

GPD 2007

Project Overview

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World Innovative Technologies, Inc.

Multinational consulting company

- Offices in Ann Arbor, Berlin and Seoul
- Successful for the past 10 years

Now

- Increasing pressure of global turn down

Aggressive CEO

- Wants to enter global markets with new innovative products

WIT, Inc

Offering innovative
engineering solutions for the
global market

Core competencies: Engineering



Fuzzy-net buddy



Internet-ready
truck



Internet-ready
door



Internet-ready
trash can

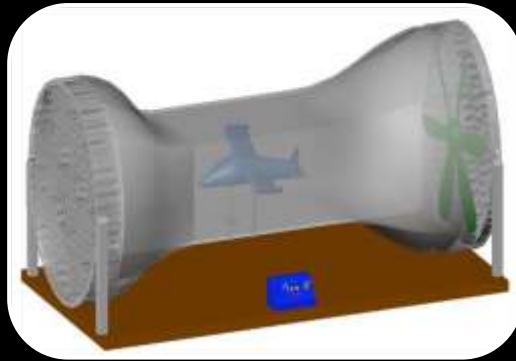


Networked
pharma dispenser

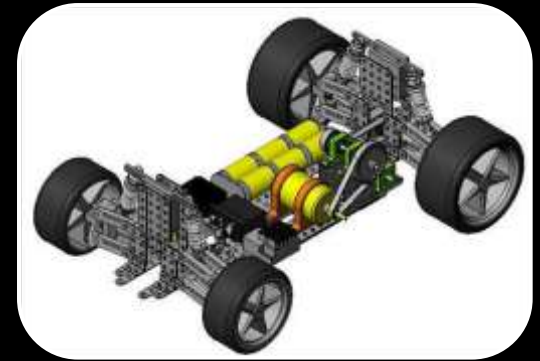
Core competency: Sustainability



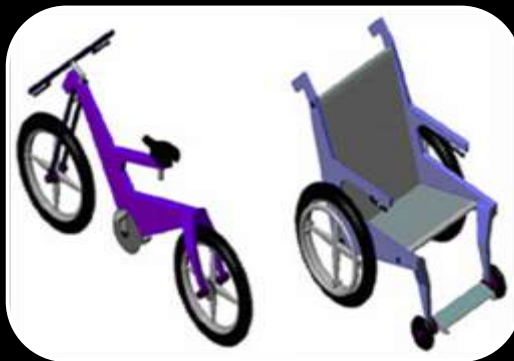
Self-educator



Fly-box!



Remote car



Bicycle-
Wheelchair



Enviro-
Refrigerator

Some trends

Internet is becoming pervasive

- In homes, and on the streets!!!

Internet-ready appliances

- No. of appliances >> # of PCs around the house
- High potential for growth

Products

- Digital VCRs, MP3 players: essentially there
- Home automation: products exist
- Internet appliances: all major vendors designing them

Some trends

Pressure

- On resources (ecological, economic, human)

Competitiveness and advantage

- Through sustainability

Increasing Regulations

- Relevant to closed-loop economy

Now...

Develop a global
product/system



is Internet-
ready



to enable
closed-loop
economy

Where do you begin?

What is global?

What is Internet-ready?

What is closed-loop economy?

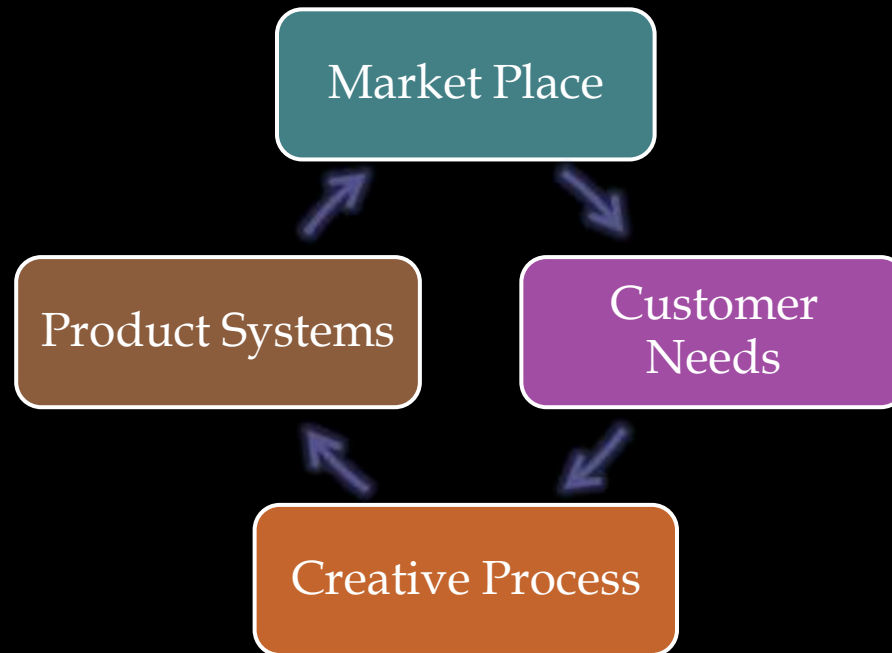
What specific product are you considering

What region(s) of the world is it being considered?

What infrastructure exists, or is likely to be in place in that region to support/sustain the venture?

How culturally appropriate is the product and why?

How to go about it?



Determine Customer needs



Select a
“primary”
region for
product
launch

Select a
“secondary”
region (for
next launch)

**Understand
the customer
in both
regions**

Understand
the market
and IT
infrastructure

Market pattern

W1	■	■	■
W2	■	□	■
W3	■	■	■
	G1	G2	G3

Single Segment Concentration

W1	■	■	■
W2	□	□	□
W3	■	■	■
	G1	G2	G3

Customer want specialization

W1	■	□	■
W2	■	□	■
W3	■	□	■
	G1	G2	G3

Customer group specialization

W(ants)

W1: speedy want

W2: long lasting want

W3: gentle want

G(roups)

G1: young people

G2: middle aged people

G3: elderly

G2

W1	■	■	□
W2	□	■	■
W3	■	□	■
	G1	G2	G3

Selective specialization

W1	□	□	□
W2	□	□	□
W3	□	□	□
	G1	G2	G3

Full coverage

Source: Kotler (with adaption)

Create your visual station!

Consumer Group Name

Life style

Time use, other products used,
information sources

Values

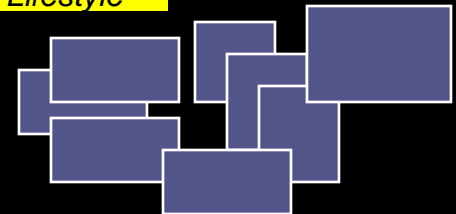
influences, politics, hierarchy of
preferences

Demographics

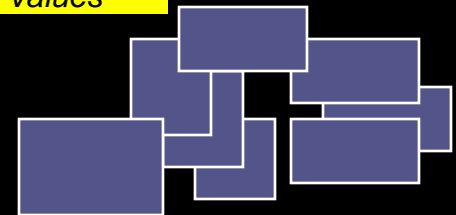
Income, population, location

XYZ consumer

Lifestyle



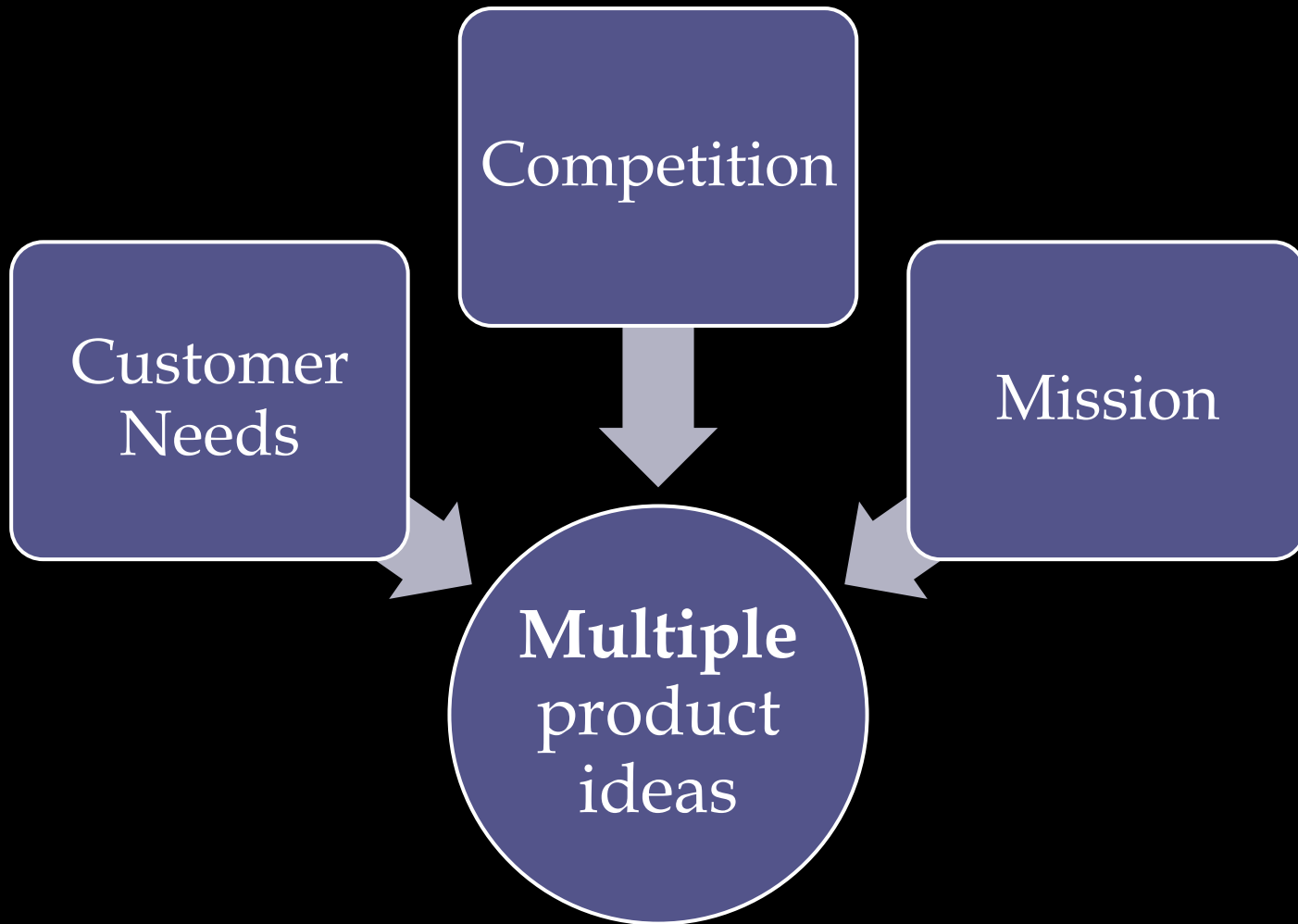
Values



Demographics



Generate multiple product ideas



Ideation

Generate as many ideas as you can (e.g., 10 x team size)

Hold all criticism
and evaluation of
initial ideas

Keep the customer/market (regions of the world) in view

Sketch ideas and archive for all team members to see

Stick with it - the best ideas come near the end

Think far-out (many good ideas come by snap-back)

GPD Project Phases

Sep 20
(Proposal)

- Determine needs
- Create product ideas

Nov 6 (DR2)

- Detail design

October 5 (DR1)

- Detail needs
- Analyze and select one project
- Develop the concept

Dec 7 (DR3)

- Prototype
- Large-scale Manufacture
- Business plan



Distributed global product development

Team exercise - as much as possible

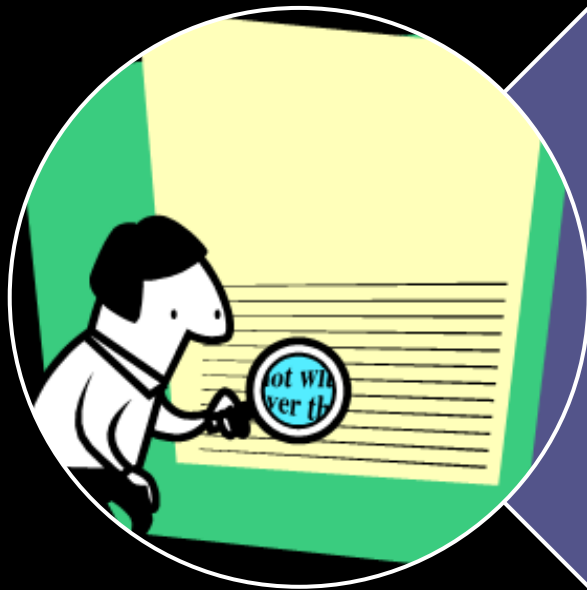
Establish group cohesion and respect diversity (of thought, language, culture, etc.)

Set aside a specific time block for group meetings and idea generation

Use the clock — schedule team meetings as well as individual investigation times

Generate ideas and share with team members using email, web, fax

What is important?



You have limited time and resources and it is unlikely that you will be able to address all the items under consideration. However, this is the real world!

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Global product

Two markets

- Developed countries / areas
- Varying requirements across the markets

Global product

Mexican version



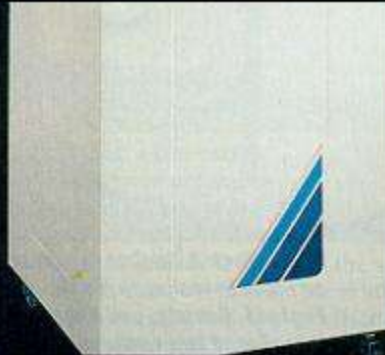
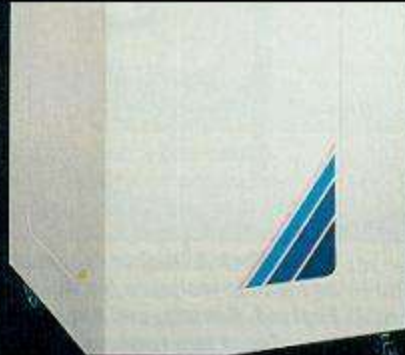
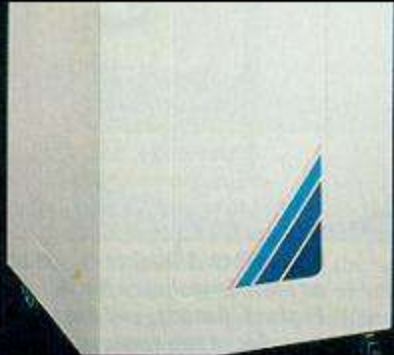
Indian version



Brazilian version



**Elements
by local
needs**



**Core
element**

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Internet-ready



Connected to the Internet?

Internet-ready: Issues

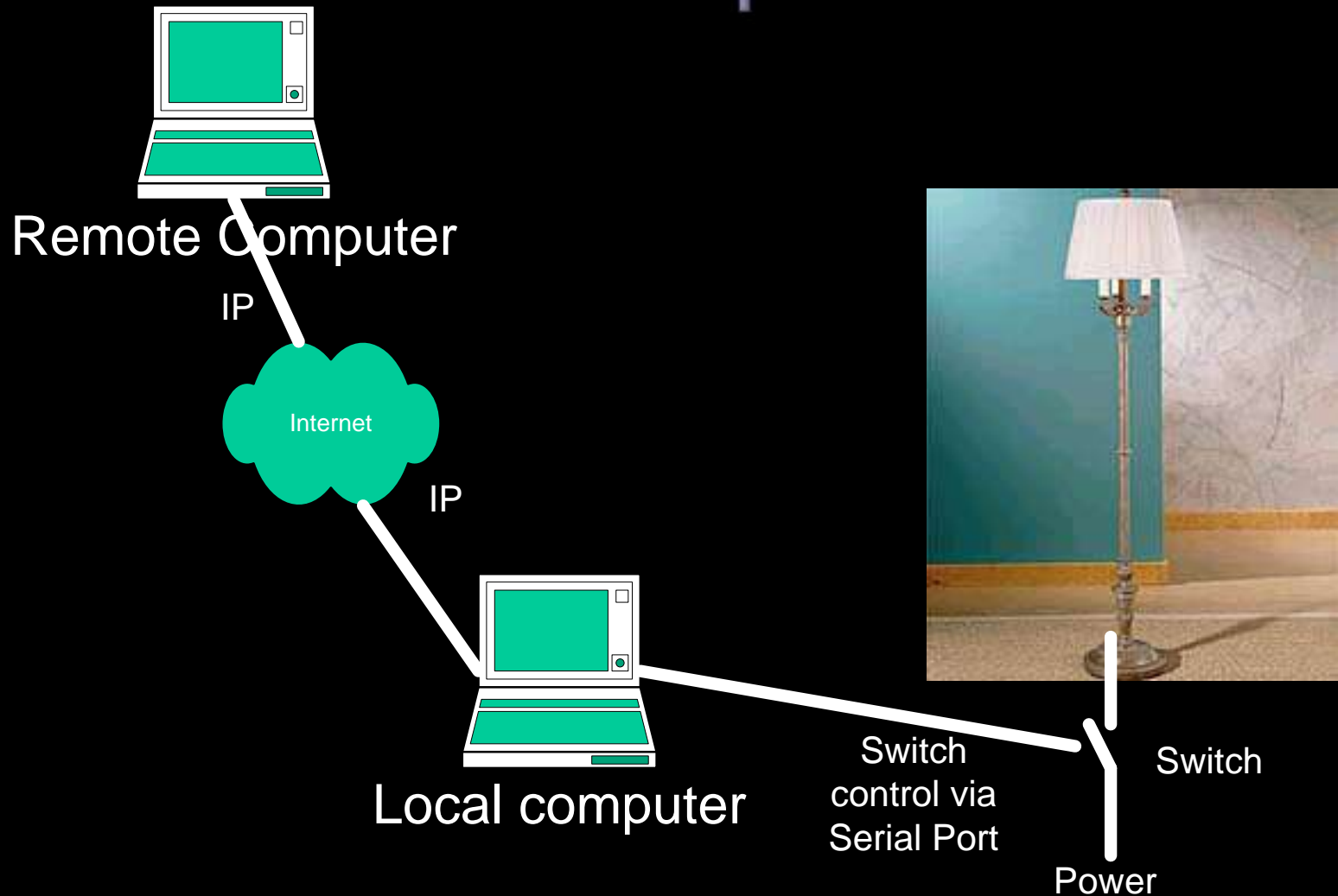
How does an appliance get “on the internet”?

Is Internet-ready same as “web-enabled”?

What technologies are out there to make this happen?

Once an appliance is internet-ready, what next?

Key Idea: Serial connection to a local computer



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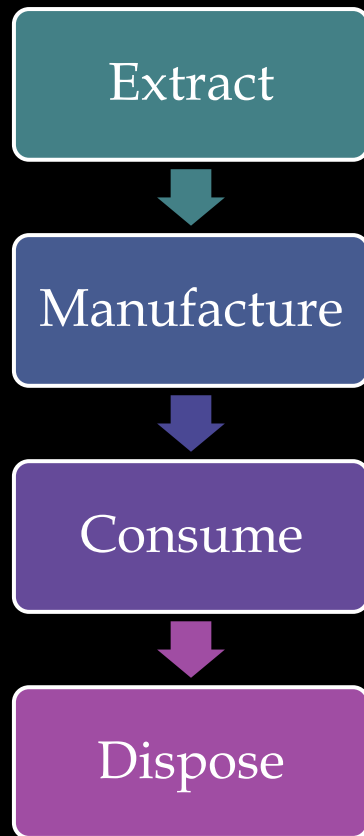
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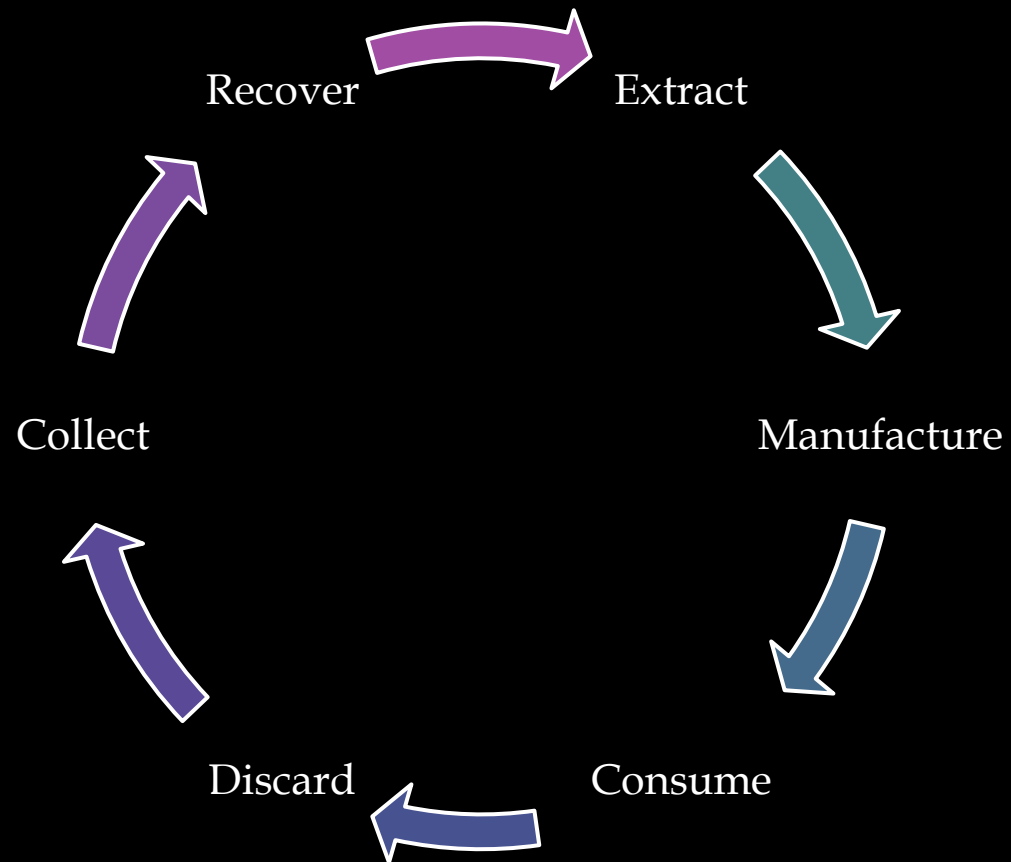
How culturally appropriate is the product and why?

Closed-loop “resource” economy

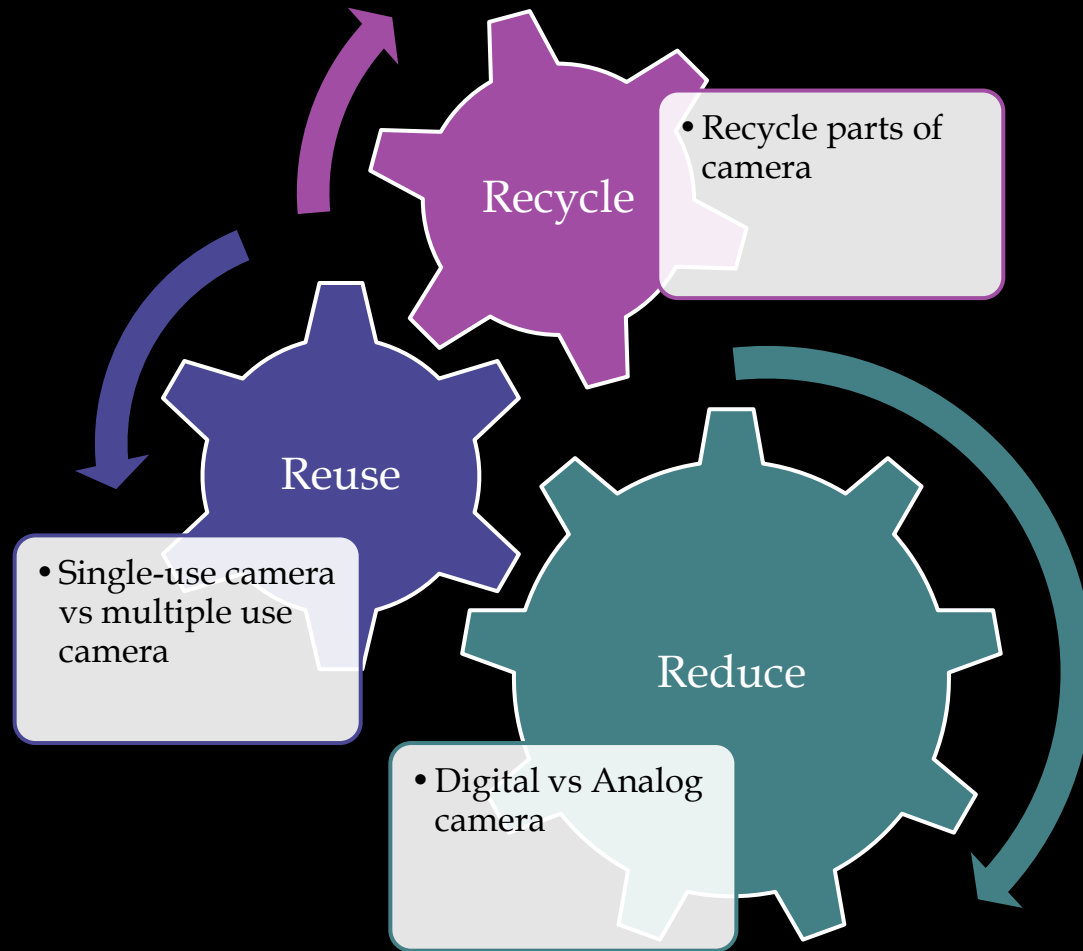
CRADLE TO GRAVE



CRADLE TO CRADLE



R's of closed-loop economy



GPD 2007 Project

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Where do you begin?

Teamwork!!

- Cannot over emphasize the importance!
- Throw in work constraints, time differences and virtual team issues and each team will have a lot to handle in the course (assignments and semester project)