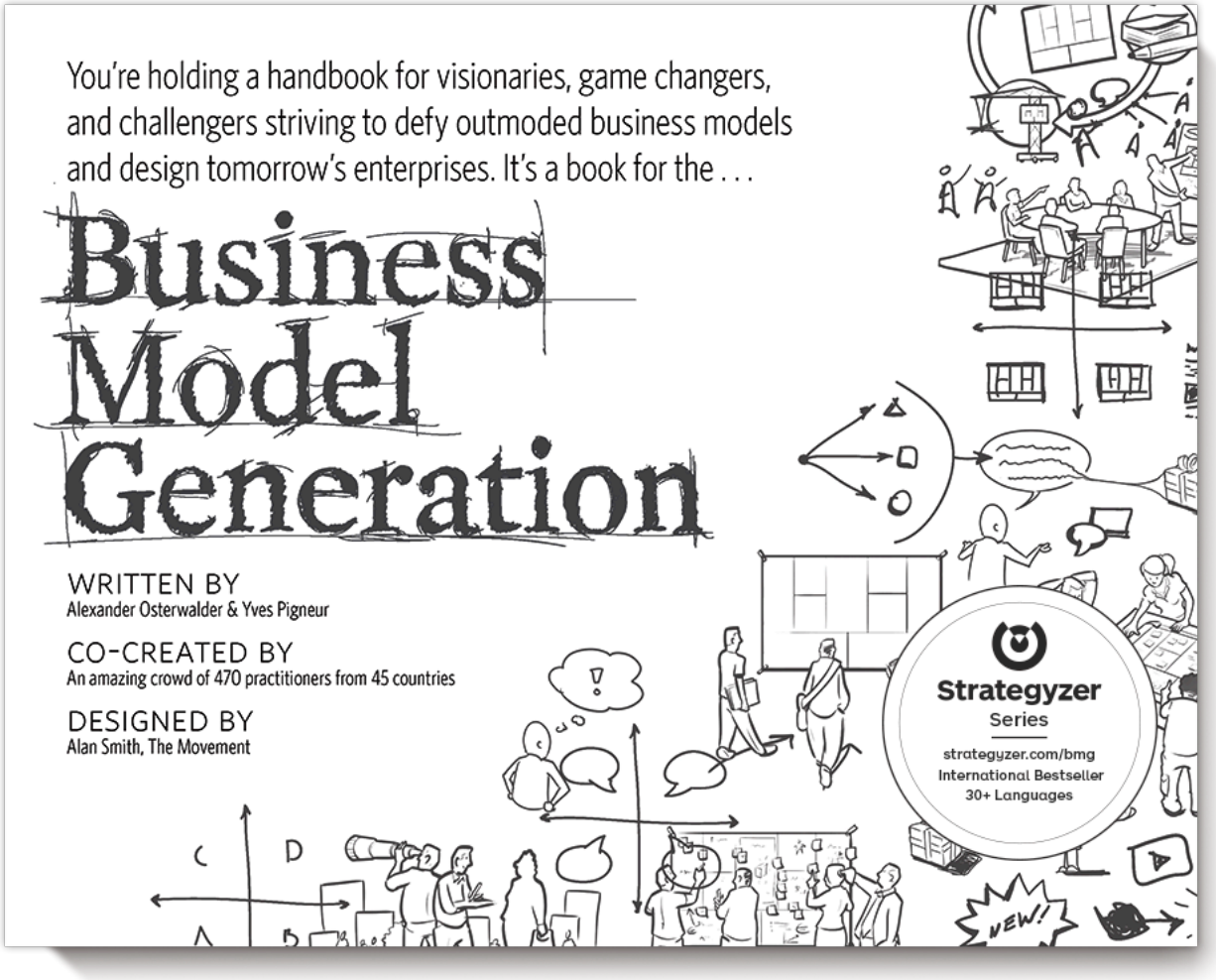
Requirements Engineering: Special Feature

Business Model Canvas,
Goal Models, System Visions

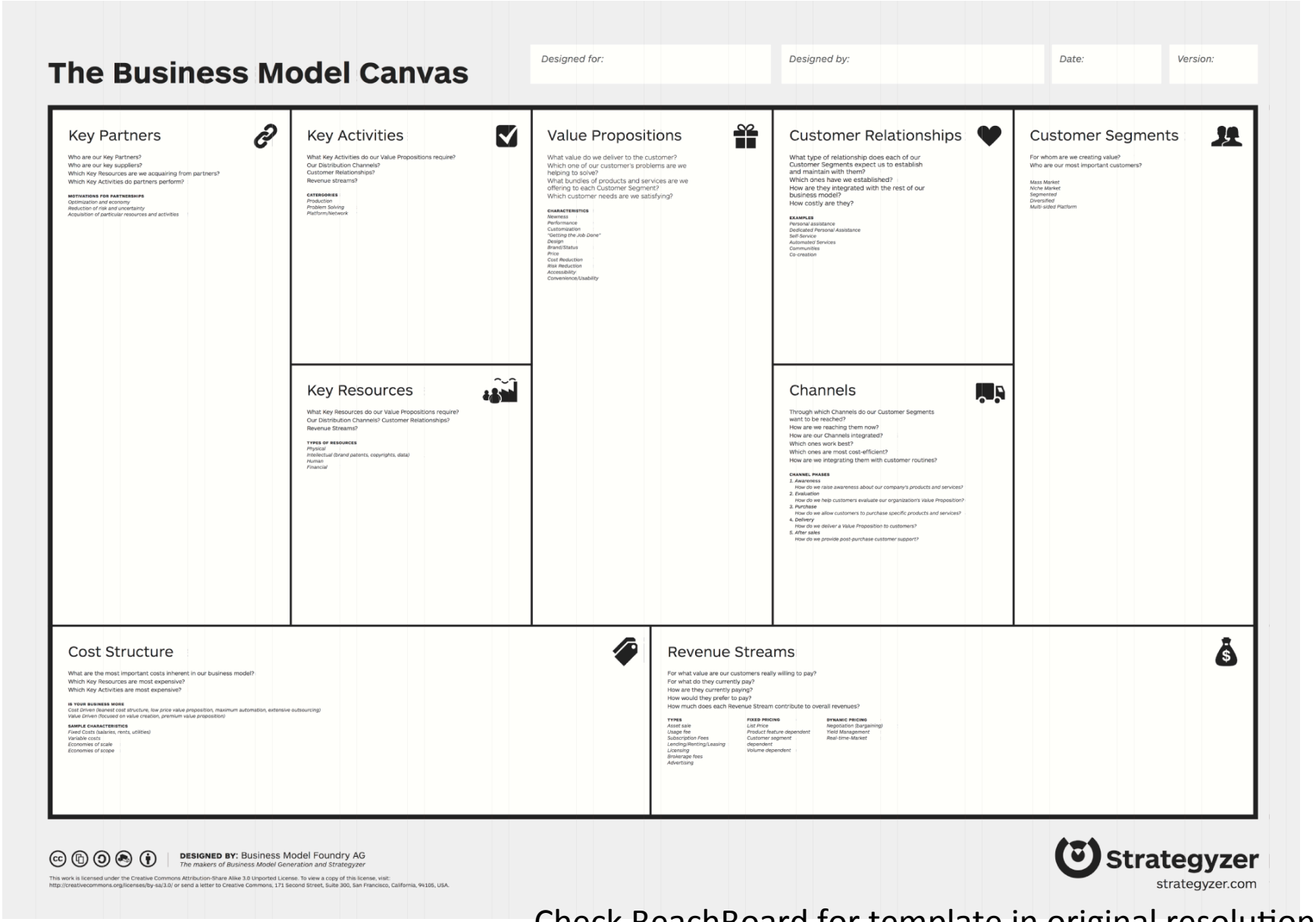
Business Model Canvas

http://www.businessmodelgeneration.com/canvas/bmc

Serves to communicate a new business idea



Business Model Canvas – Template



Check BeachBoard for template in original resolution.

Business Model Canvas – Example

The Business Model Canvas

Designed for: Trans Sweden MTB Stage Race

Designed by: Jörgen Dahlberg

On: Day 20 Month 10 Year 2010

Iteration: No 2

Key Partners

Who are our Key Partners?
Who are our key suppliers?
Which Key Resources are we acquiring from partners?
Which Key Activities do partners perform?

- Local Tourist Agency
- Regional Government
- Adventure School
- Transportation
- TV-Production
- Online market
- Team Sponsors
- Equipment Sponsors
- Charity Organizations

Key Activities

What Key Activities do our Value Propositions require?
Our Distribution Channels?
Customer Relationships?
Revenue streams?

- Event management
- Sponsor Management
- Team Management

Key Resources

What Key Resources do our Value Propositions require?
Our Distribution Channels? Customer Relationships?
Revenue Streams?

- Moving Base camp
- Online market
- Course (Kingstrail)
- Commitment (contracts)

Value Propositions

- Real MTB Racing
- .... For Racers...
  Wilderness eXperience
  A run for the price money
  What you get you give
  "15 minutes of glory"
- .... For Sponsors...
  Reach
  "Bang for the ad-buck"
  A new market space
- .... For Media...
  An Awesome reality (Show)
  New sources of revenue
  Inspiring challenges
- .... For Viewers...
  Excellent entertainment
  Good vibrations

Customer Relationships

What type of relationship does each of our Customer Segments expect us to establish and maintain with them?
Which ones have we established?
How are they integrated with the rest of our business model?
How costly are they?

- Participation
- Symbiosis (Reach)
- Opportunistic

Channels

Through which Channels do our Customer Segments want to be reached?
How are we reaching them now?
How are our Channels integrated?

- Television
- Online Media
- Offline Media

Customer Segments

For whom are we creating value?
Who are our most important customers?

- Adventurers
- "Weekend Warriors"
- Brands
- "Viewers"
- Gamblers
- Charity organizations

Cost Structure

What are the most important costs inherent in our business model?
Which Key Resources are most expensive?
Which Key Activities are most expensive?

- Staff
- Marketing
- Logistics

Revenue Streams

For what value are our customers really willing to pay?
For what do they currently pay?
How are they currently paying?
How would they prefer to pay?
How much does each Revenue Stream contribute to overall

- Sponsoring
- Advertising
- Merchandizing
- Sales

www.businessmodelgeneration.com

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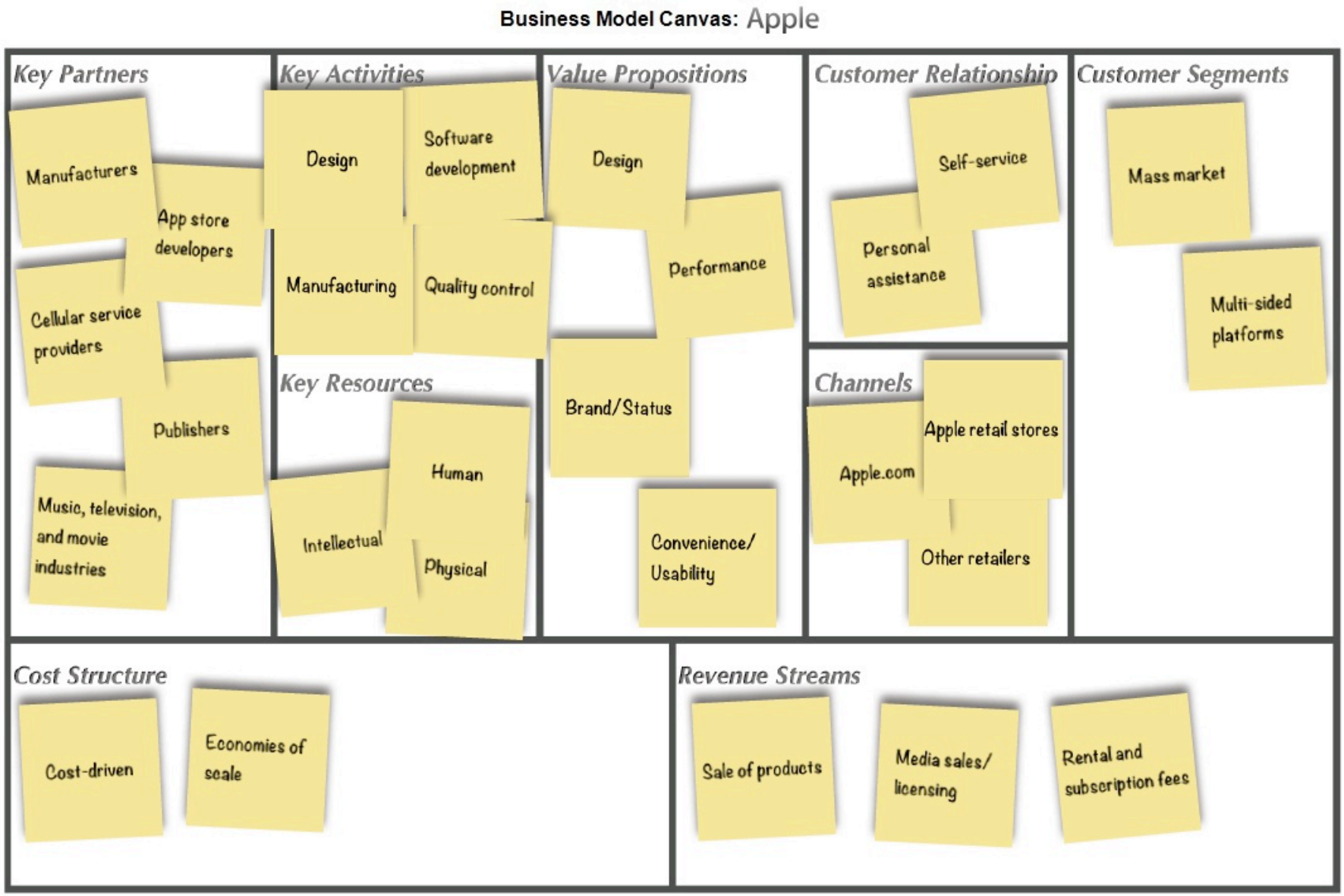
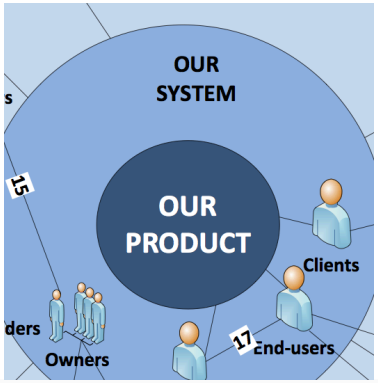
Business Model Canvas – Example 2



DigitalBusinessModelGuru.com

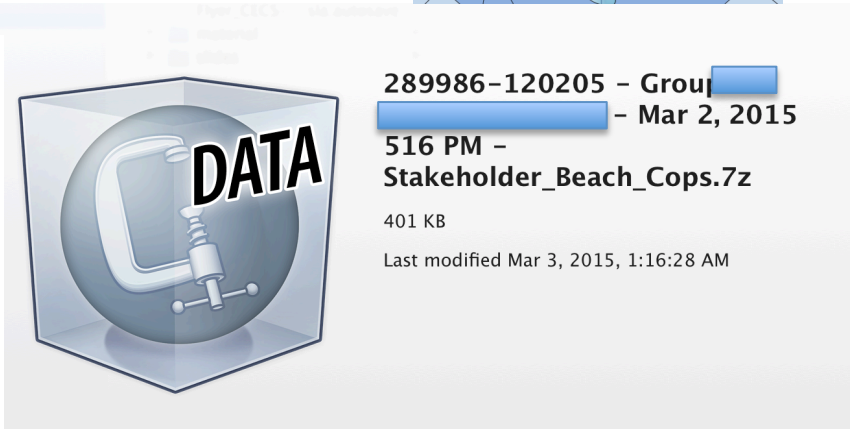
Stakeholder Model - Feedback

- Not done yet, but looks good in general.
- Please submit 1 pdf file. Really.
- Put our course on the title page: Requirements Engineering
  – not “Selected Topics” or other course numbers…
- Please put your team on the title page.
- Make the product/service known.
  (not as example where it’s called ‘our system’)



CECS 546 Fault Tolerance Computing Systems
Final Report

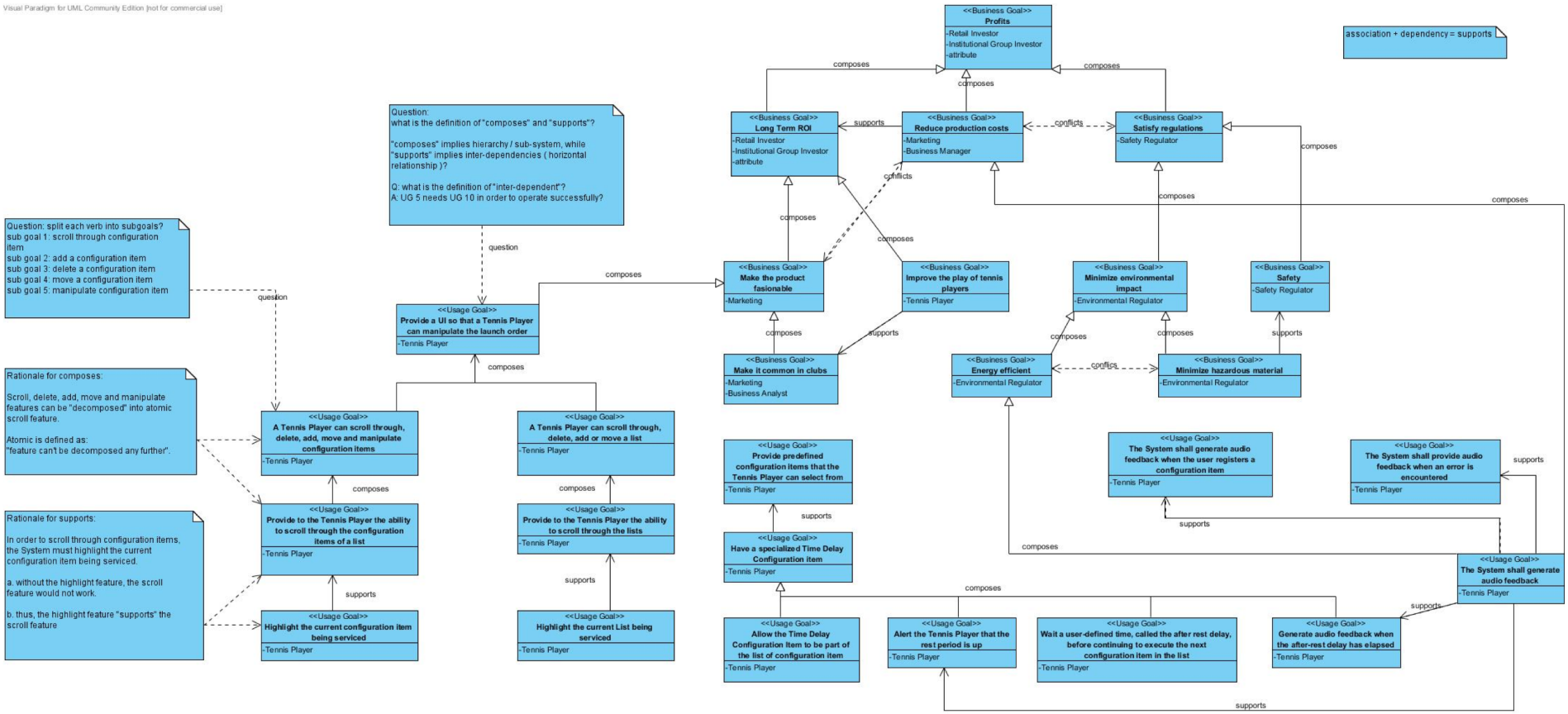
Assignment: Stakeholder Model



Goal Model

- I received one draft submission! Feedback questions:
- 1. are the boxes labelled with the correct relationship? There are 2 "question boxes" on the left hand side of the diagram
- 2. there is also a box for "Rationale for composes". This box explains the though process of why chose "composes" rather than "supports". This box is also on the left hand side.
- 3. what if the usage goals do not conflict? Should there be a minimum number of conflicting usage goals?

Goal Model


Visual Paradigm for UML Community Edition [not for commercial use]
association + dependency = supports
<<Business Goal>>
Profits
-Retail Investor
-Institutional Group Investor
-attribute
<<Business Goal>>
Long Term ROI
-Retail Investor
-Institutional Group Investor
-attribute
<<Business Goal>>
Reduce production costs
-Marketing
-Business Manager
<<Business Goal>>
Satisfy regulations
-Safety Regulator
<<Business Goal>>
Make the product fasionable
-Marketing
<<Business Goal>>
Improve the play of tennis players
-Tennis Player
<<Business Goal>>
Minimize environmental impact
-Environmental Regulator
<<Business Goal>>
Safety
-Safety Regulator
<<Business Goal>>
Make it common in clubs
-Marketing
-Business Analyst
<<Business Goal>>
Energy efficient
-Environmental Regulator
<<Business Goal>>
Minimize hazardous material
-Environmental Regulator
composes
supports
conflicts
Question:
what is the definition of "composes" and "supports"?
"composes" implies hierarchy / sub-system, while "supports" implies inter-dependencies (horizontal relationship)?
Q: what is the definition of "inter-dependent"?
A: UG 5 needs UG 10 in order to operate successfully?
question
Question: split each verb into subgoals?
sub goal 1: scroll through configuration item
sub goal 2: add a configuration item
sub goal 3: delete a configuration item
sub goal 4: move a configuration item
sub goal 5: manipulate configuration item
<<Usage Goal>>
Provide a UI so that a Tennis Player can manipulate the launch order
-Tennis Player
Rationale for composes:
Scroll, delete, add, move and manipulate features can be "decomposed" into atomic scroll feature.
Atomic is defined as:
"feature can't be decomposed any further".
<<Usage Goal>>
A Tennis Player can scroll through, delete, add, move and manipulate configuration items
-Tennis Player
<<Usage Goal>>
A Tennis Player can scroll through, delete, add or move a list
-Tennis Player
Rationale for supports:
In order to scroll through configuration items, the System must highlight the current configuration item being serviced.
a. without the highlight feature, the scroll feature would not work.
b. thus, the highlight feature "supports" the scroll feature
<<Usage Goal>>
Provide to the Tennis Player the ability to scroll through the configuration items of a list
-Tennis Player
<<Usage Goal>>
Provide to the Tennis Player the ability to scroll through the lists
-Tennis Player
<<Usage Goal>>
Highlight the current configuration item being serviced
-Tennis Player
<<Usage Goal>>
Highlight the current List being serviced
-Tennis Player
<<Usage Goal>>
Provide predefined configuration items that the Tennis Player can select from
-Tennis Player
<<Usage Goal>>
Have a specialized Time Delay Configuration item
-Tennis Player
<<Usage Goal>>
Allow the Time Delay Configuration Item to be part of the list of configuration item
-Tennis Player
<<Usage Goal>>
Alert the Tennis Player that the rest period is up
-Tennis Player
<<Usage Goal>>
Wait a user-defined time, called the after rest delay, before continuing to execute the next configuration item in the list
-Tennis Player
<<Usage Goal>>
Generate audio feedback when the after-rest delay has elapsed
-Tennis Player
<<Usage Goal>>
The System shall generate audio feedback when the user registers a configuration item
-Tennis Player
<<Usage Goal>>
The System shall provide audio feedback when an error is encountered
-Tennis Player
<<Usage Goal>>
The System shall generate audio feedback
-Tennis Player

Goal Model – Tips

- Make it easy to read – the models get large.
- Use white space wisely
- Make hierarchies well visible in the layout
- Consider color coding to make it easier to read
- Make a pdf with high resolution

System Vision

Table 1. Elements of an Effective Rich Picture

Element	Comment
1. Include *structure*	Include only enough structure to allow you to record the process and concerns. The latter requires that all the people who will use or could conceivably be affected by the introduction of the new system be included.
2. Include *process*	Do not attempt to record all the intricacies of process; a broad brush approach is usually all that is needed
3. Include *concerns*	Caricature the concern in a thought bubble (see Figures 1–3 for examples). A fuller explanation may be provided in a supplementary document
4. Use the language of the people depicted in it	This will make the rich picture comprehensible to your informants
5. Use any pictorial or textual device that suits your purpose	There is no correct way of drawing a rich picture. There are as many styles as analysts and the same analyst will find different styles useful in different situations

System Vision

- Let's look at the assignment description.
- Remember: http://systems.open.ac.uk/materials/T552/

Is this an arts class or what?

No. After the system vision, we're done with creative illustration, so make use of it ☺