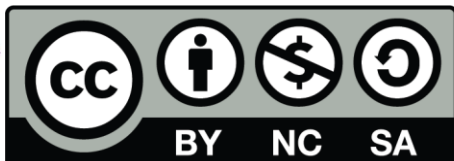


The Story of the Cheese-Master's Cheese Factory

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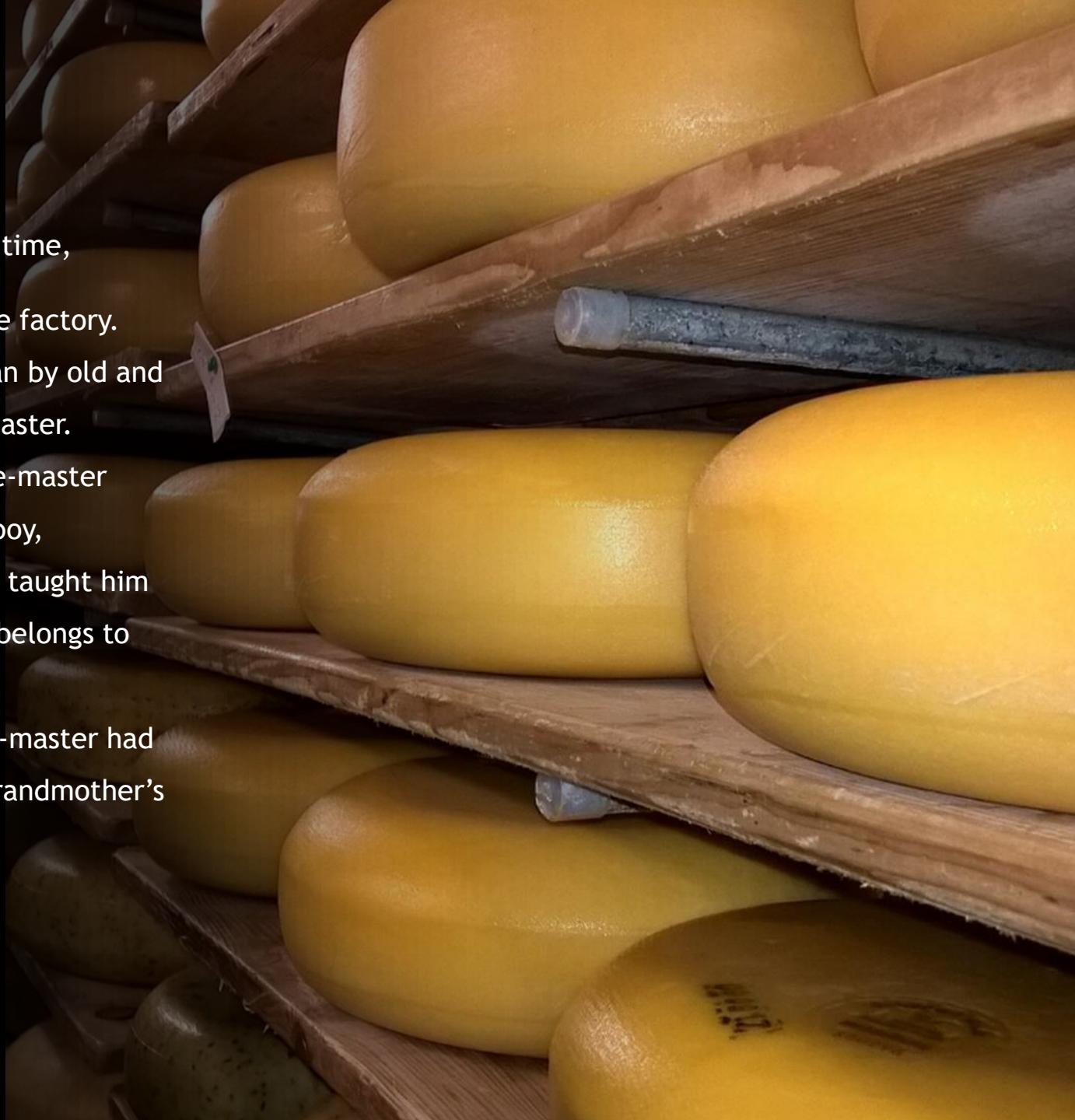
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This story is based on co-operative case-project in which students of the courses Product Development and Competitive Intelligence participated in spring 2020. Approximately 40 students in all participated in the above-mentioned courses.

This story is an independent material (~0,5 credit) that can be included into various contexts.



Once upon a time,
there was a cheese factory.
Cheese factory was ran by old and
wise Cheese-master.
Ever since Cheese-master
was a little boy,
his grandmother had taught him
that no ingredient belongs to
garbage,
until this day Cheese-master had
been able to follow grandmother's
wisdom.





But in one peculiar day cheese factory started to produce vegan product that seems like cheese as its texture and appearance but it was legally named as a vegetable fat product.

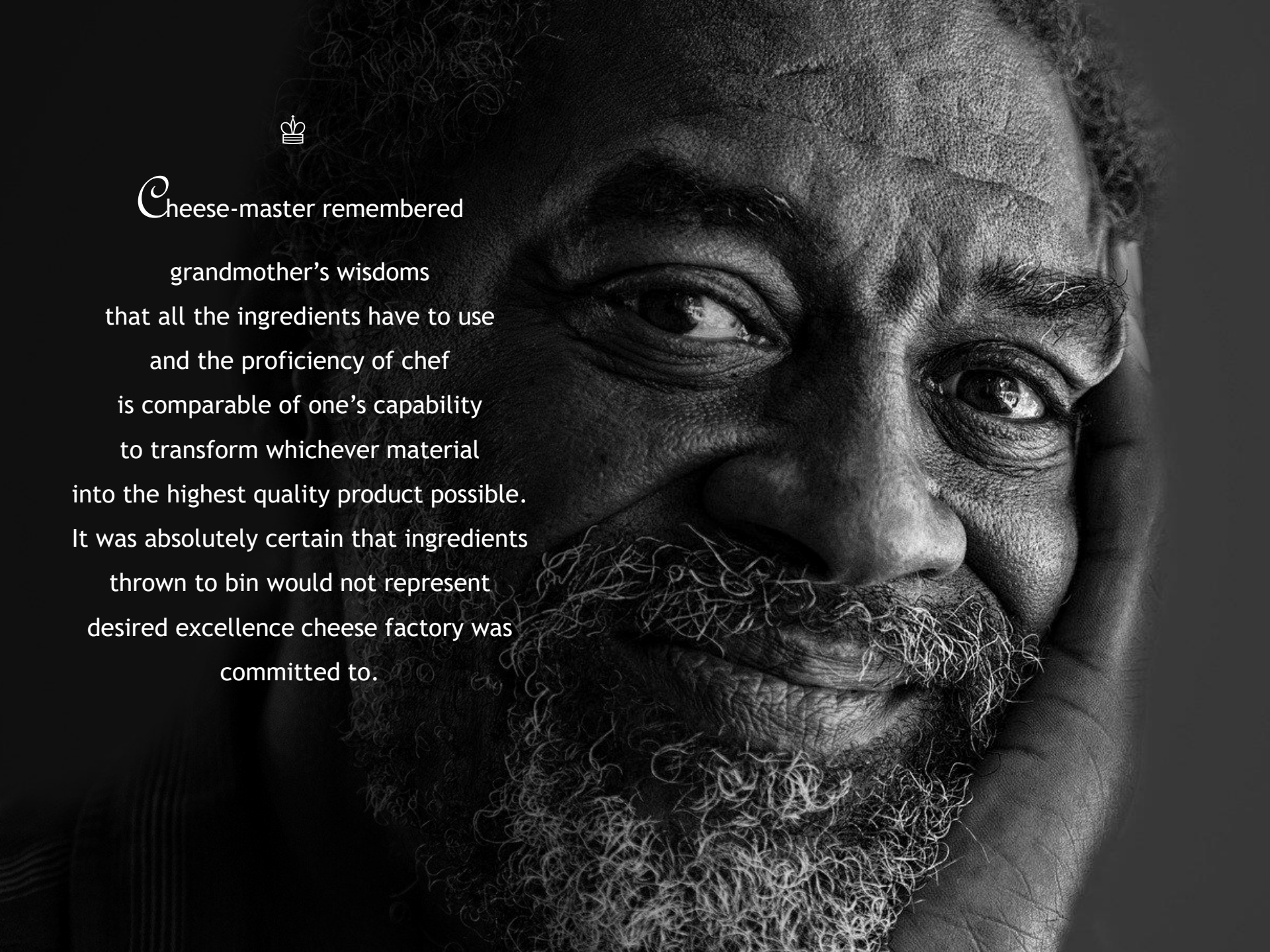
When this cheese-like product was cut into wanted blocks and shapes new side stream of leftover parts did occur.

Cheese-master cringed when he noticed factory workers throwing all the leftover parts to factory's garbage bin.



Cheese-master remembered

grandmother's wisdoms
that all the ingredients have to use
and the proficiency of chef
is comparable of one's capability
to transform whichever material
into the highest quality product possible.
It was absolutely certain that ingredients
thrown to bin would not represent
desired excellence cheese factory was
committed to.





Factory workers explained nervously to

Cheese-master

that leftover parts of the vegan product act undesirable way in a heating process yielding nonhomogeneous and grainy paste. Thus, the preparation of processed cheese appeared as impossible alternative.





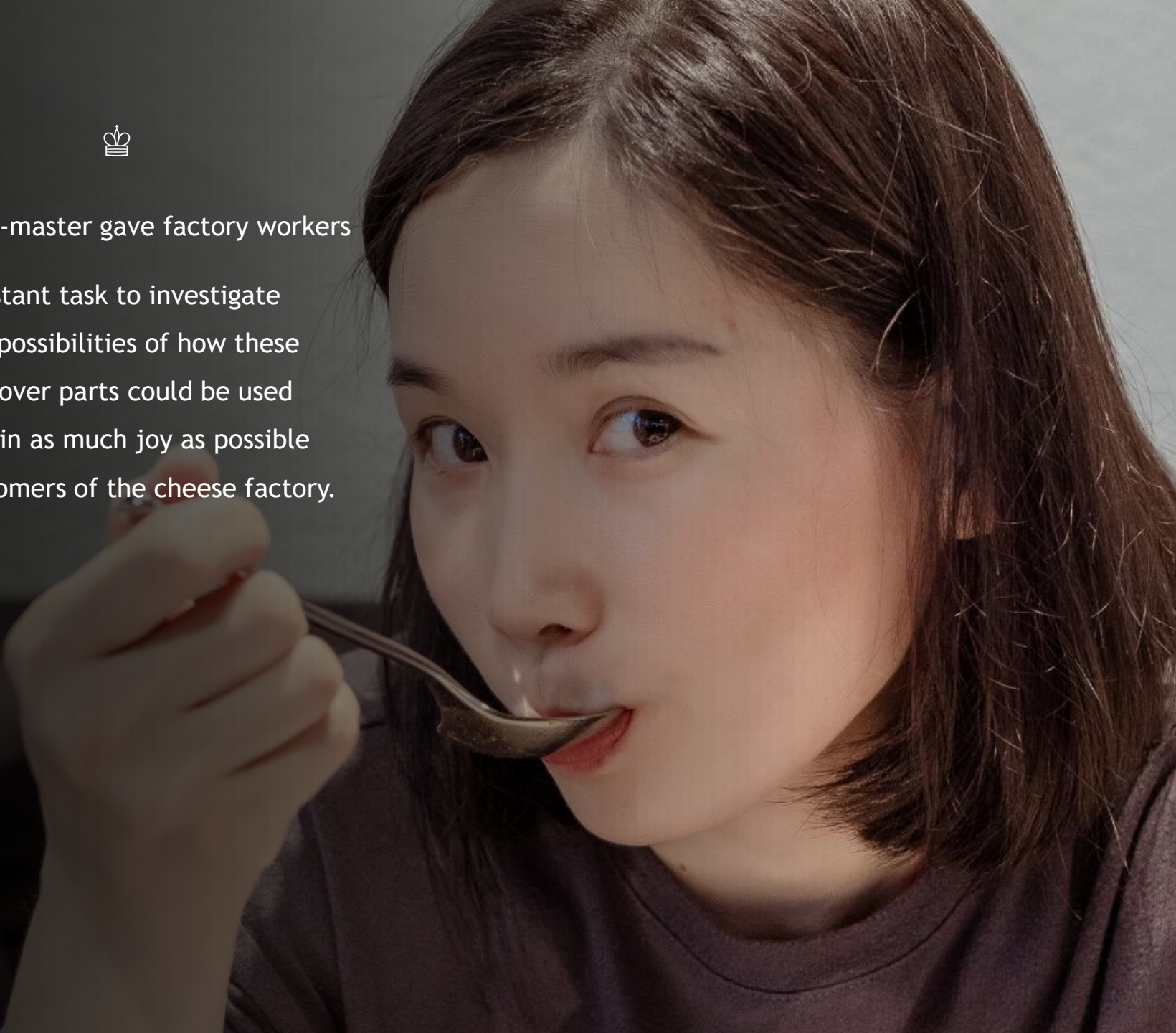
Cheese-master stated strongly to workers that garbage bin will never be the place to raw materials, instead we should feed animals with the leftover parts or produce energy to cheese factory but throwing resources away is unforgivable.





Cheese-master gave factory workers

instant task to investigate
the possibilities of how these
leftover parts could be used
to gain as much joy as possible
to customers of the cheese factory.





Immediately after, Cheese-Master dug out of his pocket a small notebook and wrote down the following: "From now on, all the new products in a cheese factory will be developed so that the raw materials are used very wisely and effectively."





Months passed and the factory workers did close co-operation with product development engineers and business professionals to find best usage for the leftover parts.

Finally product ideas were ready to represent.





Development group sat down to Cheese-master's corner office and started to introduce their product ideas.

Cheese-master cringed in joy when he saw all the ideas workers had developed.

It was a long road from wasting resources to new and shiny profitable product ideas.





Before introducing the products
to Cheese-master,
development team walkthrough
the product development process.
It started by observing competitive
environment of the vege-industry
and customers' shopping behavior.



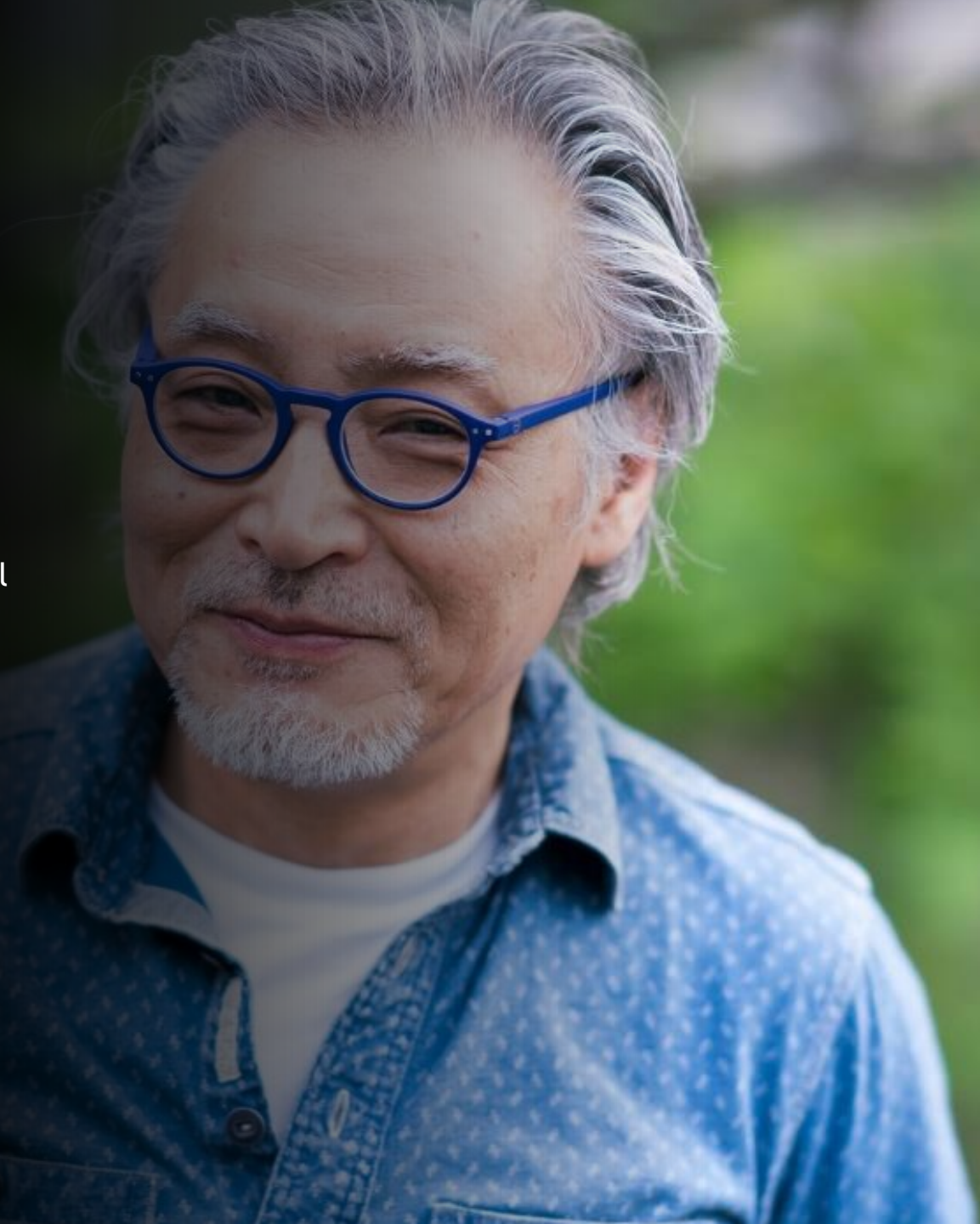


Team was trying to find

temperate competitive plateau,
in which competition is milder
and profits are stronger
and consistent.

Grey bearded business professional
explained

that in wanted market situation
there should be loyal customers
with strong willingness to pay
for our quality products.





Team discovered changes in the customers' values towards the sustainable shopping, in which vegan-product and ecological packaging materials was in key role nevertheless customers were also willing to pay more out of these value-based products.





From the new vegan-products, consumers probably expect sensory impressions comparable to those of typical cheeses. Therefore, the developed products should imitate the cheeses that are already on the trading shelves.

Last, product development group sifted all of these ground rules to their product development and as an outcome finished product ideas, which were difficult to imitate by competitors but hard to resist by customers.



Product development team had divided new products into three categories.

A-category included products, which would be sold and produced in favorable cost with low level product development and marketing, for instance in grated form as a pizza toppings or bits to salad.



C-category products

could be even sold with small loss
since it would still produce
small cash flow to company,
prevent raw-material waste
and offer customers
cheap cheese alternative.





A-category products would be packed
to simple bags
made out of a single type of plastic
material.

Brand labels would be clued as a small
label-sticker
on the side of the product packaging.

Packaging engineer emphasized
that in every category,
the package plays an important role in
diminishing the food waste.





B-category included

more developed and branded vege-products.

These products imitated
traditional cheese taste and textures
for instance mozzarella, parmesan
and cheddar flavours.

These products were aimed for customers
who wanted vegetable-based alternative
to traditional cheese
but who didn't want to give up
the taste and possibilities
of the traditional cheese.





B-category products would be packed

to materials made by bio-based plastic.

Visual look would express

the strong promise

of the ecological and fresh product.

B-products would be certainly

more expensive

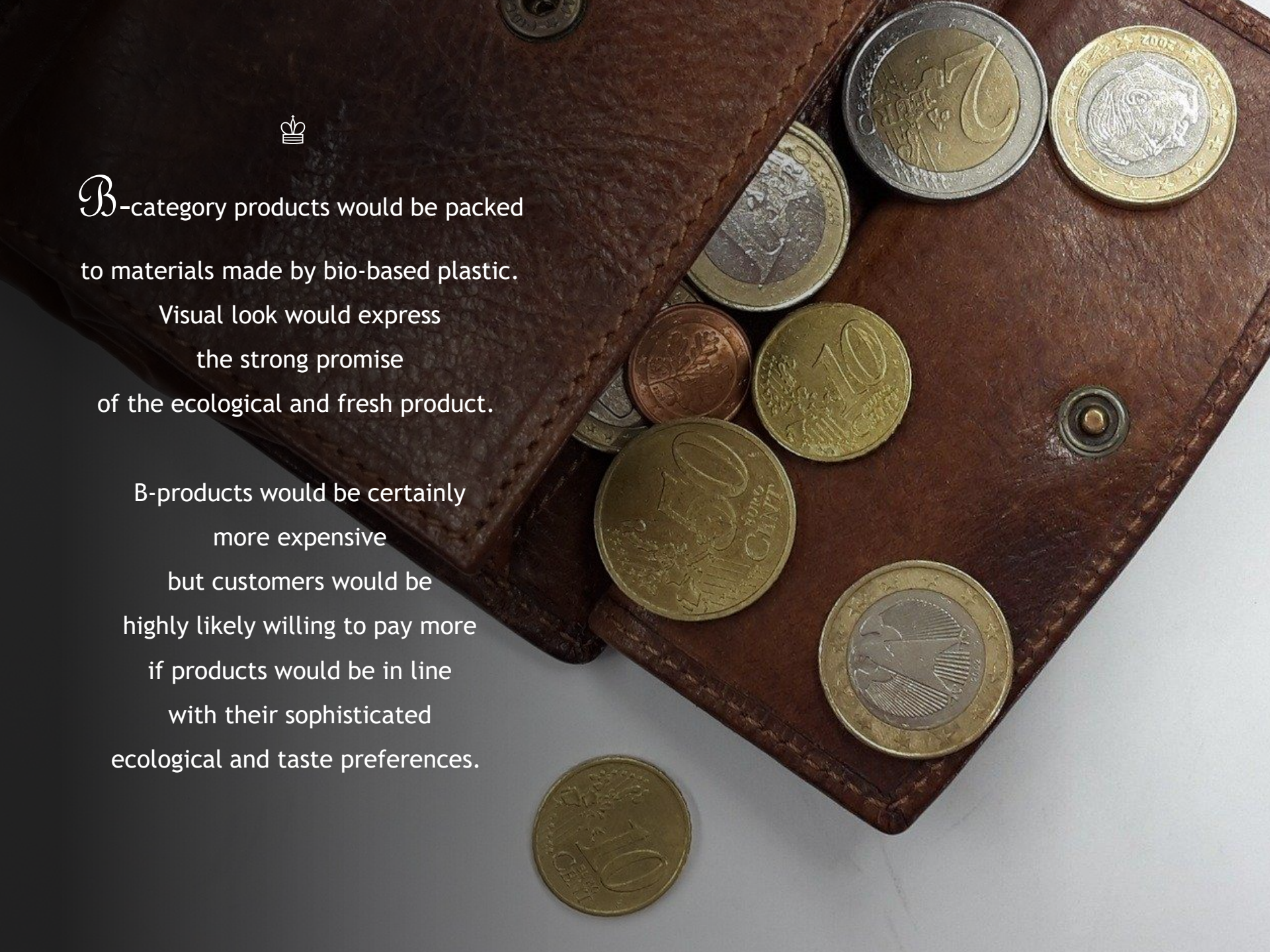
but customers would be

highly likely willing to pay more

if products would be in line

with their sophisticated

ecological and taste preferences.





Cheese-master understood right away
this unique possibility
to answer to these demanding needs
that were not being able to fulfill
with traditional cheese products.





C-category products

surprised Cheese-master instantly.

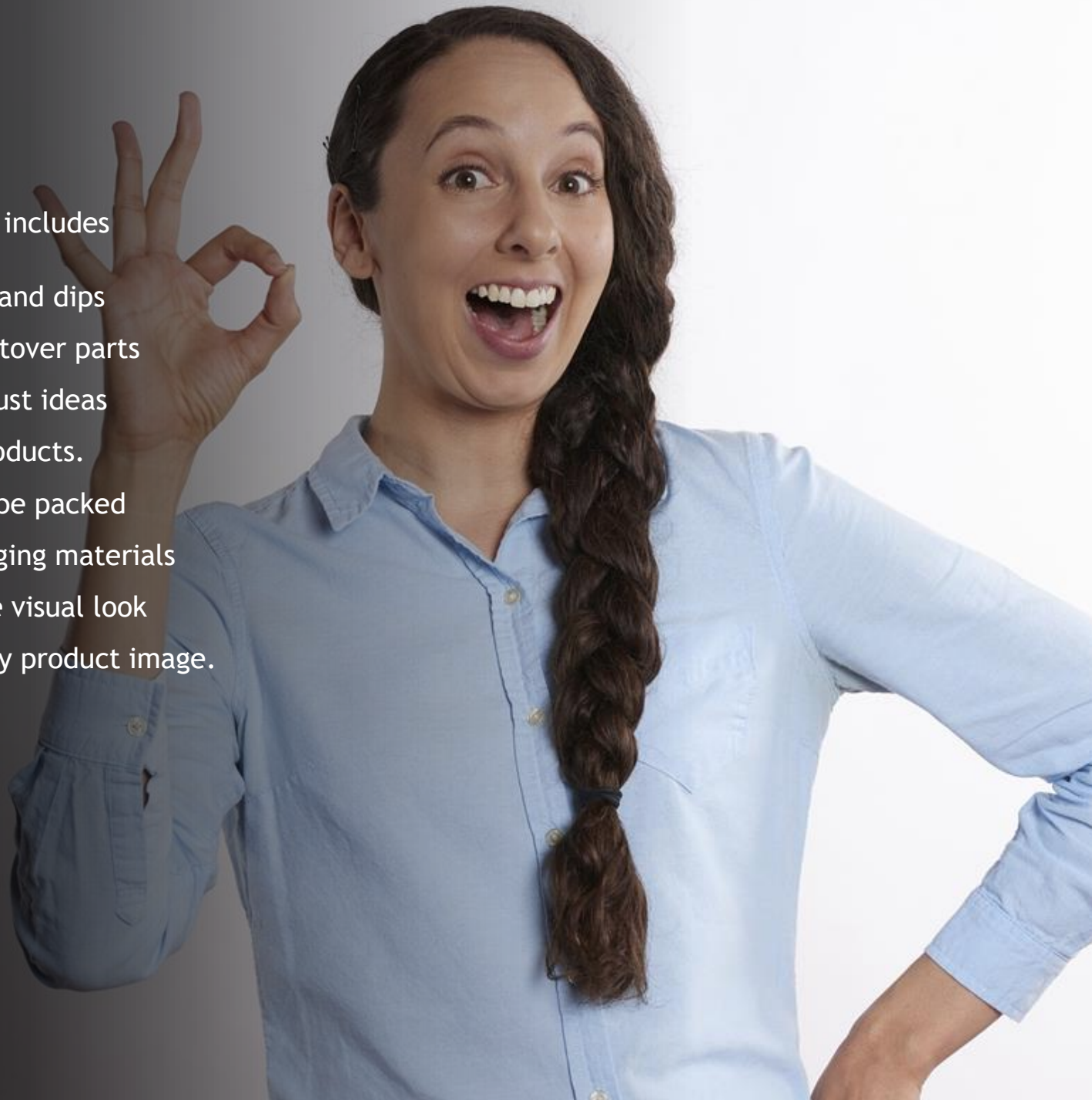
C-products were various category of snacks made out of leftover parts. Leftover parts had baked into cookies, dried to snacks balls and chips and fried to snack bars.



Also c-category includes

ideas of spreads and dips
made out of the leftover parts
but these were just ideas
not finished products.

C-products would be packed
with recyclable packaging materials
which would include visual look
that enhances high quality product image.





C-category highlights the fact that leftover parts truly bends to huge variety of different products.

Snack markets were something Cheese-master had wanted to participate for a long time.

Snack markets were lucrative market to participate since its strong growth and also profits per kilogram were a lot higher than in traditional cheese markets.

AMOUNT
\$0.87

24-22
1230

Handwritten signature: Mrs. Kashmiri

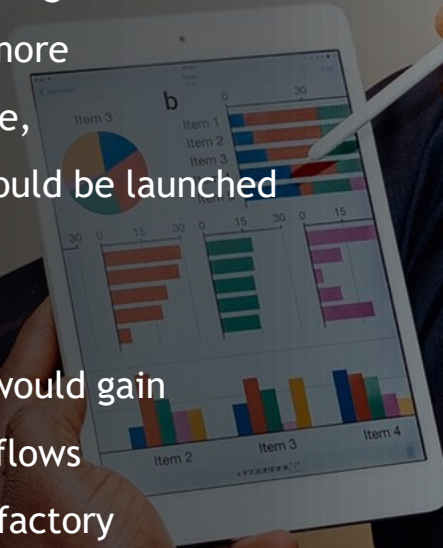


Production manager suddenly proposed
that cheese-factory
could do a first stage co-operation
with cookie-factory close by.
Actually co-operation was something
Cheese-master had wanted to do
for a long time
since cookie-factory is ran by
his close college-friend.



Cheese-master was jumping around in his office with the pure excitement. Leftover parts was not going to threat as a waste anymore but even more, completely new products would be launched from them.

These new products would gain additional cash-flows and make cheese-factory even more sustainable business.

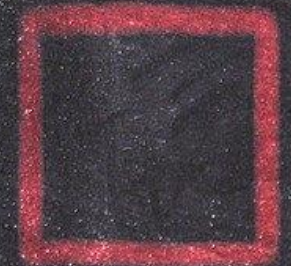
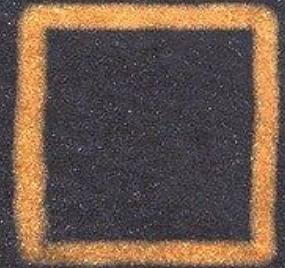




Cheese-master considered that

it is crucial to know the time period until which the leftover parts retain their high quality properties including food safety.

Thus, the storage stability of the fatty-rich left-over parts will be examined by the factory's quality control laboratory. High level of hygiene in a manufacturing area promises good regarding to product's shelf life.





Cheese-master had earlier

tried to solve problems individually

but he now discovered

that better results will be gained

if all the factory workers

was cooperatively participating to problem solving.

If engineers are solving problems

on their own

it might be that the product ideas

will be too technically orientated,

on the other hand

leaving business professionals alone

then the ideas might be too optimistic and not

taking technical aspects into consideration.

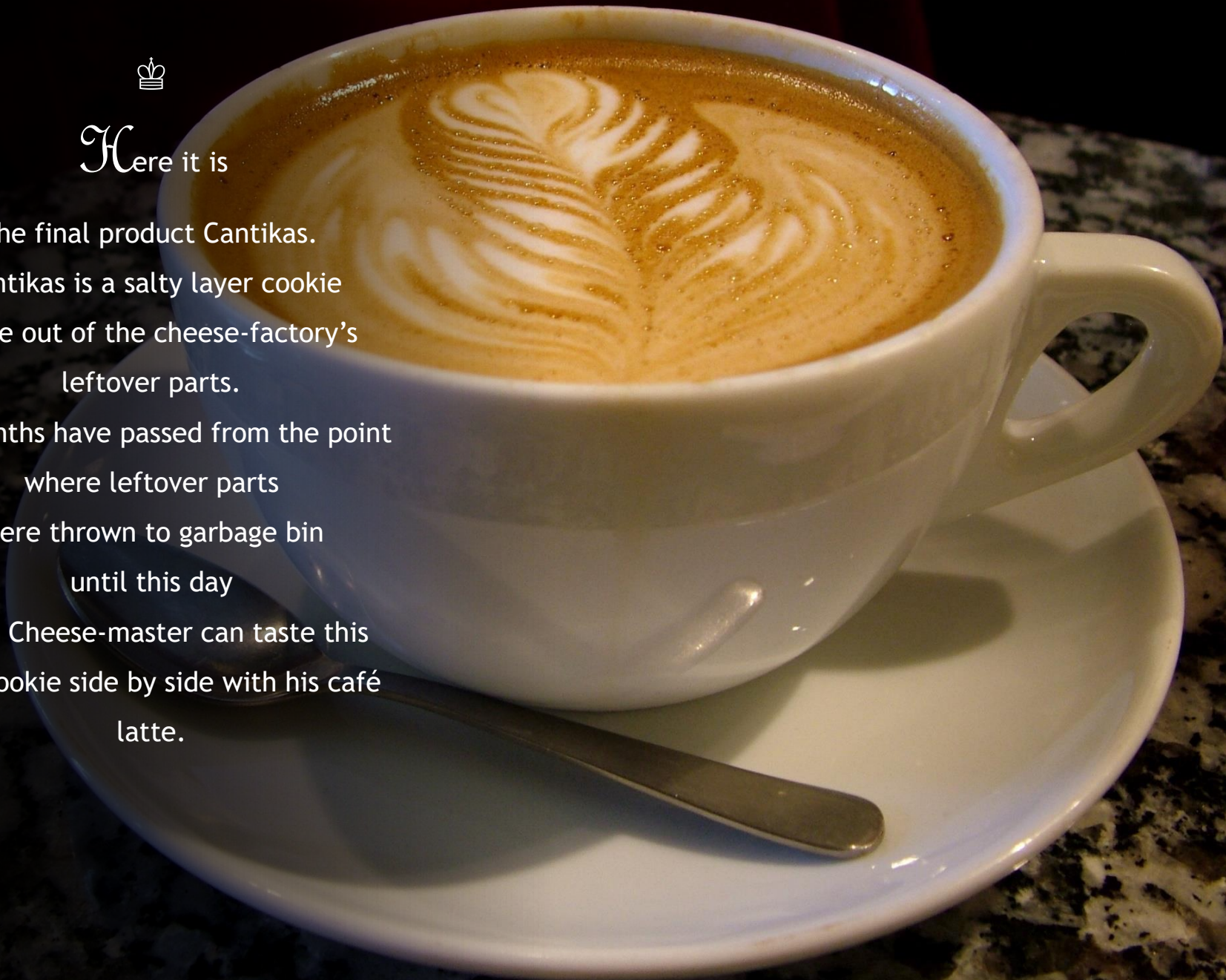


Here it is

the final product Cantikas.

Cantikas is a salty layer cookie
made out of the cheese-factory's
leftover parts.

Six months have passed from the point
where leftover parts
were thrown to garbage bin
until this day
when Cheese-master can taste this
new cookie side by side with his café
latte.





Even though the endless amount of work
has been put to this project,
this is just a beginning
of the new development orientated
way to approach
the sustainable business.

And it tastes good.

The end.



We would like to thank all of the bio and food technology & competitive intelligence students of the Metropolia Applied University, who participated by creating content for this Story!

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