012 in Belgium. It uses adjustable LED lighting to cycle between cool and warm white light. The curved design encourages users to place the lamp in a different positions. And that attractive kind of nature of that lamp it makes like aesthetic item in the, when you are keeping it in a table or something, it is like a very good aesthetic item. So, this is about this lamp.

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Now, check this another example of a lamp. We are much familiar with this kind of a design. Now, this angle poise, if you see, we all remember this design. But this is designed something

for a car garage. So, this is a classic piece of industrial design. It was designed long back in 1932 by Mr. George. Now, what was the story behind this design is like this Mr George he was working on a vehicle suspension systems.

And in this field, when he was a doing that activity, that inspiration came that 4-spring mechanism should be there. And that 4-spring mechanism you can see in this angle poise lamp. It is mainly designed to fit for workshops. And now you know that it, the simpler version of that, that is this 3-spring version it becomes like a, a very, the night lamp which you are using in a home. So that 3-spring design from 4-spring design, and this become a very good example of a table lamp or some the night lamp kind of thing in the homes.

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Then see this design of a chair; a very aesthetic design. And this is designed by German Industrial Design and the designer is Mr. Koehler. You can see that sleek circular shape and that it will give that rocking motion to this chair. So, the purpose of chair is also resolved and then you are getting some aesthetic value also. Then you can have something like a reading facility also in this chair. And then you can fit the lamp or something like that there on the upper side of this chair. And then obviously you can get a luxury of sitting and reading or something like that by using this kind of a chair.

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Now next design of a chair you can see. This was a very popular at that time. It was designed somewhere in 1964 and it is something like called popularly known as a 40 by 4 chair. Now, why it is called 40 by 4 chair is like the, at a time you can keep 40 chairs, that stacking of 40 chairs is possible. And that height may be approximately 4 feet. So, this is like designed in 1964. That, it is become very popular when you have to pack certain things maybe in the classrooms, in the conference halls, in the office. So, this kind of design of chair it become a very popular because you can just keep all the chairs at one place and whenever you will require that particular chair you can arrange in a way whatever you want.

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Now, the next design is about a table. You can see the beautiful design of a table and this is designed by Mr Robert. Now, this table, the single piece of wood, it is a starting point. And then you can see that from that single piece this table is design. Now, the challenging notion of a table having to be like a flat surface and then 4 separate legs. And that kind of whatever that standard we know that table 4, 4 legs should be there, that plane surfaces is there; all these things are there obviously in this table. And then that specific design is made in this table.

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Then the next example. This is about that car. Now, this kind of design is very popular. It is a 1950 design. It is designed by Mr. Alec. And the challenge was like designing a car that was more frugal than the large cars. So, that kind of a challenge was there. And to, that challenge is solved by using or designing this kind of small cars.

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Now, the last example, the second last example here you can see. It is like a bicycle kind of thing; a bike kind of a thing. And you can pack that, pack that things and it can be act as a backpack. And if you climb up, so it is a very good example for a trekker. So, you can backpack it, keep it on the back and then wherever you want to go you can take it, and then use this kind of a bike.

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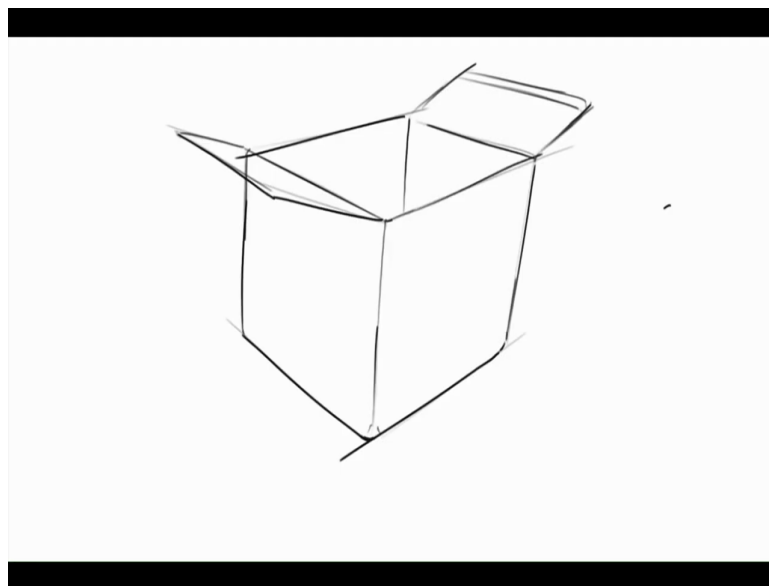
And this is; we will see this as a last example of stapler. Now, we are very well aware about that Swingline. It is introduced in 1968. It is like at that time, this is the first time that a, that stapler, it is like a top-loading stapler is there and that refilling is like a from top. That was introduced in 1968. Now, it is very popular in the offices and we are using it this kind of

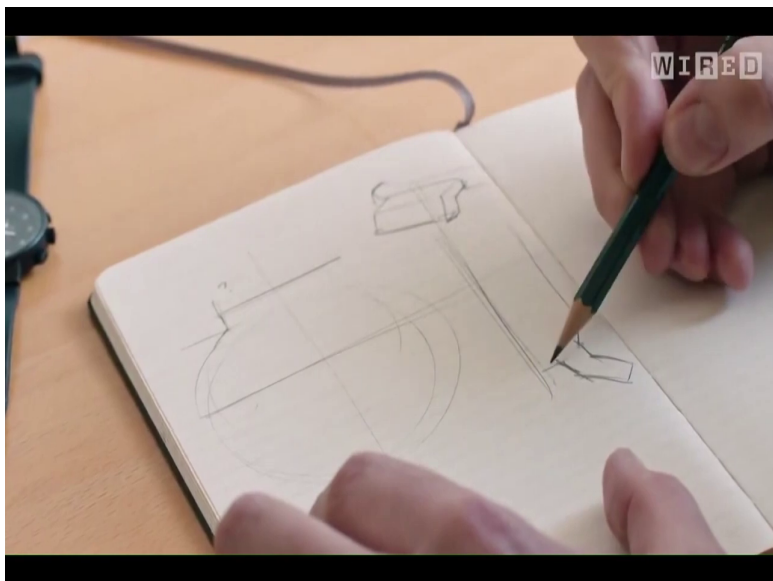
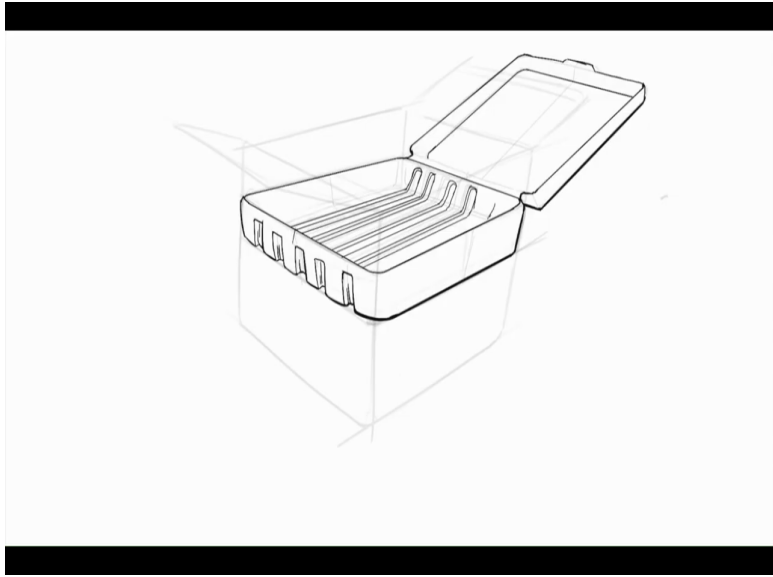
Swingline and 747 regularly. But at that time, it was like a very unique kind of introduction in the market.

Now, why we have seen all these examples of that designs because you can see that these are the products which are available in the market and you are using these particular products depending on means the appearance of that particular product is making what the value addition. And this is helping in the business. So, we have given you these few examples that, this is the design, this is the product.

And industrial design is contributing to make a value addition, uniqueness, some distinctive nature and that particular shape, size, feature whatever is contributed in that particular product or that particular whatever the, the product whatever is there, that product you are purchasing depending on that particular shape or that appearance. And that appearance part is because of the industrial design. And here industrial designer plays a very important role to make that particular product very attractive to the customer. So, let us watch how that industrial designers work to make that product very attractive. Just watch this video.

(Video shown: 09:42 to 11:05)







Narration: What if I asked you to design a box? Sure, you can make something. But it is hard to make anything meaningful or useful because you do not know what the box needs to do. There are not enough constraints. But if I was a little bit more specific and told you that it was a pizza box, suddenly the task is a bit easier. You know the shape of pizza. It is round and you know enough about it to start to develop more nuanced concepts.

If I told you that this pizza box needs to fit a 16-inch diameter pizza and the box must be made from compostable moulded fibre, then it is even more clear. If this box needs to have several other pizzas stacked on top of it, I know to add in some structural ribbing to make the box stronger. So, this is important because this shows you that the more specific you are with constraints, the easier it is to design. The shape that your designs take are dictated by what the designs need to do or how they should function.

This is the crux of the phrase “form follows function.” This is a quote as originally coined by architect Louis Sullivan in the late 1800s. And it still holds true today and it will probably always hold true. The first thing that I do when I start a project is establish a design criterion. It forces you to be very specific about what a successful look alike for a problem you are solving. And it takes a lot of subjectivity out of the design process.

Professor: So, this video was about how industrial design is. Whenever the product is designed, after that product design industrial designer plays his role and to make the product very attractive and unique.

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Now, the next thing is like there is a product design and a industrial design. Many times what happens these 2 words are used interchangeably, but there is a big difference in a product design and a industrial design. So, when we talk about a product design, it is the development of concepts moving from a research. So, when you are talking about a prototype, when you are starting the product formation or a ..manufacture..., not manufacturing exactly, but it is like developing that product, the conceptual stage is there, at that time product designer plays a very important role.

It is like a initial phase of a lifecycle of the product and it focuses mainly on the product and the design and development related to the (product) that product. There may not be the or there is never generally it is not thought about the aesthetic value, that appearance or a customer psychology, nothing is taken into consideration when that product designing is going on. Only the features of that product or the quality offering of that product, all these kind of product ..specific..., product specific features are taken into consideration.

And when we say industrial design, this industrial design, it is a process. When the product is ready, prototype is ready. And now it is like, it has now ready for entry into the market, at that time, before that industrial designing comes into the picture after product design. And they make that particular product very attractive. And because of that attractive nature, the business value of that product increases. Now business value is added because of that specific aesthetic value or appearance whatever is given by that industrial designer.

So, many times what happened that product design and industrial designer sometimes means some they may go parallel with each other. Or after product design that maybe the first prototype is ready and then that industrial designer come into the picture and then they do the that particular work around that product and make it like, give it the final appearance to that particular product. So, industrial designer and a product designer, these are the two different things.

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Now, this industrial design is more about how to make something, why make it something and for whom. So, when industrial designer is designing that particular product, he is like thinking about how to make that particular thing. That is a very important for him. Then why he is making? That objective behind that particular designer designing. And then for whom? That is very important.

And then when we say whom, at that time the customer range comes in front of the comes into the picture, gender, age, then which sector of the society. All these things are taken into consideration when the industrial designer develops that particular kind of design. So here, that customers get a very satisfactory experience whenever they are using that product.

So, this is for the task or this is the objective of that industrial design that, that will give the, that experience of satisfaction to the customer. Now, I can give you the example. We see very different types of a car. Why there is no only, not only the one simple design of a car? It is a, the purpose is like to go from one place to another place. But you see the variety of cars in the market. The various trademarks or various brands are there.

They themselves are offering a range of cars. And then within that range also, once they introduce a particular car after a few years they themselves stop the production of that particular car and introduce the new design. Now, why this kind of activity is done in the automobile sector? Because many a times we know the purpose is same but still that particular design and that is what the industrial design is that is playing a major role.

And that particular industrial design attracts customers and based on that appearance many times obviously the customer is purchasing that particular product. The same applies, a simple example of a pressure cooker you can take. Different brands are there in the market and you like a particular brand because you get emotionally attached or you get attracted towards that particular appearance. And that is the task of industrial designer.

Or you can take a different examples of bikes and such varieties of bikes are there. And we know that, that Bullet is there or Hero Honda bike is there or the variety of bikes are there. And then we know the specificity related to that particular bike and that designs are like a task of that industrial designer. And product designer is giving the product. Even another example of a pen. Pen purpose is writing. But you see a variety of pen from say 10 rupees to like 10,000 rupees also.

So, why this kind of ranges are there? Because the taste of a customer is different. And based on that taste, industrial designer designs that particular product, adds that business value and then the product will get that unique standing in the market. So, that is the role of industrial design. Now, here many times what the thing happened is like a customer get emotionally attached with that particular product. And it is so attached that he never changes that particular product.

Lifelong he is like so much attached with that product that he or she will buy that particular product because of that particular appearance of that particular product. Then designer has, whenever designer is working on that particular final design, he has to take care that he will not affect the function of that product. He will not affect the workability of that product. And keeping that in mind, he has to design the final appearance of that product. So, the product designer he like a concentrate on the product features and designer has to concentrate on that particular that final appeal of that particular product.

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Now, moving further you can see here that the simple differentiation between product design and industrial design is like this. That generally product designer they see the affordability, manufacturability or how easily it can be manufactured, and the functional aspect of that particular product. And obviously as we have seen that engineering when they are concentrating on that particular thing, the industrial applicability that is that industrial designers they are coming into the last phase of a life cycle.

And they will think about the customer psychology and that gender, and the age, then the sector, which sector of a society is taking the, who will be that customer. Based on that, they will design the final product. Now, you have seen different products at Crompton and Greaves. Why I am giving the example of Crompton and Greaves is because their products they are the number one in industrial design in India.

And they have received the price from the IP India in that sector. Now they have a separate design team which is working on the industrial design of their products. Now the products of this company, if you see a few examples I can give you like fans, bulbs that lighting related things all this like that, that is the product portfolio for Crompton Greaves. And the industrial design is like a dedicated department in this organization which is concentrating on the final appearance of that particular product.

And the observation generally that design team and the man that the product development team they are working together to make that particular final product. So, it is although we say in the life cycle that okay first that product design is there and then the industrial design come

into the picture. The actual is that once that product design starts, obviously the design team also starts contributing into that when the prototype kind of thing is ready and they start giving that final shape to the product.

And based on the input by this both the teams obviously, product team and then the industrial design team, we get the final product into the market. So, that way we can see that industrial designer and then the product. Product designers are generally the engineers and they are creating when we are talking about engineering products. And then the, that designers are they are having some that like artistic approach and they apply that artistic approach and develop that particular product.

And we have to remember that, generally I make a statement here that product designer can be an industrial designer. But generally industrial designers a very rare case is that industrial designers are the product designers. Reverse is less but this is what the scenario is. So, I guess you can get the idea with these examples, the video whatever we have watched and the few, the points related to the product design and industrial design; how that industrial design come into the picture when we are talking about a final product offering into the market. So, with this we come to the end of this session. Thank you.