Sustainability of Technology

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Nathan Harwick

• Personal Life
  o I want a successful, happy life and eventually have a family of my own in a small town setting.

• Social Life
  o At home I live with my parents and my sister
  o Currently living in Phi Sigma Kappa which allows me to be very social and I like to meet a variety of people.

• Material Life
  o Need music everyday but other than that I'm not concerned with new technology

• Occupation
  o I want to have a successful career that I enjoy within the agricultural field.

• Hobbies
  o I plan on continuing to play sports, hunt, and fish in my free time.

• Politics
  o Enjoy paying attention to current events
  o Libertarian
• Personally:
  o Have a good career that I also enjoy
  o Be able to look in the mirror and like what I see
• Socially:
  o A small circle of close friends
  o Larger group of people who respect me
• Materially (is that a word?):
  o All the food I could ever want
  o Enough disposable income to be able to see the world
• Occupationally:
  o Right now, NASA
  o Rethinking life strategy
• Recreationally:
  o Music
• Politically:
  o Probably almost nonexistent
  o I'll vote and be a responsible taxpayer
Raquel Alvarez

- Personal
  - I am from Spain and I came to the US a year ago.
  - I expect to improve my English and meet a lot of people.
  - I am also interested in Nuclear Medicine and that is why I came here.

- Social Life
  - So far I am making new friends and going through the whole american college experience.
  - I miss a lot my friends from Spain.

- Material Life
  - I like going shopping.

- Work/Occupation
  - I never had a job, but I would like to have one this summer (maybe an internship).
  - I like volunteering and planning events and parties.

- Recreation
  - I love playing tennis and skiing (even though I am not very good at skiing because I don't get to do it very often, I love it).

- Political Life
  - I have no preference, I am not into politics.
Chris Behr

• Personal Life
  o from Chicago, IL (pretty rare for around here)
  o Try to live by christian values
  o large family

• Social Life
  o very social person
  o greet everyone I see

• Material Life
  o want every new gadget available
    ▪ Even though funds to not allow for such
  o live in one bedroom apartment with 1 roommate

• Occupation
  o Currently unemployed
  o worked for an Insurance company over the summer
  o and previously for a catering company

• Recreation
  o was in ROTC however am now going to enlist in the USAF
  o baseball since 2nd grade
  o sports in general

• Politics
  o Conservative although I do not pay attention too much
Unsustainable Technologies: Airplanes.

- Airplanes are one of the most important forms of transportation nowadays.
- According to Boeing there are almost 50,000 departures every day, and this is excluding Military aircrafts.
- Probably the majority of you took an airplane at least once in your life.
- There are a lot of advantages of using an airplane, and probably the main one is the time that it takes to travel.

- Societies are getting more used to the service airplanes can offer as time goes.
- Airplanes use fossil fuels in order to work, and that makes them unsustainable.
- Fossil fuels are not going to be available forever.
- Soon solutions to this problem will have to be made, because living without the use of an airplane is not an option anymore.
- This situation is causing engineers to think about other alternatives such as using Biofuels.
## Airplane Travel

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>speed of travel</td>
<td>noise/air pollution</td>
</tr>
<tr>
<td>safety</td>
<td>lose the enjoyment of the ride, focused only on getting from A to B</td>
</tr>
<tr>
<td>one of the safest forms of travel</td>
<td>cost compared to many other forms of travel</td>
</tr>
<tr>
<td>cost compared to driving a car is usually less</td>
<td>If something goes wrong almost 0% chance of survival</td>
</tr>
<tr>
<td>great for the economy.</td>
<td>crammed into tiny seats</td>
</tr>
<tr>
<td>almost 7.5% of world GDP</td>
<td>poor customer service (generally)</td>
</tr>
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<td></td>
<td>lost luggage</td>
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</tbody>
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Jet Fuel

• At the moment, gasoline-derivative fuel is used to propel airplanes
• The air travel industry, a rapidly growing field, currently produces 11% of the passenger transport sector's greenhouse gas emissions
• You can't run a plane on electricity (at least not in the foreseeable future)
• Therefore, we have to look for innovations in current modes of propulsion
• Synthetic Fuel
  o Biofuel
  o Algae looks promising as a future source of fuel; will produce only half the emissions of traditional fuel and drastically reduce the use of oil
Alternative Mode of Transportation

High speed trains have been emerging as an efficient mode of transportation in both Europe and Asia over the past two decades.

• Advantages:
  o Uses electricity to generate speed.
  o Takes up less land than cars or air travel when there's more passengers.
  o Creates jobs to build the infrastructure and boosts economy
  o No traffic
  o Cheaper to build than roadways or airplanes
  o Train stations take up less space
  o More environmentally friendly (lower energy consumption per passenger kilometer)
  o Much safer than flying

• Disadvantages
  o Electricity is produced by fossil fuels
  o The record Maximum Operation Speed is 217 mph in China (half the speed of a jetliner)
High Speed Trains
Works Cited

