



62990 Innovation Pilot (summer edition), Summer 2024

“Reflection & Learning “

Group 3

Dairy ECO Innovators

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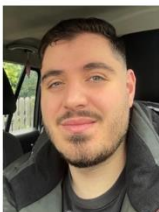
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1 INNOVATION AND COLLABORATION PROCESS

We were presented with a problem by Dairy Without Borders, a sustainable way for local communities in Mongolia or Nepal to receive their Dairy products. We decided to work with the local communities in Nepal and specifically the dairy product called paneer, which is a kind of cheese highly consumed in Nepal. We planned our work based on our hardnut, hardnut being the problem statement we wanted to find a solution for. Essentially what we did was to come up for the problem statement we wanted to find a solution for, and then brainstormed and found ways that we could fix the problem, and when done brainstorming, make use of the method of elimination and pick the one that both sounds best and seems more realistic than the rest of the solutions. Because of an Innovative course the group works with, the group then thought creative and innovative and produced a cheese package. Our first hardnut was the following:

- *How can Dairy Without Borders develop and implement sustainable, cost effective, and food safe packaging solutions for dairy products in developing countries to reduce plastic waste and environmental impact, while ensuring the packaging meets the specific needs of dairy products and is accepted by local communities?*

Feedback from our Professors made us realize that our hardnut was too restrictive and would cause us trouble later. We realized the truth in the words of our professors and made the necessary changes and eventually came up with the following hardnut:

- *How can Dairy Without Borders develop and implement sustainable food safe packaging solutions for dairy products in developing countries to reduce plastic waste and environmental impact?*

When we were assured that our hardnut was now accurate and corrected, we were able to come to a conclusion, and find a solution we deemed fit for our problem statement. Our brainstorm led us to many solutions, some more realistic than others. Some of the solutions being cheese packaging made from wood, carton, pots etc. In the end and with use of the methods of elimination we concluded that we would be making use of bamboo for our solution. Our reasoning behind our decision being, that bamboo is both a natural resource that grows incredibly fast, and the fact that there is a bunch of bamboo in Nepal that we could make use of. After the entire process of coming

up with the material for our solution we had to find a design for our product. The design phase opened our eyes to what else was needed. We needed something to wrap our cheese in to keep it from harmful bacteria's and other organisms we would like to keep our cheese away from. Once again, a brainstorm was needed, and it took us to the following solutions, paper, bioplastic, aluminum foil, wax paper etc. By using the methods of elimination we decided on wax paper, wax paper that would be biodegradable. Lastly, we decided that for the hold between the lid and the lower part of the box we would make use of cornstarch as adhesive and noteworthy is also that it is biodegradable. With all that our solution was enough for us to be able to make a prototype for our product. Our product can be seen below, with all the different parts of the product shown:

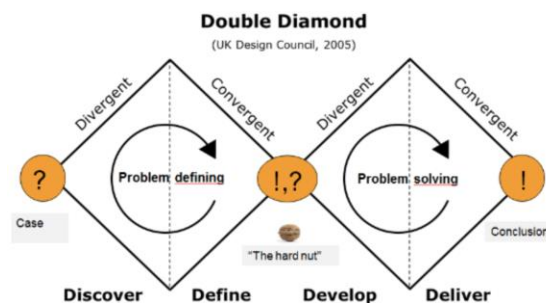


We made our prototype in a matter that exact measurements wouldn't mean the end of the world. We have our lid that sits on top of our box that carries the cheese, the yellow block with dots being the cheese and lastly the box where the cheese is placed in.

2 DOUBLE DIAMOND

For the project we have followed the double diamond framework. The framework in short tells us that in the first diamond we have two phases, the first one being the discovery phase focuses solely on understanding the problem on hand and getting insights and different perspectives on the problem, and the discovery phase prepares us for the next phase, the define phase. The defined phase is where we narrow all the information, we have down into something specific and an actionable statement, and what we are left with from this phase is our hardnut, a precise problem statement that we can then work on. The second diamond consist of two parts as well, the first one being the develop phase, in this phase there is focus on exploring solutions for our problem

statement, in fashions like ideas and prototypes etc. The last phase, the deliver phase focuses on the final touches on the product, meaning testing and changing the product, if need be, and the launching of the product.



2.1 DOUBLE DIAMOND IN OUR PROJECT

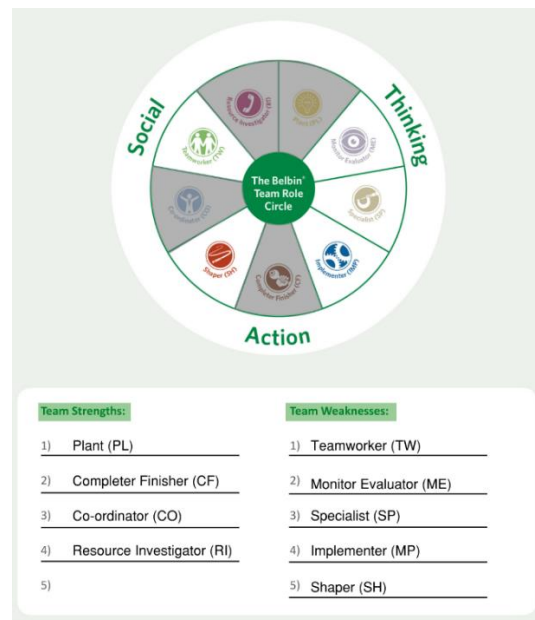
As suggested by the double diamond framework, we started out by digesting the problem, understanding and trying to get a perspective that would help us understand the problem. We did our research, and we interviewed the dairy without borders organization. The interview helped us get enough information and understanding to move on to the next phase of the double diamond framework. As mentioned earlier, in the early stage of the define phase we came up with a hardnut we thought was sufficient but was changed later, on the request of our professor, and the hardnut was changed for the better, and with that we could move on to the next phase. In the development phase we made use of brainstorming and the methods of elimination and were able to narrow down our solution to a product made from bamboo and wax paper and some adhesive. We were able to make a prototype that accurately depicted our vision and idea of a solution to our hardnut. We received good feedback from our professors and could slowly move on to the next phase. We are currently still in the last stage of the double diamond framework, the delivery stage where we are finalizing the product.



3 BELBIN & BTMI PROFILES COMPETENCE TRIANGLE

The first week the group came together, it was a subject to fulfill the Belbin & BTMI to analyze the individual characters on each group member to see where we fit in

Belbin shows us where we as a group are totally. The Belbin can be seen here:



The strengths of the team have 4 of the 9 possibilities:

As a group we are Plant where we like to think creative, inventive and like to approach with new solutions to the problems, where ideas and new strategies is common.

Another thing we are part of is Complete Finisher. As a Complete Finisher our strengths are meticulous, thorough, and conscientious. We are good at completing tasks on time and ensuring that the work is of high quality and free of errors.

The third strength is the Co-ordinator. We are as a Co-ordinators mature, confident, and good at delegating tasks. We have a natural authority and the ability to find and utilize the strongest skills of team members

The last strength is the Resource Investigator, where we are enthusiastic, outgoing, and good at finding external resources and opportunities. This brings us energy to the team, and we are good at



making contacts and networking. The resources have we used to gain the Innovative and creative solutions in our 1½ week.

But if we look at the other hand, we also have some weaknesses:

Unfortunately, we are not great team workers, but we surely believe that we are the opposite, so we work great with each other

We are not good Monitor Evaluators where strategic, discerning, and good at evaluating ideas and proposals is in the game

We also have the Specialist as a weakness, where dedication, self-starting, and knowledge in our specific field is a part of us. We also believe this is I mistake because we are dedicated and self-starting

As the end both Implementer and Shaper are our weaknesses. This tells us that we are not practical and dynamic, where we are able to work under pressure and challenges, but we surely believe that we are practical because of the creative effort we have put into our project based on Dairy Without Borders!

Overall in the Belbin Model, we are at all three points (Social, Thinking & Actio), but most on the Social part

The more detailed specifications about the Group by using the BTMI Triangle:

	<u>Personal Skills</u>	<u>Professional Skills</u>	<u>Academic Skills</u>
<u>Group 3</u> <u>(Dairy ECO Innovators)</u>	Consul, Logistic, Mediator, Virtuous & Intuitive. <ul style="list-style-type: none">- Construction & Buildings- Software Technology- Electrical Technical Energy Innovators, Intuitive, Introvert & Driver	<ul style="list-style-type: none">- Internship as Constructions Engineer- Football players- Taekwondo- Coding- Craftsmen	<ul style="list-style-type: none">- High School backgrounds'- Vocational & Technical education- Calculators & Analyzers- Serious and committed students- Apps and software developer