Shifting Company Culture Toward Innovation

Craig Chappell - VDC Technology Specialist

TDIndustries

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TDIndustries is changing the face of the mechanical contracting industry through sustainable, state-of-the-art innovations that consistently produce outstanding results. True to being a leader in mechanical life-cycle solutions, we design and build with the commissioning in mind. We employ more engineers than most mechanical subcontractors, and that dedicated team of in-house engineers uses the latest technology to deliver target value design (TVD) to clients.

TDEngineering Vision

Engineer. Equip. Excel.

Delivering value-driven solutions through rewarding collaborative partnerships.

- The TDEngineering Team

TDEngineering Mission

Develop the Right Solution	**Work Together**	**Teach Each Other**	**Challenge Ourselves**
Providing focused expertise that evaluates and delivers solutions consistent with project and company priorities.	*Facilitating and supporting trustworthy teams that utilize effective, transparent communication.*	*Sharing the skills and knowledge with all partners that empower everyone to perform better.*	*Improving processes and standards through accountability and trust.*



About the speaker

Craig Chappell

Virtual Design and Construction Technology Specialist for TDIndustries in Dallas, Texas. He is also Chairman of TD’s Innovation Forum. The Innovation Forum's Mission is to develop a culture of innovation to expand the possibilities of the construction business through the discovery and exploration of innovative ideas and new technology. He is also an FAA licensed UAS Remote Pilot.

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Discover key aspects of innovation that lead to adoption



"INNOVATION IS NOT A BIG BREAKTHROUGH INVENTION EVERY TIME. INNOVATION IS A CONSTANT THING…COMING TO WORK EVERY DAY TO FIND A BETTER WAY."

JACK WELCH (FORMER CHAIRMAN & CEO, GENERAL ELECTRIC)



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Key Aspects of Innovation – Definition

WHAT IS INNOVATION?

ANY CHANGE THAT CREATES VALUE.



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Culture at TD – 5 Core Values

BUILD AND MAINTAIN TRUSTING RELATIONSHIPS

Be an empathetic listener. Act with fairness. Speak with honesty. Make and keep your commitments.

FIERCELY PROTECT THE SAFETY OF ALL PARTNERS

Show concern for every person. Your safety is my responsibility. Stop any unsafe work behaviors. Zero injuries for our families.

LEAD WITH A SERVANT'S HEART

Be humble and respectful. Listen to understand, not just respond. Teach, inspire and support others to be their best. Hold yourself and others accountable.

PASSIONATELY PURSUE EXCELLENCE

Hold high expectations of myself and others. Innovate and challenge the status quo. Never stop learning.

Be 100% responsible for results – No excuses.

LEAD WITH A SERVANT'S HEART

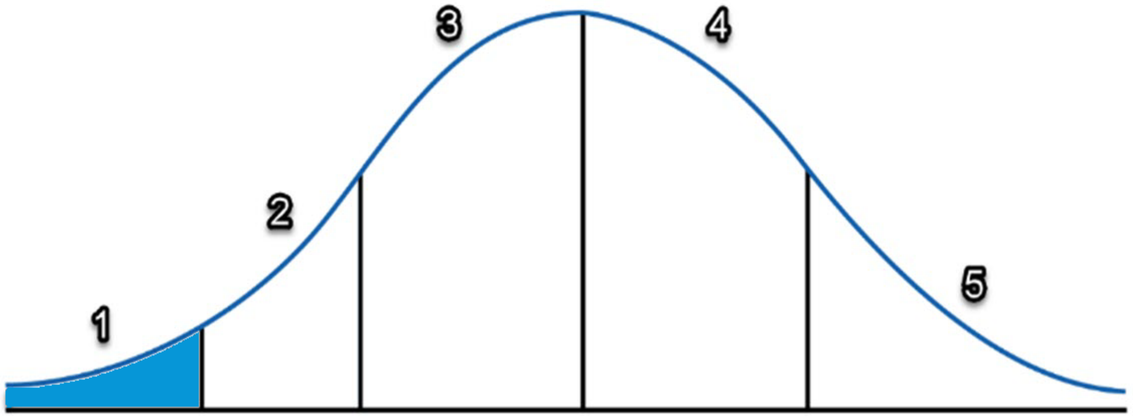
Create a culture of collaboration and inclusion. Encourage new ideas. Learn from each other's perspectives. Be grateful for each contributor. Achieve more together.

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Law of Diffusion of Innovation

Innovators (2.5%)

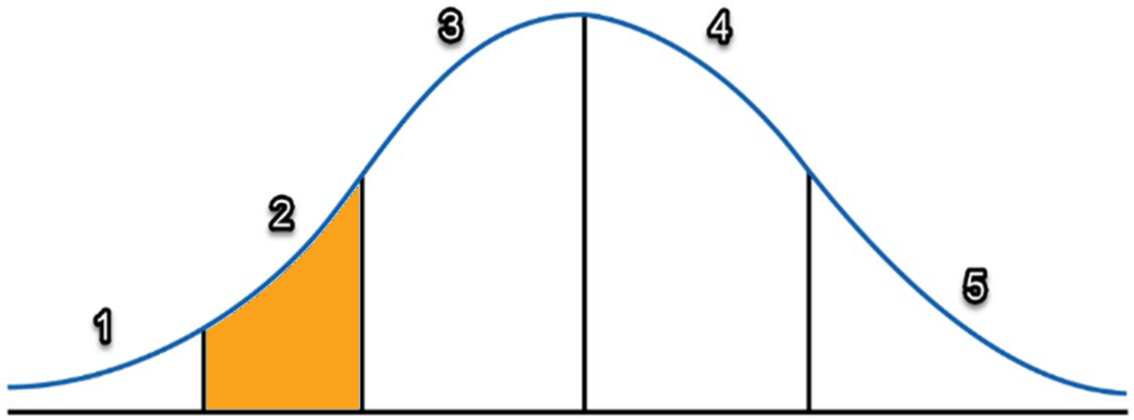
Like to be the first ones with the newest thing. More willing to take risks and try new ideas with only the hope of success in mind. They require very little to be motivated.



Law of Diffusion of Innovation

Early Adopters (13.5%)

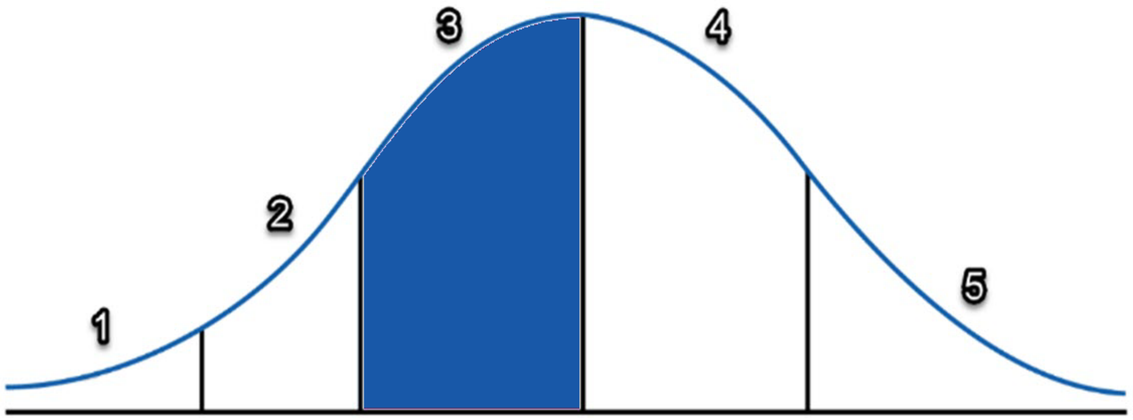
Tend to have leadership roles. Understand that change is necessary and embrace it. Comfortable using new ideas.



Law of Diffusion of Innovation

Early Majority (34%)

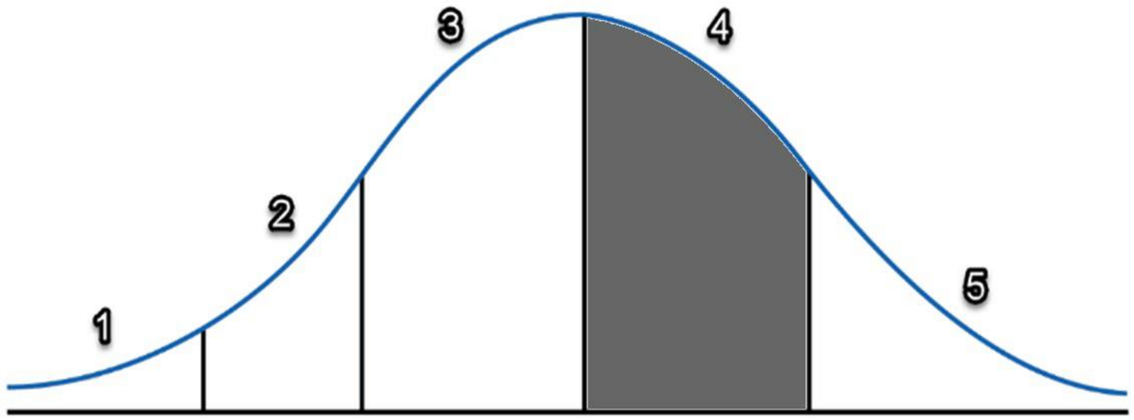
More willing to adopt a new idea than the average person but will need some form of proof before they use it.



Law of Diffusion of Innovation

Late Majority (34%)

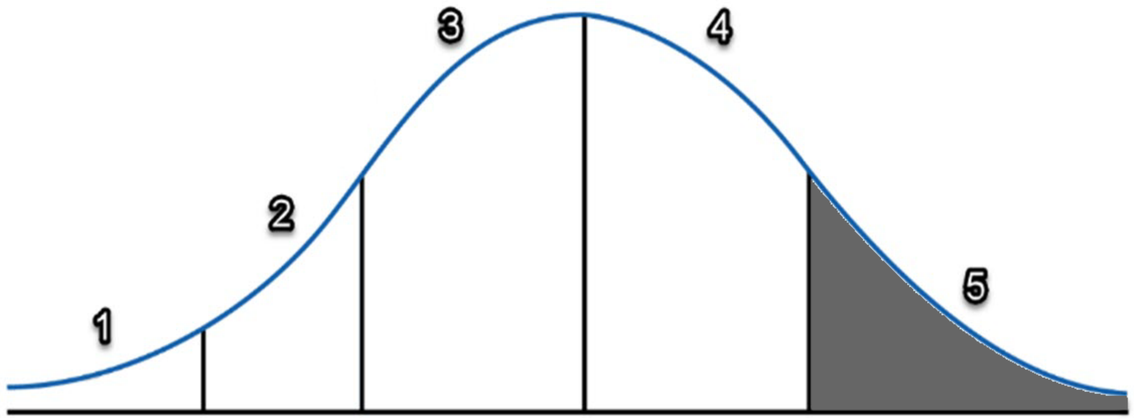
These people tend to be more skeptical of change and will not budge until a majority of the people have tried.



Law of Diffusion of Innovation

Laggards (16%)

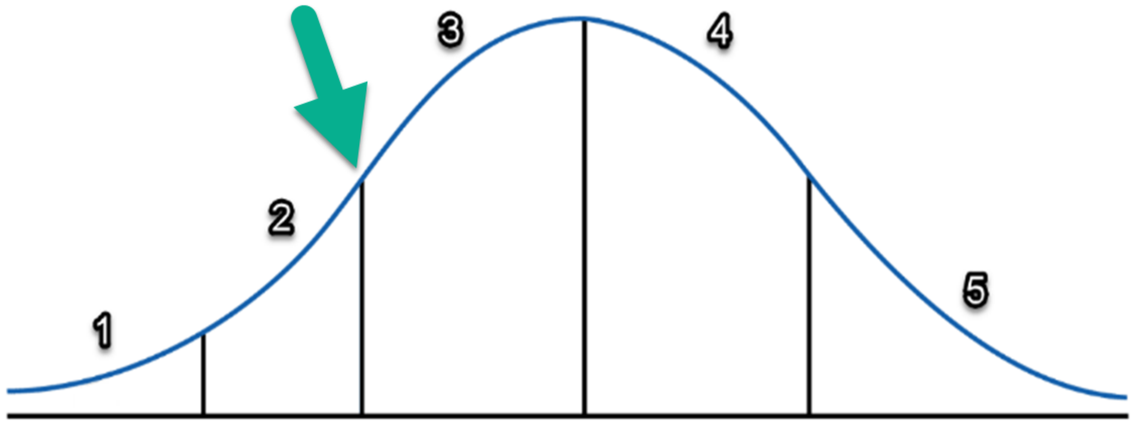
These people conform to tradition and known workflows and are not as influenced by the majority. They are the most skeptical and hardest to influence.



Law of Diffusion of Innovation

The Tipping Point / Chasm

- The point on the curve where an idea grows momentum into adoption.
- This is the critical area of adoption. It is easy for an idea to gain adoption from the first 16%.
- It is the remaining 84% that need to justify why.



Key Aspects of Innovation – Customer Discovery



Companies that do not talk to their customers will likely fail.

HONEST FEEDBACK

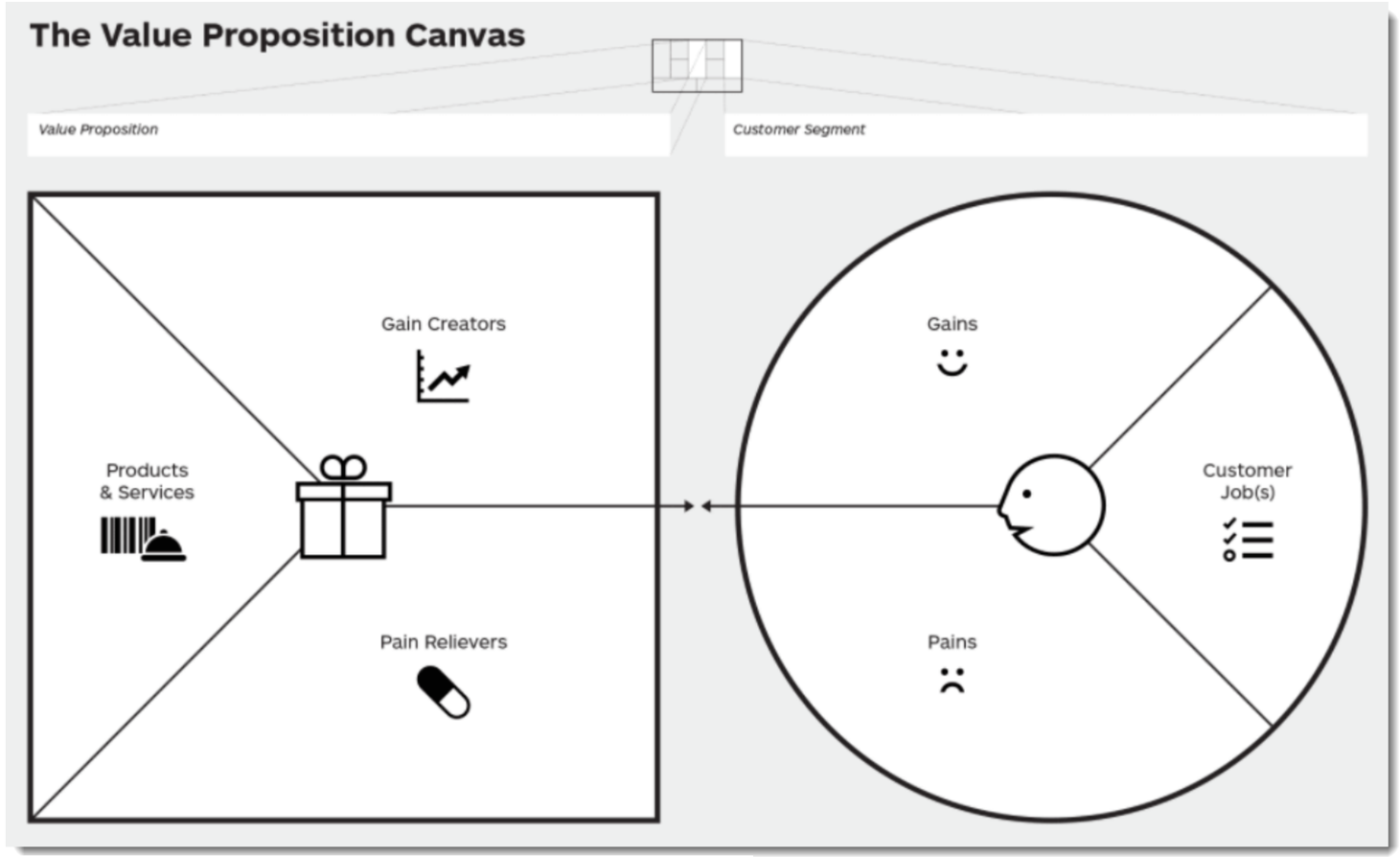
- Ask questions that seek understanding into the customer’s experiences.
- Allow the customer to talk more than you ask questions or lead the conversation.
- Dive deeper into their pains and goals to understand what is creating hurdles that prevent them from reaching their hopes.
- Seek diversity of roles and experiences when developing solutions to support customers.
- Conversations must be framed to foster honest understanding and not just the customer wishing to approve the idea.

Customer Interview Story



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Key Aspects of Innovation – Value Proposition Canvas



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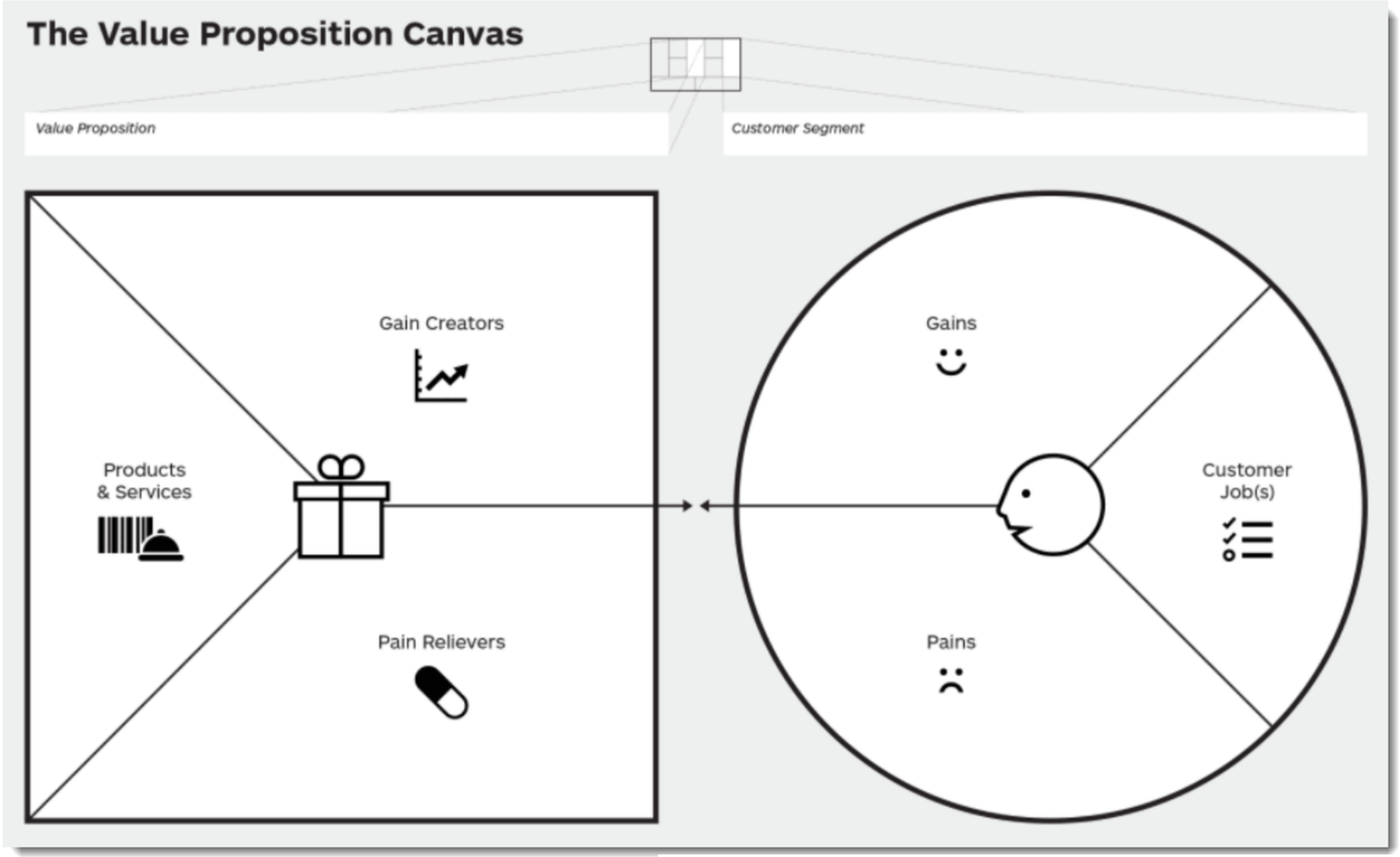
CUSTOMER SEGMENT

- Break down the client's objectives.
- The pains represent negative outcomes related to risk or hurdles.
- The gains represent what the hopeful result would be and what value would be created.

Key Aspects of Innovation – Value Proposition Canvas

VALUE PROPOSITION

- Analyze the tools in development and how they will align with the identified client needs.
- The pain relievers address how to support the identified pains of the customer.
- The gain creators relate to how the solution will directly support the hopeful result of the customer.



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3D Printing Story



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Develop a language to improve understanding among thought leaders



Develop A Language



TERMINOLOGY

- Whatever support your team gets, it is important that everyone within your team and company work to use the same terminology.
- Before any action begins, the culture and conversations need to be immersed in this use of a common language.

ALIGNING THE ORGANIZATION

- Run a campaign of media to help educate and motivate everyone inside the organization
- Cast a vision to the company showing how the Innovation Program will help the company.
- Tell stories about successes and failures from previous events that will generate thought and action for new ideas.

Create the process that guides innovators through development



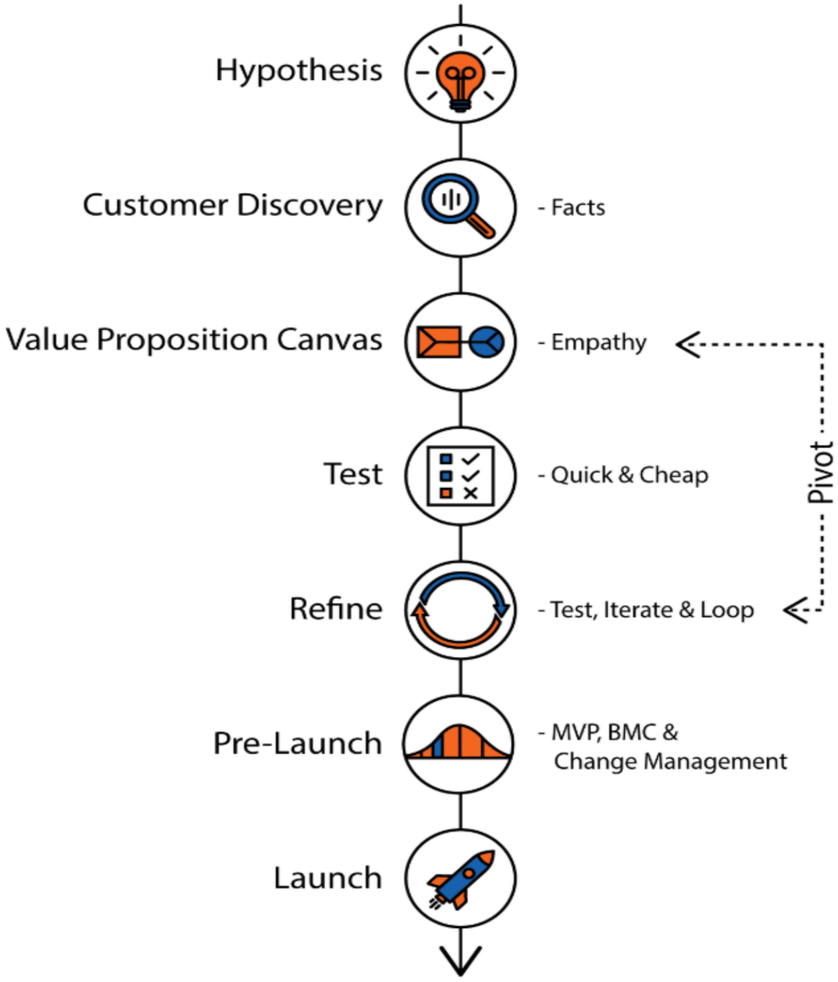
Create the process that guides innovators through development

HYPOTHESIS

Develop a statement that leads to the purpose without binding you to a solution or path.

CUSTOMER DISCOVERY

Critical to success. Ask the right questions in the right manner. Ask questions to draw out genuine feedback from your Customer. Ask open questions seeking insight into their lives and how they hope to accomplish their goals.



Create the process that guides innovators through development

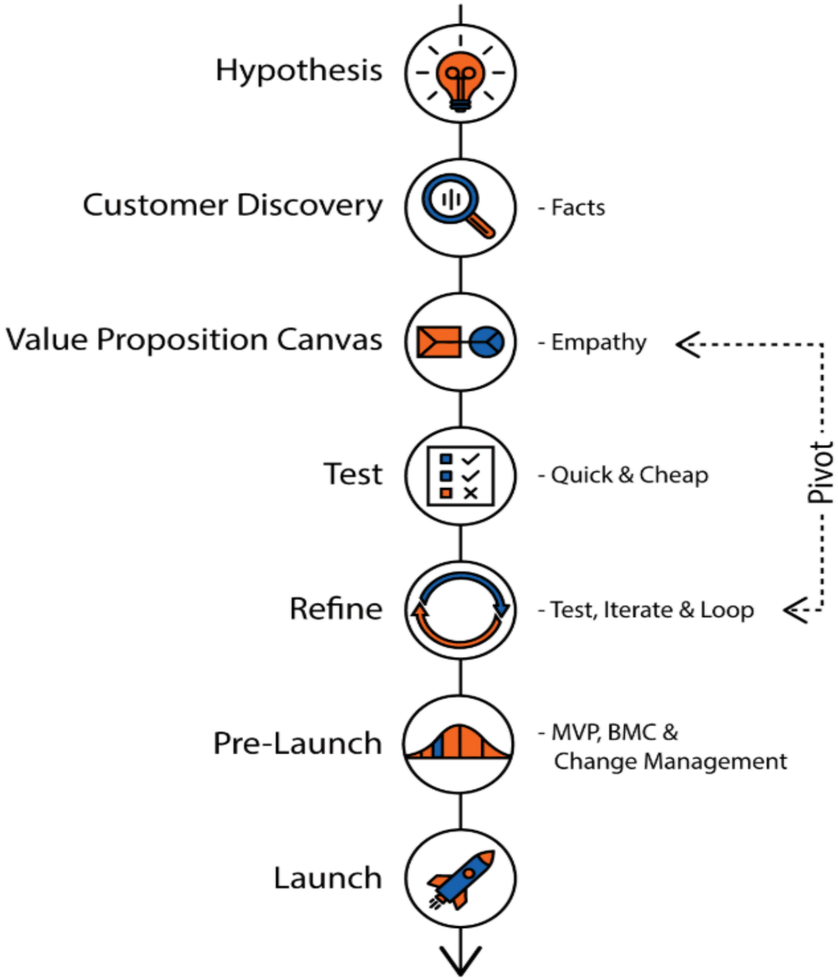
VALUE PROPOSITION CANVAS

Helps lay out the customer's pains and gains and align them with your product solution.

TEST

Test quickly and with low cost to find how effective the idea will be in action.

Don't be afraid of failure. Share what you learn from failure. Just like success can prevent us from a willingness to change, failure can prevent us from a willingness to continue trying. Take an honest look at what happened in the testing and talk about it.



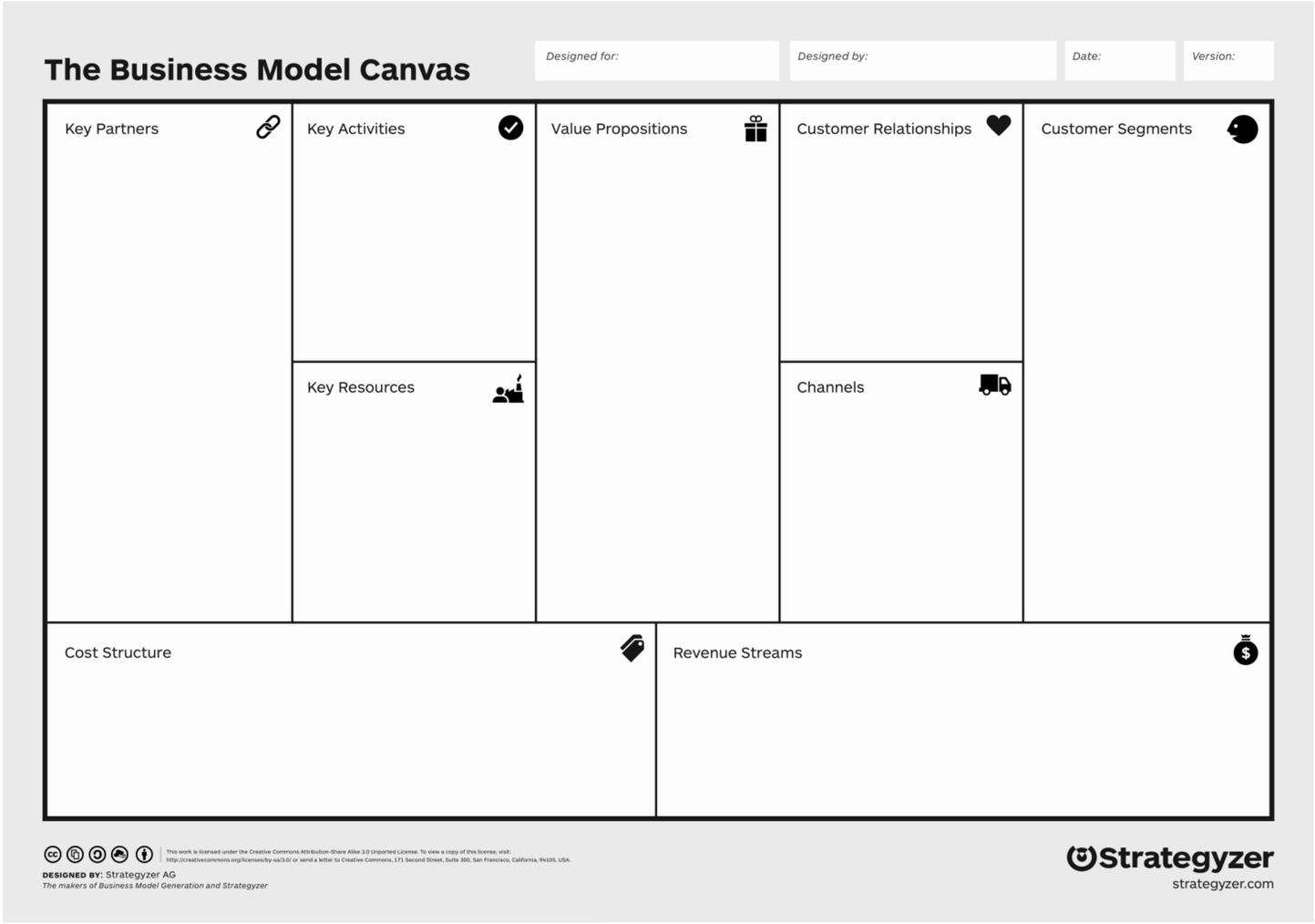
"FAILURE IS SIMPLY THE OPPORTUNITY TO BEGIN AGAIN, THIS TIME MORE INTELLIGENTLY."

HENRY FORD



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Create the process that guides innovators through development



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Exoskeleton Suit Story



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Create the process that guides innovators through development

REFINE

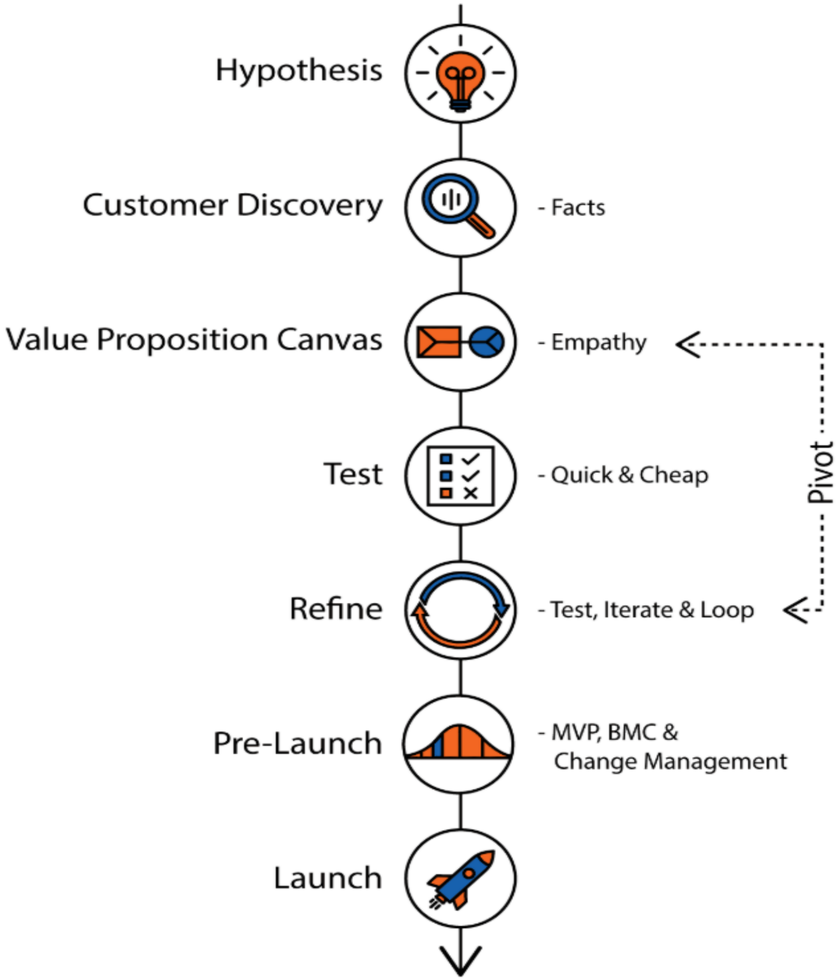
Learn from the test and refine the solution through iteration loops

PRE-LAUNCH

Evaluate the Minimum Viable Product (MVP), developing the Business Model Canvas (BMC) and determining what Change Management will be needed.

LAUNCH

Launch the product to market.



Differentiate between processes and tools



Differentiate between processes and tools

TOOL

A hammer is a tool that does nothing on its own. It is the person that defines how well that hammer is used to drive a nail. A pneumatic nail gun is a tool that makes the process of driving the nail into the board easier for the person responsible for the task. A pneumatic system is more complex, but the execution of the tool is simple.

PROCESS

Don’t overlook the quality of a process being used. Developing a better tool for a bad process, still makes the process perform bad, but maybe just a little better.

Virtual Reality Story



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Innovation Program Thoughts

WANT TO DEVELOP A PROGRAM TO DRIVE INNOVATION WITHIN YOUR COMPANY?

- What is the best solution for your company that fits in your culture?
- How will you foster a culture to create ideas?
- How will you gather ideas from colleagues?
- How will you not be a barrier or gate keeper to ideas?
- How will you communicate to the company the vision of the program?
- What stories will you tell to inspire your colleagues?
- How will you train and mentor colleagues that are brave enough to present ideas?
- How will you incentivize the participation in your program?
- Be a fast follower. Look at other companies and develop based on what is successful and fits best for your needs.

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Why is Innovation so Important?

- Innovation is essential for the growth of a company.
- Innovative companies attract innovative people to work there.
- Innovation helps a company stay competitive in their market and serve their customer better.
- Innovation helps the company’s value go up by being able to change to market needs.
- Innovation is exciting and fun!



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Questions?



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THANK YOU!

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