Making Recycling a Habit

Market research on HKUST Student Perceptions and Habits Towards Recycling

Prepared by Alexandra Ho
August 27, 2014
POP QUIZ!

Do HKUST students recycle?
How many students recycle?
What do they recycle?
Why do they recycle?
What about those who do not recycle?
HKUST students are receptive to recycling; recycling habits on campus can be cultivated

95% of UG students are aware/familiar with recycling

Over 50% student recycle but not regularly

Paper is recycled most often, followed by plastics and metals

Likelihood to recycle is contingent on:

1. Belief that recycling makes a difference

2. Awareness of recycling facilities

3. Convenience

Focus on signage, bin locations and campaigns
Net Impact students can help HKUST achieve its goals

Net Impact HKUST MBA students can help HKUST achieve its goals

HKUST Sustainability Unit tasked to deliver a long-term sustainability vision

HKUST aspires to be World Class University

Net Impact is a community of more than 50,000 student and professional leaders creating positive social and environmental change in the workplace and the world.

The Net Impact chapter at HKUST was founded by full-time MBA students in 2012.

As future business leaders and active members of the HKUST community, we believe that strong environmental leadership and education of students is necessary for HKUST to achieve its aspiration to be a World Class institution.
An opportunity support HKUST sustainability goals while fulfilling course requirements

Market Research (MARK 5310)

Supervised by Prof. Ralf van der Lans

Project team:

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- Alexandra Ho
- Elita Yue
- Alex Wang
Data collection through exploratory and descriptive research

• Interviews with Sustainability Unit

• Focus groups with UG 1 & 2 students
  • May 5, 2014
  • Cantonese
  • 14 students, 5 males and 7 females

• Online survey
  • 668 responses
  • Majority UG1 & 2
  • 85% educated in HK
  • 50:50 gender split
  • Broad range of programs
Management issue is how to make HKUST students regular recyclers

Recycling is an important component of HKUST’s waste management efforts

Diverting recyclable materials from the trash stream reduces the total volume of trash sent to the landfill

Recycling is eco-friendly, good for the environment

HKUST is a World-Class Institution with a responsibility to prepare its students for a better future
Our goal was to understand why students do or do not recycle.
#1: AWARENESS

Students will recycle if they are aware and familiar with recycling
Most students know about recycling bins on campus....

Are you aware of recycling bins on campus?

- Yes: 81
- Unsure: 12
- No: 7

But 20% of students were either unsure or were not aware of recycling bins on campus!
The majority learn about recycling in primary and secondary school

Where did you learn about recycling?

- Pri or Sec school
- Media
- Family
- Friends
- HKUST
- Other
- Not familiar

90% of students were able to correctly blue, yellow and brown as the colours of recycling bins in HK.
#2: Convenience

Students will recycle if it is easy
The majority of respondents will recycle if they can find a bin nearby

If you had an empty drink can in your hand…

- Hold on to it until you find a recycling bin
- Throw it in the first trash can you see
- Look for a recycling bin and if you can't find one, throw it in the trash

51% of students could be regular recyclers if it was more convenient!
52% always or almost always recycle paper, compared to 31% for plastics and 23% for metals

12% never recycle paper, 20% never recycle plastic, and 34% never recycle metal
Paper recycling is more assessable than plastic or metal recycling

Paper recycling bins are typically located next to printers and photocopiers in the computer barns
#3: Motivation

Students recycle for different reasons including belief, peer pressure etc.
Students can be motivated to recycle by several factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief</td>
<td>I believe that my act of recycling makes a difference to the environment</td>
</tr>
<tr>
<td>Peers</td>
<td>Many of my peers recycle</td>
</tr>
<tr>
<td>HKUST</td>
<td>HKUST encourages me to recycle</td>
</tr>
<tr>
<td>Clearly Marked</td>
<td>Recycling containers are clearly marked</td>
</tr>
<tr>
<td>Conveniently located</td>
<td>Recycling facilities are conveniently located</td>
</tr>
</tbody>
</table>
Students indicate that convenience and clearly marked bins are their first priority, belief ranks a close second.
#4: Incentive

Students recycle because they believe it is a good thing or because it is convenient.
15% of respondents would be more willing to recycle if they knew how recycling is processed or were reminded on what to recycle.

Which would make you more willing to use the recycling bins on campus?

- More information on why recycling is important: 14%
- More information on how your recycled materials are processed: 31%
- Having signage to direct you to the nearest recycling bin: 31%
- Signage at the recycling bin to tell you how to use it: 6%
- Signage at trash cans to remind you which items can be diverted to a recycling bin: 18%
71% would recycle more if it was more convenient to recycle on campus
Conclusion

What is the most important determinant of recycling behaviour?
Overall, belief and awareness are the most important factors influencing recycling

Regression analysis

‘Belief that recycling makes a difference to the environment’ and ‘Awareness of recycling bins on campus’ are the two most important influencers for recycling.

LSK v. students in the Main Building

Belief is the most important factor for the total sample while Awareness is top amongst students at LSK building.
Differences likely due to a recent recycling experiment, which promotes the visibility of recycling bins at LSK

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Total Sample</th>
<th>LSK Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Statistically significant</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ = just significant, ✓✓✓ = strong significance</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Likelihood to recycle</strong></td>
<td><strong>Likelihood to recycle</strong></td>
</tr>
<tr>
<td></td>
<td>Everything</td>
<td>Everything but glass</td>
</tr>
<tr>
<td>Awareness of recycling bins on campus</td>
<td>✓✓</td>
<td>✓✓</td>
</tr>
<tr>
<td>Belief that recycling makes a difference to the environment</td>
<td>✓✓</td>
<td>✓✓</td>
</tr>
<tr>
<td>Many of my peers recycle</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Recycling containers are clearly marked</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Recycling facilities are conveniently located</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Gender</td>
<td>✓✓</td>
<td>✓</td>
</tr>
<tr>
<td>Country of Origin</td>
<td>✓✓</td>
<td>✓</td>
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</tbody>
</table>
Increase the availability of bins in the main academic building
• Locate recycling bins close to areas of high usage (e.g.; plastic and metal recycling bins next to vending machines and in cafeterias; paper bins next to printers, photocopiers and in classrooms)
Develop signage to improve recycling bin visibility, raise awareness of recycling impact

Treat surface area and areas around recycling bins as precious real estate for advertising
Develop campaign-style messaging that is emotive, persuasive and relevant to students

- Messaging should be have a strong emotive sell
- Delivery through video, storytelling, social media etc.
- Persuasive and personal messages directed at students who sometimes recycles
We predicted that only 5% were regular recyclers; survey suggests 15% of students consider themselves regular recyclers.

- 51% recycle if it is convenient
- 34% don’t think about recycling

1. Raise awareness with signage
2. Boost convenience with more bins
3. Persuade through campaigns

“Sometimes” → “Always recycle”
“Never” → “Sometimes”