Innovation & Social Impact in the Next Generation of ERCs

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The Academy for Innovation & Entrepreneurship
innovation.umd.edu

We help UMD students and professionals creatively solve tough problems.

The Academy
for Innovation & Entrepreneurship

Design Thinking Process:
a methodical way to creatively solve problems

BUILD EMPATHY

BRAINSTORM IDEAS

TEST SOLUTIONS

Lean Startup Process:

a methodical way to maximize the # people you impact

MAP STAKEHOLDERS' TIME/$

PROTOTYPE VALUE PROPOSITIONS

TEST SUSTAINABILITY

THE ACADEMY
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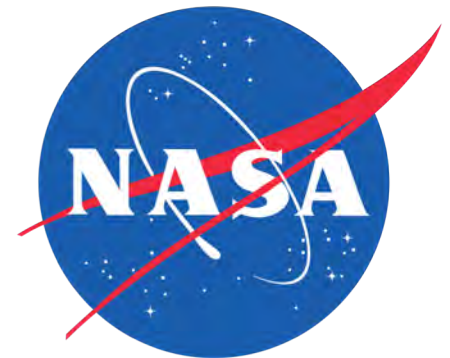# UMD & AIE Featured in Two Recent Chronicle Cover Stories

April 2015

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THE ACADEMY
for Innovation & Entrepreneurship

We teach and lead *Design Thinking* & *Lean Startup* workshops for UMD, industry, government, & non-profits

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General Electric

Doug Dietz
Designer & Innovation Architect

Source: dschool.stanford.edu/students/dougdietz

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The Academy
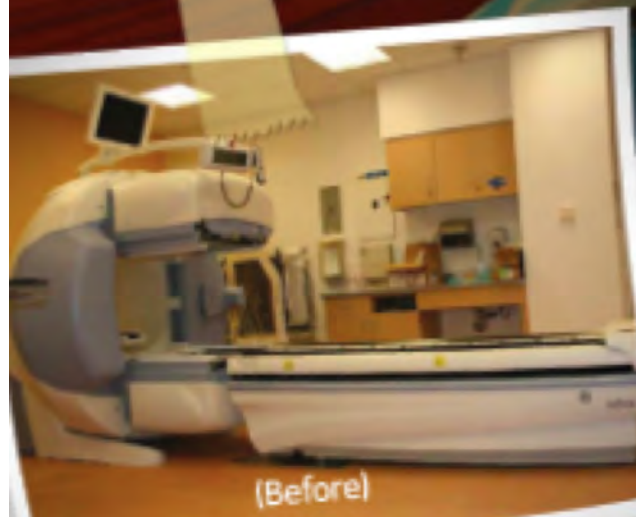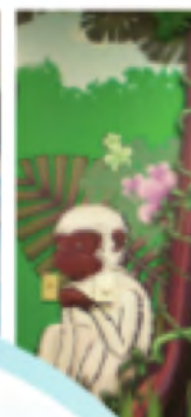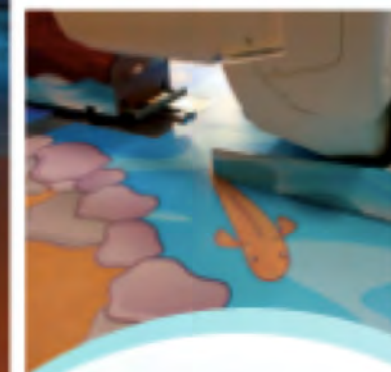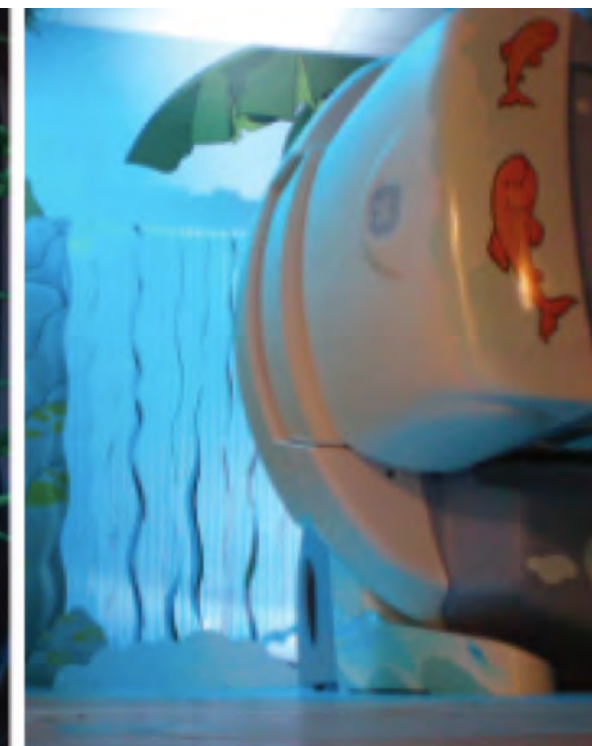for Innovation & Entrepreneurship

We heard:
"My brother gets to go to camp, but I can't go"

We observed:
No trophies in the rooms of the sick children, unlike their siblings

THE ACADEMY
for Innovation & Entrepreneurship

Jungle Adventure

(Before)

The Nuclear Medicine room that was designed by GE is absolutely fantastic. That room is **exactly what a children's hospital should look like**. It is the epitome of what a pediatric imaging room should be, with all of the **lights**, **sounds**, **smells**, and **amazing decorations** on the walls, floor, and scanner. We are so excited and proud of this room in our department. In fact, the staff from several nursing units has expressed how jealous they are of what a **wonderful experience** this room will create for our patients and families.

**Dana Etzel-Hardman, MSN, MBA, RN, CPN,
Training and Education Specialist**

Pirate Island

> "Can we come back tomorrow?"
> Actual patient, age 6
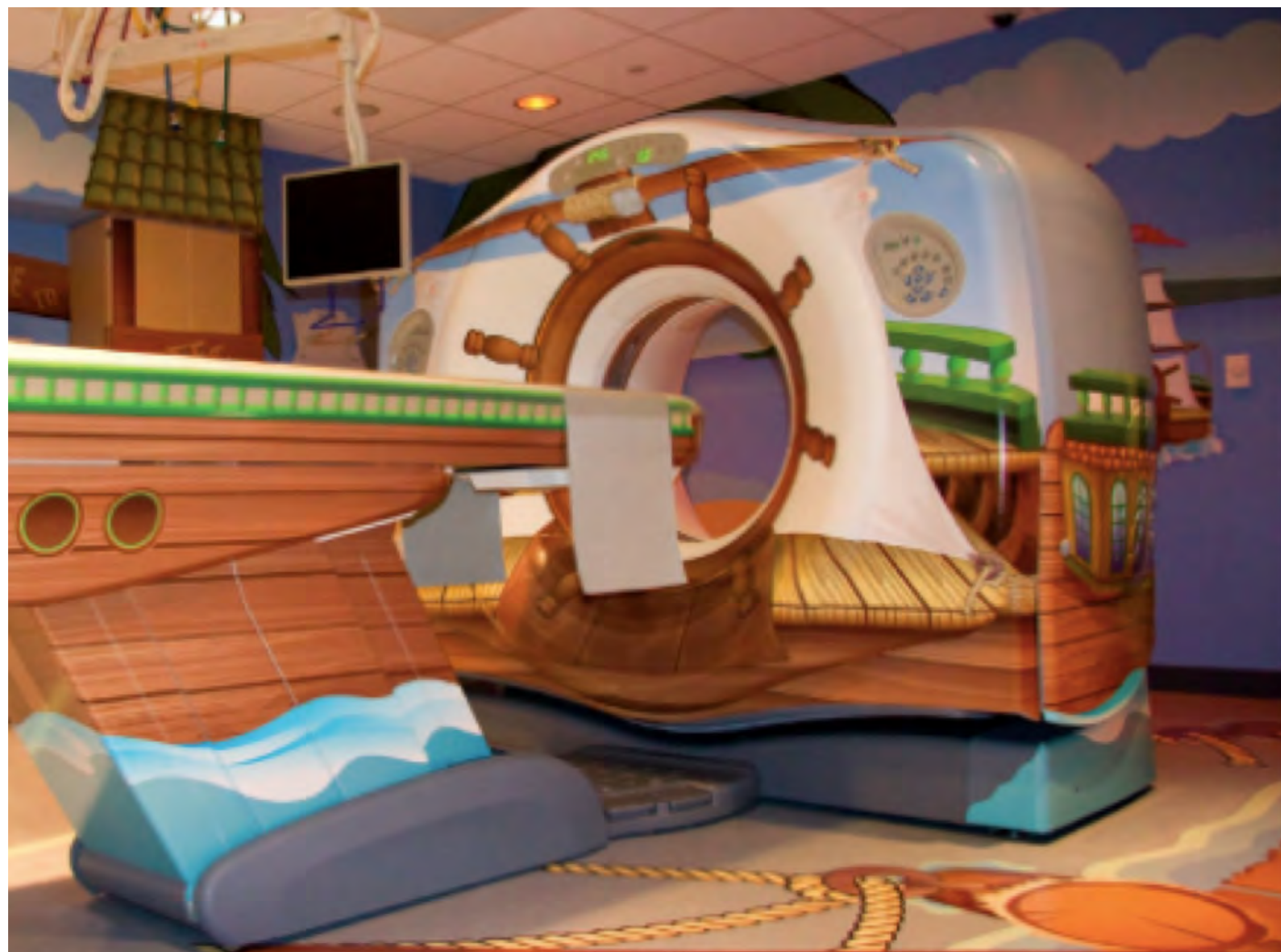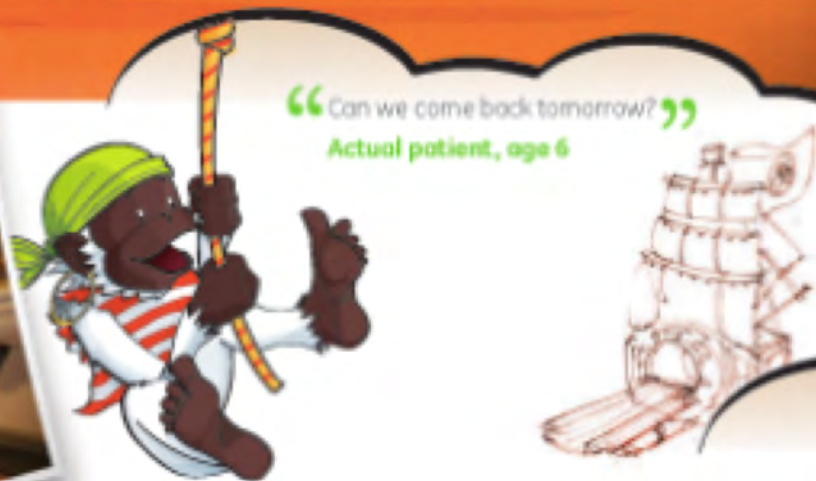
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Lean Startup Process:

a methodical way to maximize the # people you impact

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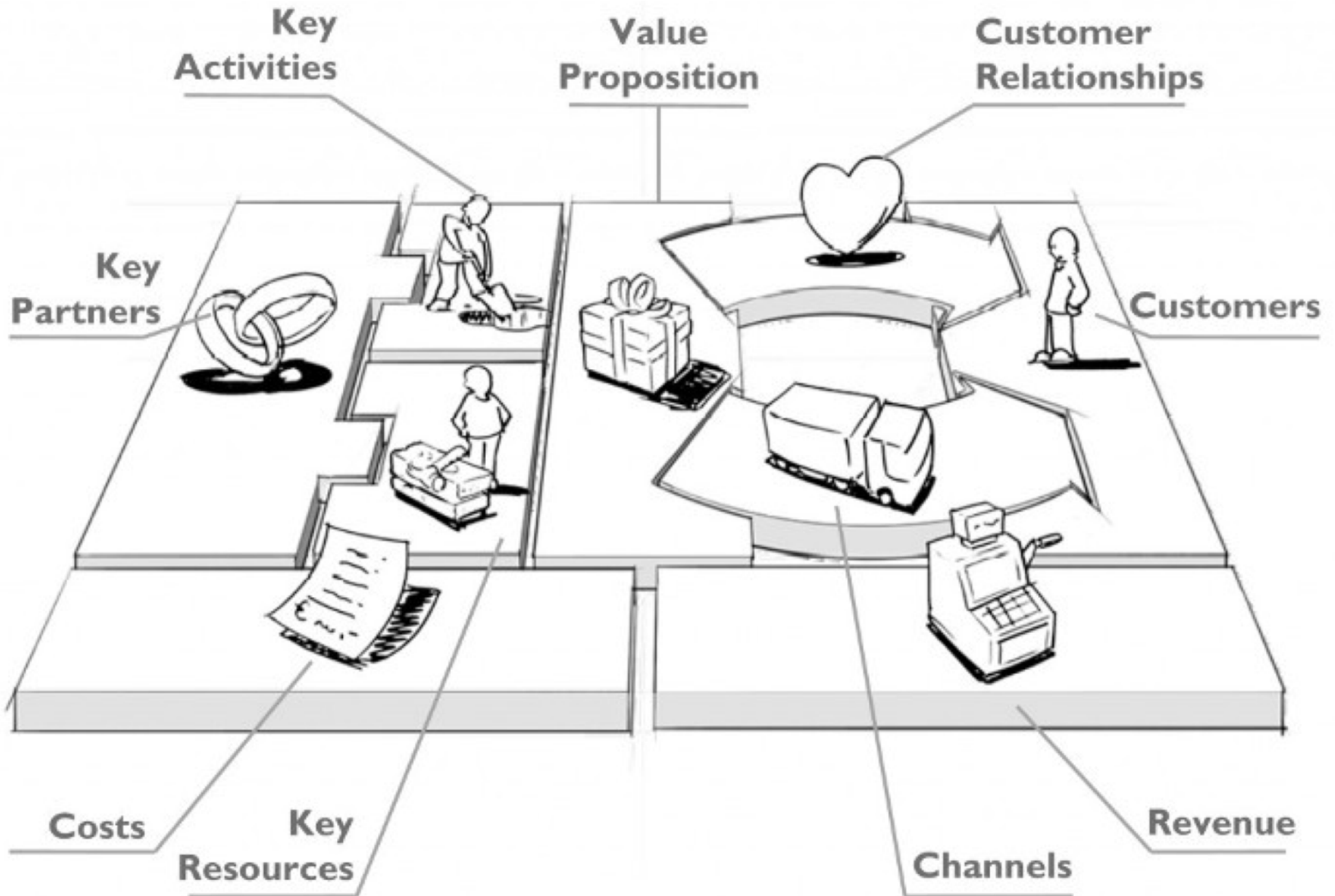
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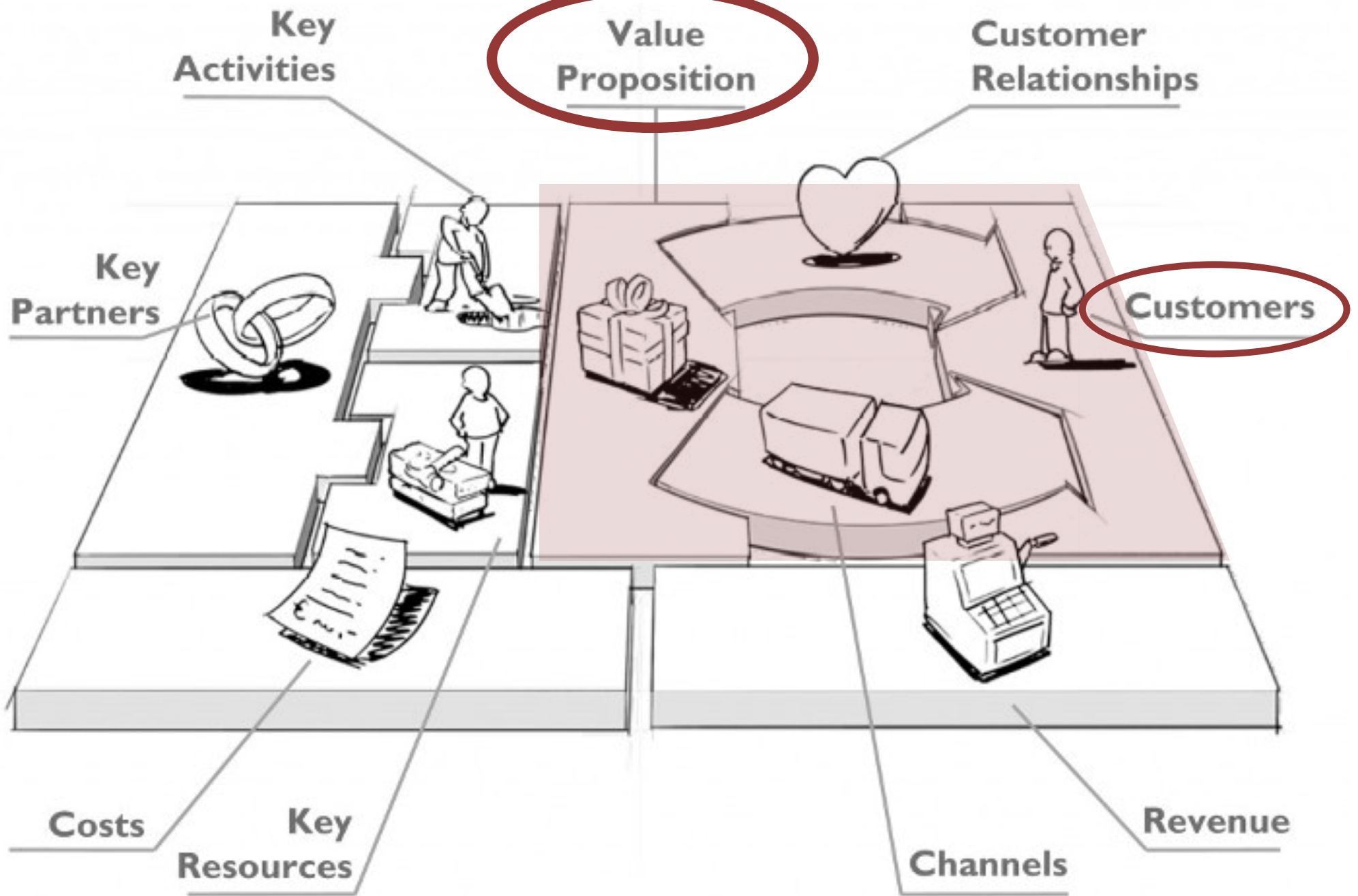for Innovation & Entrepreneurship

Lean Startup isn't explicitly about starting a company ...

It's really about maximizing the number of people you help and impact
(i.e., the business model)

BUSINESS MODEL CANVAS

Key Activities

Value Proposition

Customer Relationships

Key Partners

Customers

Costs

Key Resources

Channels

Revenue

drawings by JAM

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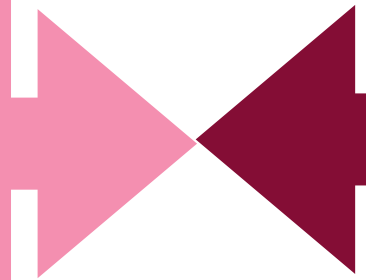
drawings by JAM

Customer Segments (CS)

Who decides how an organization spends its time & $$$?

Value Propositions (VP)

What does each Customer Segment base its decisions on?

Mystery Organization: Who Am I?

2014 total revenue over $300M

- $211M from donations
- $106M from contracts, fees for services, & license fees

Hint #1: It's a non-profit (yes, non-profits have revenue)

Hint #2: It's in education (yes, education is an industry)

TEACHFOR AMERICA

*2014 total revenue over $300M*

BILL & MELINDA GATES *foundation*

- $211M from donations
- *$106M* from contracts, fees for services, & license fees

- *⅓ of revenue is self-generated - not from donations*
- *Gates gets **$3 of impact** for every **$2 they donate***
- *Successful non-profits charge for the **value they deliver** to help them **scale their impact**!*

Lean Startup isn't explicitly about starting a company …

It's really about how to scale the number of people you help and impact
(i.e., the business model)

Customer Segments (CS)

Who decides how an organization spends its time & $$$?
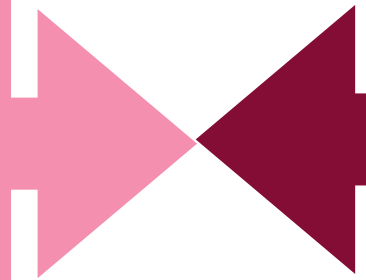
Value Propositions (VP)

What does each Customer Segment base its decisions on?

Jerry Maguire

The 100% "Complete" Value Proposition (VP)

Customer Segments (CS)

Who decides how an organization spends its time & $$$?

100% Value Propositions (VP)

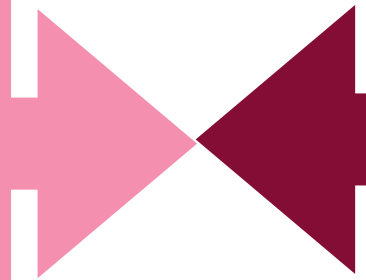What does each Customer Segment base its decisions on?

The *100% Complete VP* Test

You should feel 100% confident that your stated CS/Stakeholder would drop everything and immediately buy/fund/approve/switch to your stated VP *without having to ask you any questions*
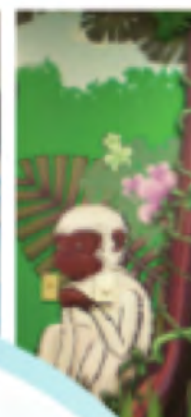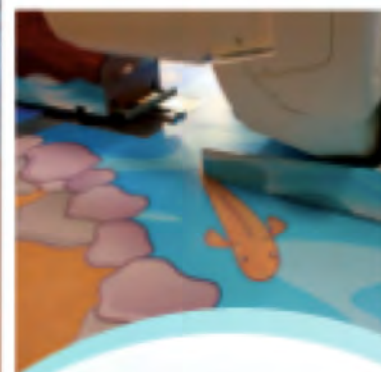
General Electric

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> **Dana Etzel-Hardman, MSN, MBA, RN, CPN, Training and Education Specialist**

CS

User: Kids

Decision
Maker: ?

Payer: ?

Influencer: ?
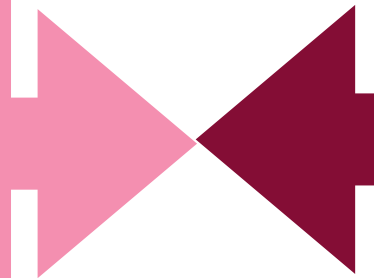
100% VP

No More Tears

?

?

?

It's Time for GE MRI Role Play!

Role Play Instructions

- Get into a groups of 4
  - If you're not in a foursome, drag a chair over and join some others to form a group of 4
- Once in your foursome, each person in the group should visit the assigned URL below on their smartphone or laptop:
  - Person 1: ter.ps/gemri1
  - Person 2: ter.ps/gemri2
  - Person 3: ter.ps/gemri3
  - Person 4: ter.ps/gemri4

Hospital Chief Ethics Officer

Hospital Chief Executive Officer

Hospital Chief Financial Officer

Hospital Chief Insurance Officer

Roleplay Script Card: *Hospital Chief Executive Officer*

As CEO, you are expected to provide healthcare services to your community and do so profitably for your hospital's parent company, ACME Healthcare. Things that threaten profits are patient dissatisfaction leading to them leave for other neighboring hospitals, large equipment purchases that take too long to pay off, and hospital staff (doctors, nurses, technicians, etc.) unhappy about having to work longer and longer hours. You get all kinds of ideas for new initiatives all the time, but you only have resources for 1-2 of them. You generally only support ideas that have clear evidence that it will provide satisfactory healthcare services, make your hospital more competitive and attractive compared to other hospitals, keep your staff happy, and most important of all lead to increased profits. You like the idea of the Children's Adventure Series but aren't sure how it will lead to increased profits. You also aren't convinced there's anything wrong with a normal MRI & sedation except for the 2 week backlog to get an appointment.

Roleplay Script Card: *Hospital Chief Ethics Officer*

As Chief Ethics Officer, you are expected to review ethical or moral questions that may come up during a patient's care. You're well aware of the emotional trauma that many children experience during a typical 45 minute MRI procedure. What's worse is that if a child isn't calm enough to stay still during the scan, sedation is required, extending the procedure and traumatic experience to 4 hours. Furthermore, if a child was scheduled for a 45 minute procedure but then ends up needing sedation, that must be done by rescheduling 2 weeks later because that's how long the backlog is for the MRI facility at your hospital. That's 2 additional weeks of possible dread for the child. You also know that 4 in 1000 pediatric patients sedated for an imaging test experience an adverse respiratory event. You're concerned that parents are very unhappy overall with the experience - emotional trauma, 2 week wait times, and subjecting kids to strong sedatives.

--------------- fold & tear along dotted lines --------------- ---------------one roleplay card per team member---------------

Roleplay Script Card: *Hospital Chief Insurance Officer*

As Chief Insurance Officer, you negotiate how much a patient's insurance company pays your hospital for the healthcare services you provide to that patient. Insurance companies pay your hospital $2000 (45 min procedure without sedation) or $3000 (4 hr procedure with sedation) for each MRI procedure you do - it's actually one of the most lucrative services the hospital offers (e.g., a simple doctor visit pays only $500). The problem is that your MRI facility is currently underutilized since 80% of pediatric patients end up taking 4 hrs at the MRI facility. You would love if you could figure out a way to use the MRI facility more efficiently and get paid for doing a lot more MRI procedures.

Roleplay Script Card: *Hospital Chief Financial Officer*

As CFO, you are expected to keep the hospital from spending more money than it takes in each year. The MRI scanner was the hospital's big purchase this year, and it cost $1 million. You've learned that it would cost at least an additional $50,000 to convert your MRI facility to the Children's Adventure Series. You already had to borrow money to pay the $1 million for the scanner, so you don't want to spend any more money on the MRI facility until the MRI scanner is paid off. Every MRI procedure your hospital does brings in money to help pay off the MRI scanner, but you don't think your hospital can do enough procedures this year to fully pay off the machine this year. So you'd like to wait until next year before considering spending another $50,000.

Role Play Decision Discussion

- What decision did your group come to? Was it a consensus?

- What guesses did you make or what other info do you feel you needed to make this decision?

- What was most difficult about this scenario: both overall as well as for your role?
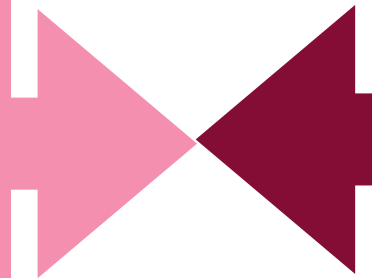
- Any other comments or thoughts?

CS	**100% VP**
User: Kids	no more tears
Decision Maker: CEO	< 2-week wait time
Payer: CFO	< payback time, > profits
Influencer: Ethics/Insurance	< child risk

Customer Segment	Value Proposition	100% Solution
Kids/Parents (User)	Better Imaging	No
Kids/Parents (User)	Imaging w/ No Tears	Yes
Hospital Exec Committee (Decision Maker / Payer / Influencer)	**Imaging w/ No Tears**	**No**
Hospital Exec Committee (Decision Maker / Payer / Influencer)	**Decrease MRI payback time & increase profits**	**Yes**

Working Session on Scaling Impact

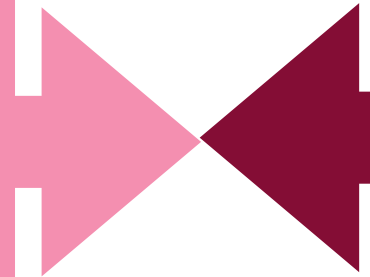## Mapping Out Your Customer Segments & 100% Value Propositions

Your Project

CS

User: ?

Decision
Maker: ?

Payer: ?

Influencer: ?

100% VP

?

?

?

?

Stakeholder CS/VP Canvas Example

	CS	100% VP
User	Parents & Kids	No More Tears, Trauma
Decision Maker	CEO	> profits / < 2-week wait
Payer	CFO	< time payback / > profits / < debt
Influencer	Insurance Ethics	< child risk

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