

CET310 Software Enterprise

Week 3

Innovation

Innovate - Make changes in something established, especially by introducing new methods, ideas, or products - Oxford English Dictionary



Product Development

Products never stay static - manufacturers are always seeking to change them.

Why

Customers can change their minds about the value of a product.

How

Customers can change their minds about the value of a product.

Sustainability

What is Sustainability

"Is the management and coordination of environmental, social and financial demands and concerns to ensure responsible, ethical and ongoing success."

<http://whatisthebest.com/definition/business-sustainability>

It is a new way of accounting - not just the bottom line but with a focus on people and the environment.

These can represent natural resources that businesses such as fisheries, farming and forestry consume but sustainability can also represent the ability of a business to repay its debts while still maintaining a viable business.

"Corporate sustainability can accordingly be defined as meeting the needs of a firm's indirect and direct stakeholders (such as shareholders, employees, clients, pressure groups, communities etc.), without compromising the needs of future stakeholders as well."



Activities

Innovation

Innovation is the process of developing new products, services, or processes.

Agile

Agile is a methodology for developing software products.

Scrum

Scrum is a framework for managing and completing complex projects.

CET310 Software Enterprise Week 3

Innovation

Innovate - Make changes in something established, especially by introducing new methods, ideas, or products - Oxford English Dictionary



Product Development

Products never stay static - manufacturers are always seeking to change them.



Sustainability

What is Sustainability

"is the management and coordination of environmental, social and financial demands and concerns to ensure responsible, ethical and ongoing success."

<http://whatis.techtarget.com/definition/business-sustainability>

It is a new way of accounting - not just the bottom line but with a focus on people and the environment.

These can represent natural resources that businesses such as fisheries, farming and forestry consume but sustainability can also represent the ability of a business to repay it's debts while still maintaining a viable business.

"Corporate sustainability can accordingly be defined as meeting the needs of a firm's indirect and direct stakeholders (such as shareholders, employees, clients, pressure groups, communities etc.), without compromising the needs of future stakeholders as well."



Activities



Innovation

Innovate - Make changes in something established, especially by introducing new methods, ideas, or products - Oxford English Dictionary

Innovation and the entrepreneur

The entrepreneur - "sees **new ways** of ordering and managing resources" (Curran 1990) These can be:

- The introduction of a new good - one which consumers are not familiar with.
 - The introduction of a new method of production
 - The opening of a new market
 - The conquest of a new source of supply of raw materials or half manufactured goods
 - The carrying out of a new organisation of any industry e.g. creating a monopoly
- (Schumpeter J A 1934)

Innovation and disruption

Emerging or disruptive technologies/goods that tend to destabilise the status quo

Uber - this means of calling a taxi threatens to put existing licensed taxi drivers out of business also because of it's business model of charging more at peak times it can cause congestion!

The Stirrup - this was invented by the Chinese in the 5th Century A.D. - allows a rider to be much more stable in the saddle - allows traveling over longer distances and knights could now fight on horseback rather than dismounting first

Innovation and the environment

Innovation can have consequences for the environment

The discovery of gold in the Amazon - gold miners use mercury to concentrate the gold this can pollute and destroy the forest.

Bottled water uses plastic bottles which can pollute the sea and use valuable resources

Wind farms reduce greenhouse gas emissions

The advent of Google - google's massive data centres contribute to global warming by using a lot of electricity

Edinburgh Napier University
www.napier.ac.uk

Innovation and Ethics

http://www.corporate-ethics.org/pdf/Innovation_ethics.pdf

Innovators need to deal with the fallout that can disrupt lives

Uber - putting taxi drivers welfare at risk

Powdered milk - it's sales in Africa are putting babies lives at risk

Social media allows bullying and intimidation

Innovation and the entrepreneur

The entrepreneur - "sees **new ways** of ordering and managing resources" (Curran 1990) These can be:

The introduction of a new good - one which consumers are not familiar with.

The introduction of a new method of production

The opening of a new market

The conquest of a new source of supply of raw materials or half manufactured goods

The carrying out of a new organisation of any industry e.g creating a monopoly

(Schumpeter J A 1934)

Innovation and disruption

Emerging or disruptive technologies/goods that tend to destabilise the status quo

Uber - this means of calling a taxi threatens to put existing licensed taxi drivers out of business also because of its business model of charging more at peak times it can cause congestion!

The Stirrup - this was invented by the Chinese in the 5th Century A.D. - allows a rider to be much more stable in the saddle - allows traveling over longer distances and knights could now fight on horseback rather than dismounting first

Innovation and the environment

Innovation can have consequences
for the environment

The discovery of gold in the Amazon - gold miners use mercury to concentrate the gold this can pollute and destroy the forest.

Bottled water uses plastic bottles which can pollute the sea and use valuable resources

Wind farms reduce greenhouse gas emissions

The advent of Google - google's massive data centres contribute to global warming by using a lot of electricity

<http://www.theguardian.com/environment/2015/sep/25/server-data-centre-emissions-air-travel-web-google-facebook-greenhouse-gas>

Innovation and Ethics

http://www.corporate-ethics.org/pdf/innovation_ethics.pdf

Innovators need to deal with the fallout that can disrupt lives

Uber - putting taxi drivers welfare at risk

Powdered milk - it's sales in Africa are putting babies lives at risk

Social media allows bullying and intimidation

Product Development

Products never stay static - manufacturers are always seeking to change them.

Why

Businesses can steal a march on the competition

They can appeal to consumers

They can create revived markets when old ones are saturated (the 'Must Have' device)

Ultimately it's about generating revenue

How

Customer focus - Identify a need and come up with a solution. E.g. I can never find my keys - develop an rfid tag to find them

Technology focus - new technology offers new opportunities
new sensors in phones so you can monitor vital signs.

Revisit old technologies - memory foam in saddles gives a much better fit and changes with the horses shape.

Brand Extension - extend an existing brand to include new products - capitalise on an existing recognisable brand - e.g. frozen snickers

You need to find synergy between your existing products and the new product - your new product should benefit from the existing brand name and the extension should be capable of generating sales

Why

Businesses can steal a march on the competition

They can appeal to consumers

They can create revived markets when old ones are saturated (the 'Must Have' device)

Ultimately it's about generating revenue

How

Customer focus - Identify a need and come up with a solution. E.g. I can never find my keys - develop an rfid tag to find them

Technology focus - new technology offers new opportunities
new sensors in phones so you can monitor vital signs.

Revisit old technologies - memory foam in saddles gives a much better fit and changes with the horses shape.

Brand Extension - extend an existing brand to include new products - capitalise on an existing recognisable brand - e.g. frozen snickers

You need to find synergy between your existing products and the new product - your new product should benefit from the existing brand name and the extension should be capable of generating sales

Sustainability

What is Sustainability

"is the management and coordination of environmental, social and financial demands and concerns to ensure responsible, ethical and ongoing success."

<http://whatis.techtarget.com/definition/business-sustainability>

It is a new way of accounting - not just the bottom line but with a focus on people and the environment

These can represent natural resources that businesses such as fisheries, farming and forestry consume but sustainability can also represent the ability of a business to repay it's debts while still maintaining a viable business.

"corporate sustainability can accordingly be defined as meeting the needs of a firm's indirect and direct stakeholders (such as shareholders, employees, clients, pressure groups, communities etc.), without compromising the needs of future stakeholders as well."

References

Sybilik, T. (2008). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 17(2), 1-11

<http://www.thefreelibrary.com/What+is+business+sustainability+the+new+bottom+line+for+businesses>

<http://www.sustainabilityjournal.org/sustainabilityjournal/article.aspx?articleid=1001>

References

Dyllick, T., Hockerts, K. 2002. Beyond the business case for corporate sustainability. Business Strategy and the Environment. 11(2). p 131

<http://www.theguardian.com/sustainable-business/blog/ten-tips-smes-sustainability-strategies>

http://www.scu.edu/ethics/practicing/focusareas/environmental_ethics/lesson4.html

Activities

Innovation

Try and identify innovative products in each of these categories - spend 10 minutes on each section - see presentation on Innovation

Disruptive technologies

The Environment

Ethical/moral concerns

Agile

Hold your weekly planning meeting
You should rotate the role of scrum master and have someone take notes of what is discussed.

You may elect a product owner if you wish - someone who feels ownership of the product
Review last weeks activity - where all the actions were completed?

Decide on the direction your enterprise will take for the next week
and decide what the team members will do in the next week.

Your meeting records should be submitted as supporting documentation (in mahara) for your portfolio

You should try and meet up at least once before next week's session

Micro Businesses

In your groups - examine your microbusiness
Spend 30 minutes and reflect on the impact of your business in terms of:

Environment

Ethical concerns

Disruption

How innovative it is

There will be a short group discussion

Innovation

Try and identify innovative products in each of these categories - spend 10 minutes on each section - see presentation on Innovation

Disruptive technologies

The Environment

Ethical/moral concerns

Micro Businesses

In your groups - examine your microbusiness
Spend 30 minutes and reflect on the impact of
your business in terms of:

Environment

Ethical concerns

Disruption

How innovative it is

There will be a short group discussion

Agile

Hold your weekly planning meeting
You should rotate the role of scrum master and have someone take notes of what is discussed.

You may elect a product owner if you wish - someone who feels ownership of the product

Review last weeks activity - where all the actions were completed?

Decide on the direction your enterprise will take for the next week
and decide what the team members will do in the next week.

Your meeting records should be submitted as supporting documentation (in mohara) for your portfolio

You should try and meet up at least once before next week's session