

*In- and outside the classroom:*

# Embedding **SDGs** into the curriculum & beyond



## **Curriculum – teaching (ML)**

- ENTE3534 Social Innovation and Entrepreneurship      final yr UG
- ENTE5000 Business Creation and Innovation              PG
- LCBS5053 Social Entrepreneurship and Innovation      Exec MBA

## **Co-curriculum / extra-curricular activities (Lead)**

- EnActUs DMU      - worldwide student society
  - Map the System - annual global competition (Oxford)
- both = cross-faculty*

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Beyond the classroom

# Map the System

Annual global competition

*run by Oxford University  
in connection with unis worldwide*



*In- and outside the classroom:*

## Map the System

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- Global competition that challenges participants to think differently about social and environmental change.
- Tackling global challenges starts with **understanding a problem** and **its wider context**, rather than jumping straight into a business plan or an idea for a quick fix.
- **Select a social or environmental issue** and to
  - explore, probe, and research all the **connecting elements and factors** around it,
  - **map** out the landscape of current solutions and
  - identify missing **opportunities** for **positive change**.

Find out more: <http://mapthesystem.sbs.ox.ac.uk/>



*In- and outside the classroom:*

## Map the System

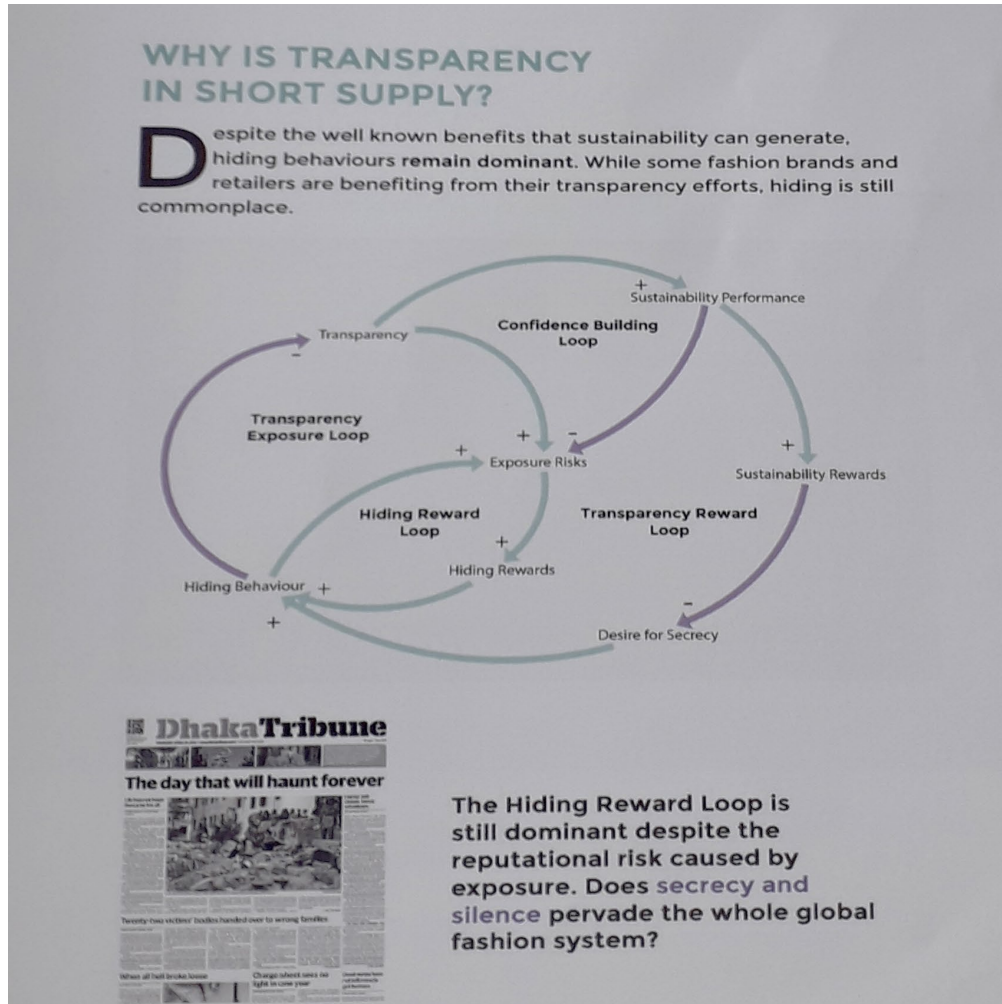
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- Student-led groups of maximum five
- Submission: one **map**, one **essay** (3,000 words), one **bibliography**
- Timeline: from October until June
- Stages:
  1. Registration of teams -> by end of January
  2. Submission of documents -> by early April
  3. Internal competition (@DMU) -> in April/early May
  4. Finals @ Oxford University -> mid June
- Info and support:
  - Detailed guidance will be sent to all participants
  - Find out more: <http://mapthesystem.sbs.ox.ac.uk/>
  - Contact: [regina.frank@dmu.ac.uk](mailto:regina.frank@dmu.ac.uk) (BAL) and skype: regina.frank



*In- and outside the classroom:*

# Map the System



**DMU finalist:** Team 'Honest Fashion'

**Topic:** (Lack of) Transparency in the Global Fashion System

**Synopsis:**

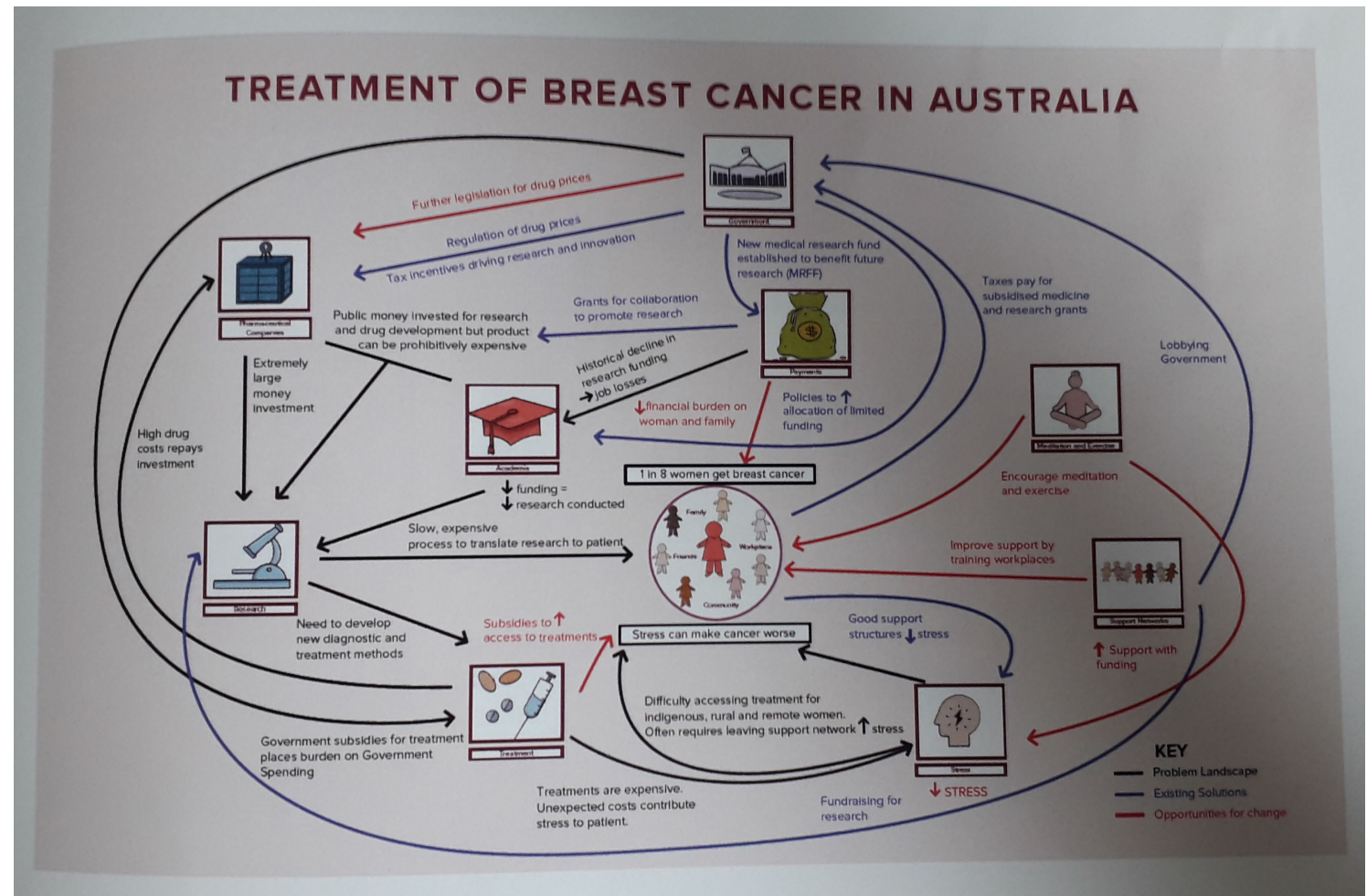
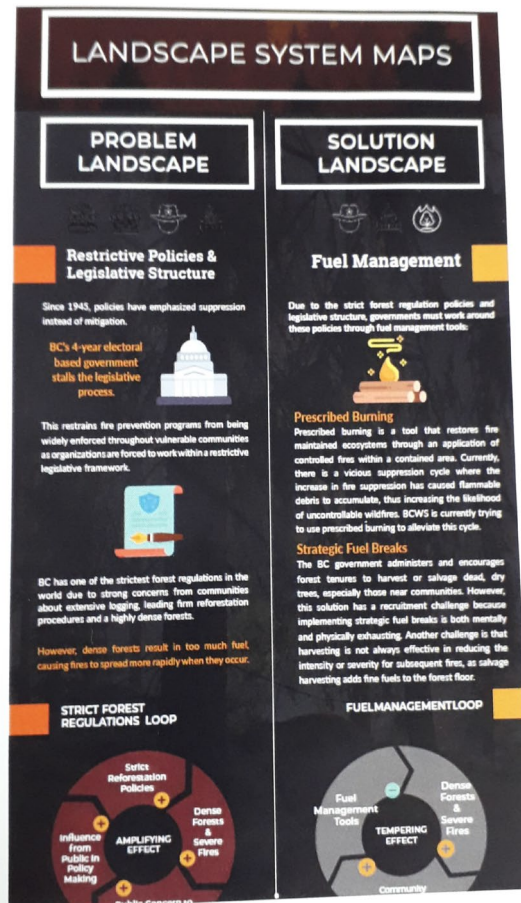
*This team set out to better understand the sustainability challenges in the global fashion industry, and soon discovered through their research that transparency was in short supply in the fashion system.*

*Their therefore investigated the perils and potential of transparency to better leverage positive changes – social, environmental and economic – in the fashion system and along the entire value chain.*

# In- and outside the classroom:

# Map the System

## Examples of submissions

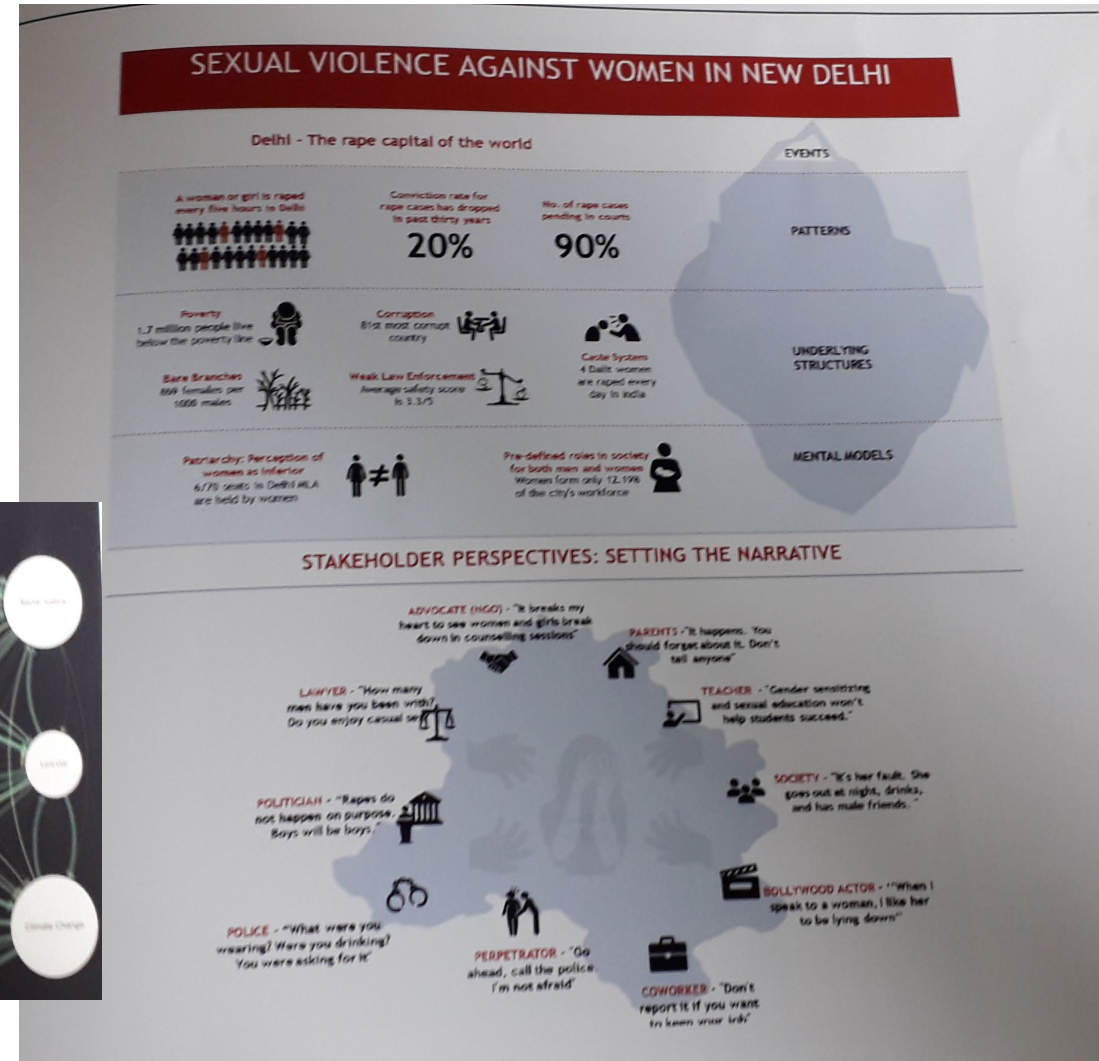
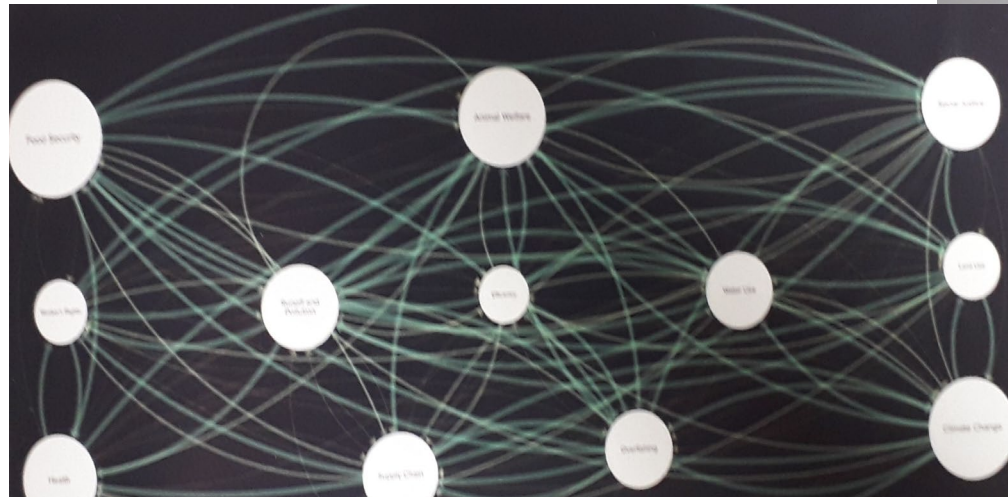




*In- and outside the classroom:*

# Map the System

Examples of submissions  
(2019)





# MEXICO'S waste CRISIS.

Team Planet Soldiers

Mexico is the country that produces the highest quantity of garbage per capita in Latin America.

Mexico..... **1.16** 0.74 .....The world

Kilograms per day.  
(World Bank, 2018)

Mexico has a huge challenge related to the exponential growth of solid waste, its bad administration and the consequences that come with them.

## PROBLEM

## Solid waste:

Garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded materials including solid, liquid, semi-solid, or contained gaseous material, resulting from industrial, commercial, mining, and agricultural operations, and from community activities. (US EPA, 2018)

## BACKGROUND

Individuals and the government have to make decisions about consumption and management that affect the population health, productivity, and cleanliness of communities. Bad administration of waste is lead to:

Transmissions of diseases

Unhealthy water causes **+3,000** premature annual DEATHS in Mexico.  
(World Bank)

Air pollution KILLS **+33,000** Mexicans every year  
(World Bank, 2018)

Antireal harm and general environmental pollution

(Caused by the burning of solid waste, it penetrates deep in the lungs)

Lack of infrastructure  
Mexico has **LESS** than 300 sanitary landfills, 87% of final disposal sites are open dumpsites that pollute air, ground and water.

Mexico has between **20-36** PM2.5 particles per cubic meter  
**10** is the limit according to World Health Organization

## WHAT KEEPS THIS PROBLEM ALIVE?

Lack of education & culture.  
**42.3%** of the people that doesn't separate their waste comment that they don't care about the topic, doesn't know the benefits from it and doesn't know how to separate it.

Weak compliance of the law  
There is an environmental law which say that people is obligated to separate their waste, nevertheless, **57%** is not doing it. The government is not ensuring the compliance of the law.

Population growth  
Mexico City is the fifth largest city in the world, by 2035 is estimated that the population will increase in more than **24** million people.

## CHALLENGES OF STAKEHOLDERS

## STAKEHOLDERS

Massive production.

Small effort to ensuring compliance with the law.

Numerous failed programs to encourage people to separate their garbage.

Lack of interaction with Trading Points.

Waste pickers are socially marginalized and work under poor conditions.

Haven't been formalized.

High transportation cost.

No governmental support.

Open dumpsites produce one-fifth of global anthropogenic methane emissions.

Lack of controlled dumpsites.

All recyclable materials should end up in recyclers, but only **11%** of all garbage generated is recycled.

Campanas

They offer the products, these programs. They are responsible for the order exchanging that perpetuate new plastic production.

Government

Responsible for creating policies and planning. Produces solid waste.

Population

It's conformed by people.

Informal sector

Trading Points

Final disposal Sites

Recyclers

Companies that

Places where the cycle of solid waste that is not recycled ends. Generated income

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# A STORY OF MISSING AND MURDERED INDIGENOUS WOMEN IN CANADA POWER AND INFLUENCE

## Underlying Ideologies

## ESSENTIAL STAKEHOLDERS

## LEGISLATION

## OTHER STAKEHOLDERS

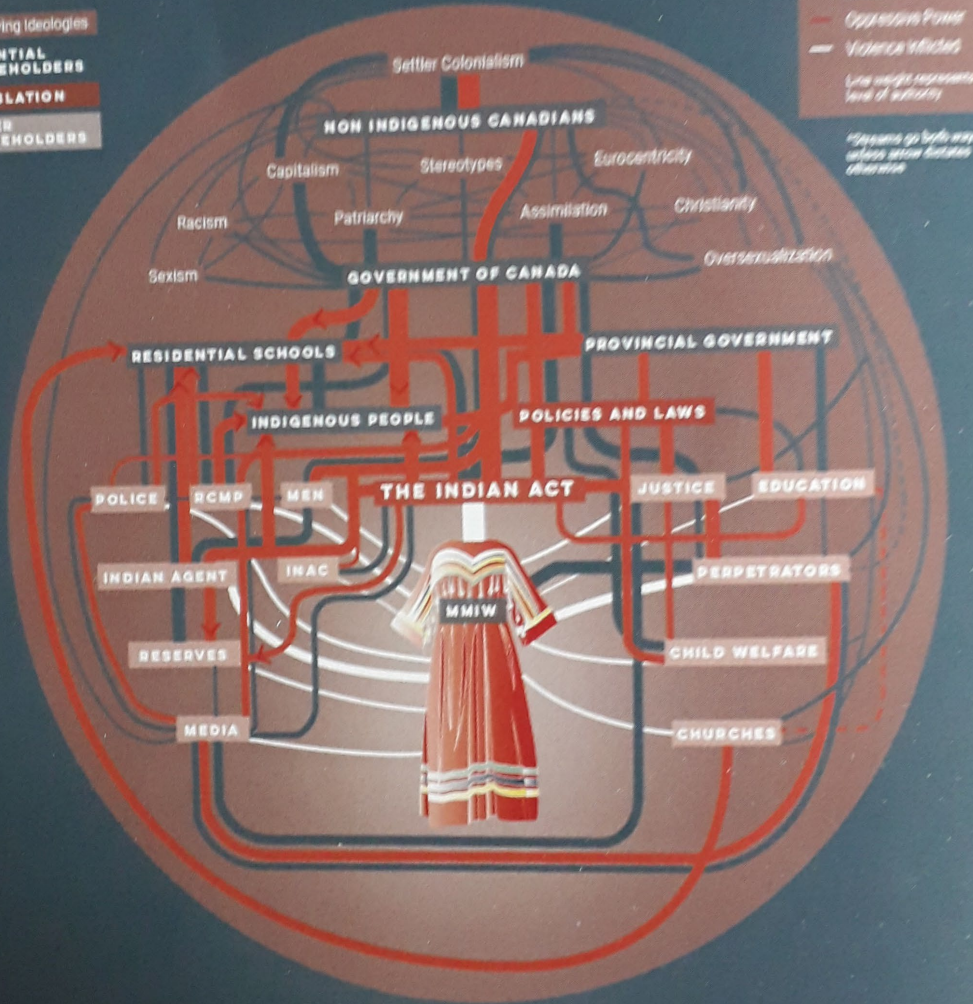
## Influence

## Oppressive Power

## Violence Inflicted

## Line weight represents level of authority

## \*Arrows go both ways unless arrow dictates otherwise







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## Map the System

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= Example of **transformational** learning

Learning outcomes:

- Knowledge and understanding...
- Subject-related skills and competencies...
- Transferable skills...

+ learn cross-faculty

+ network with inspirational colleagues from across the world.

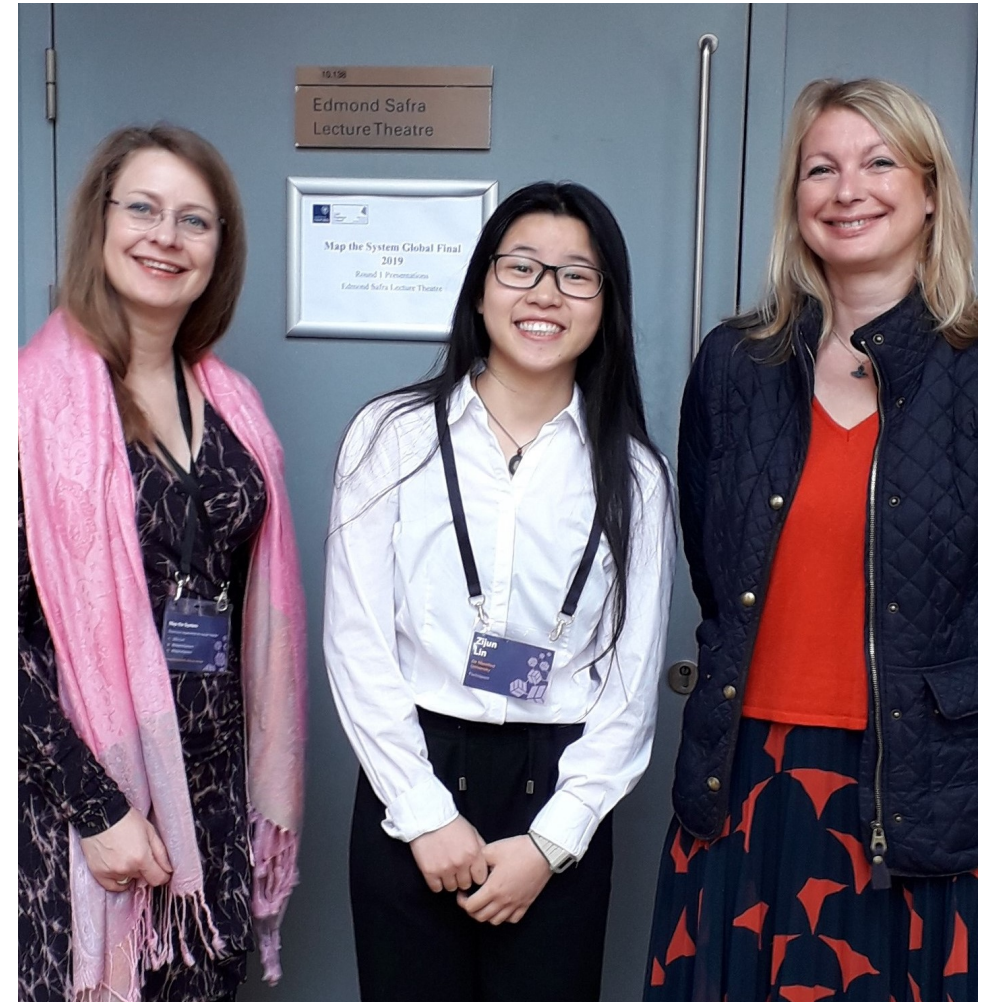


# DMU at the Oxford Finals - Map the System

At Oxford University, Said Business School, June 2019



Over the course of three days in Oxford, DMU managed to get through to the **final round**, proudly presenting amongst the final six alongside teams from Yale, Simon Fraser, Oxford, Wisconsin and the Amani Institute (and 'beating' Harvard University along the way)...



Dr Regina Frank  
SL in Entrepreneurship

Ms. Zijun Lin  
final yr student

Dr Nicola Thomas  
AP in Marketing



# APPENDIX

to Map the System Presentation

Tuesday 7 May 2019, 3 – 4pm in The Innovation Centre

# Map the System

## Global competition

Come and watch our final 2 DMU teams competing to represent De Montfort University at the global finals in Oxford.



## *Other topics presented in Oxford (2019):* **Map the System**

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- Mexico's waste crisis: our waste = our problem
- Effects of incarceration on children and families
- Street children in Dominican Republic
- Public education in South Africa
- 'Honour' killings in India
- Missing and murdered indigenous women in Canada
- Aphasia problem (UK)
- Breast-feeding in Kenya (urban/rural/refugee camps)
- Indigenous homelessness in Toronto
- Industrial animal agriculture in the US
- Food deserts in low-income communities.
- Deforestation in Brazil
- Decreased use of chacras indigenous agroforestry method) in the Ecuadorian Amazon.





# *Misc info on process of* **Map the System**

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- As soon as the competition opens for next year (in autumn), DMU signs up (as institution) and pays participation fee (£2,000).
- Budget: PVC (Enterprise), EBR Enterprise Directorate / SaAS Employability.
- Teams register (per team, on Map the System website), before end of January.
- Group composition:
  - Graduates are eligible but at least one student must be currently registered;
  - Staff can mentor but should not lead nor do most of the work  
(as staff got their own conferences where they can showcase their work amongst peers)
- Who goes to Oxford:
  - Each HEI holds an internal competition in Spring.
  - The winning team of each competition is invited to Oxford and compete there in June.





## Map the System The Global Final 2019

*News: "DMU reaches final six...  
and... beats Harvard..."*

### Item for DMU BAL Faculty Newsletter, July 2019

DMU has successfully participated in the Global Finals of the [Map the System](#) competition, held at Oxford University, and reached the final six. Unlike other Business Plan competitions and lean startup events, [Map the System](#) is a global competition that challenges students to think differently about social and environmental change by focusing on the interconnected complexities of the grand challenges of this world.

Making sure that DMU participates on this global stage, Dr Regina Frank (BAL/Entrepreneurship) took the DMU finalists – a team mentored by Dr Nicola Thomas (BAL/Marketing) – to present at Saïd Business School. Ms Zijun Lin (DMU BA International Business final yr student) enthusiastically showcased 'Honest Fashion' in three rounds of presentations, going through to the [#mapthesystem](#) finals, and 'beating' fierce competition from 'Harvard' and Yale along the way.

Join Regina with our cross-faculty 'ESD Forum' in John Whitehead 1.06, this week on Thursday 11 June 2019 between 11.15 and 12.30 to find out how you can integrate 'sustainable development' and UN SDGs into your teaching and research. For more info on how you may participate in next year's [Map the System](#) competition, email Regina via [regina.frank@dmu.ac.uk](mailto:regina.frank@dmu.ac.uk).

Thank you, Professor Dana Brown ((former) Dean of BAL and PVC (Enterprise), Mrs Helen Donnellan (Head of EBR Directorate) and Simon Baines (ex-Innovation Centre) for your support to this competition, and thank you to all participants from all faculties for your enthusiastic engagement with this competition.

See you (again) next year?