

The image features two thick black L-shaped brackets. One is positioned in the top-left corner, and the other is in the bottom-right corner, framing the central text.

SORTLOGIC: A STARTUP'S STORY

What is Startup Anyway?

- An organization designed to create new products and services
- Under conditions of extreme uncertainty
- Goal is to figure out the right thing to build
 - *customers want and will pay for*
 - *as quickly as possible*



BACKDROP & VISION

The IBM and AT&T Antitrust Suits : Late 60's to early 80's



70's Antitrusts open Tech World

- 1970's: AT&T Unix is bedrock of computer science in universities
 - *Linux now accounts for 95% of top 1 million domains*
 - *All tablets and phones are Unix workalikes*
- IBM is forced to unbundle Mainframe "free" applications from \$\$\$\$ hardware
 - *IBM reluctantly publishes Interfaces*
 - *IBM PC changes the world with commodity hardware*



IBM Check Processing - Big Business

- US checks in 2000: 115 million checks/day => \$157 billion/day
- The IBM fortress: CPCS application and 3890 Check Sorter
 - *Proprietary software and hardware*
- IBM3890 Check Sorter in 2000:
 - *About 8000 units across 1400 major bank centers*
 - *Purchase price \$1.5 Million*



My Vison–Open Version of IBM Platform

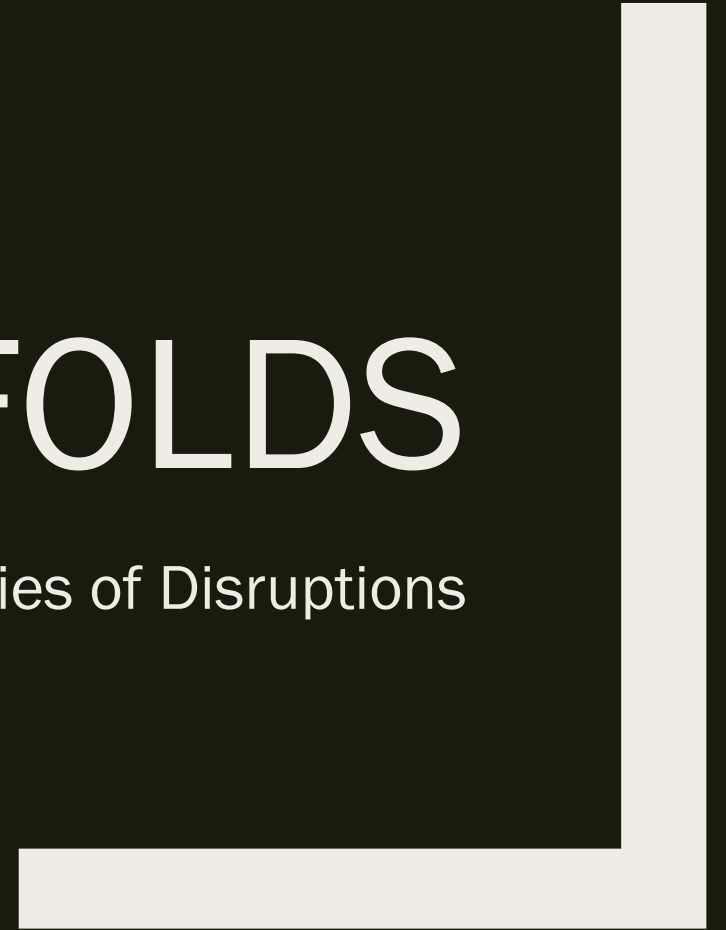
- Run on any vendor's software and hardware
 - *Scale up, scale down, no problem*
- *Easy Install, free support*
- *no training needed*

Initial Strategy – Build a MVP

- Live 180 days with minimal functionality
- Nobody was ever fired for choosing IBM: Can we beat the odds???
 - *Will operators want to use product?*
 - *Will managers trust the product?*
 - *Is it what banks want to buy?*

THE STORY UNFOLDS

A Series of Disruptions



Disruption #1 – Image Processing Arrives

- Image Archives for Checks
 - *Seen as luxury for customer for additional fee*
 - *Vaguely seen as technology of the future*
- Big Vendor Mainframe Solutions
 - *Costly upgrades to devices, applications and storage*
- SortLogic Solution
 - *Archives on Commodity Servers*
 - *Zero or minimal application changes*

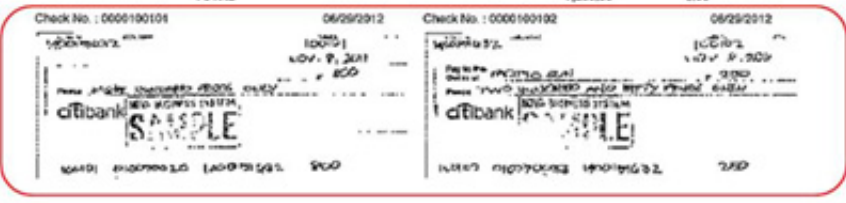
NAME-1 - QMACHCACH Page 2 of 3
Statement Period 06/01/2012 - 06/30/2012

PESO EVERYDAY BANKING 1400151632 PHP (continued)

Transactions Done

Trans Date	Value Date	Description	Reference	Withdrawal	Deposits	Balance
06/29/2012	06/29/2012	CHECK PAYMENT	0000100107	860.00		489,289.56
06/29/2012	06/29/2012	CHECK PAYMENT	0000100101	800.00		488,489.56
06/29/2012	06/29/2012	CHECK PAYMENT	0000100103	700.00		487,789.56
06/29/2012	06/29/2012	CHECK PAYMENT	0000100104	640.00		487,149.56
06/29/2012	06/29/2012	CHECK PAYMENT	0000100108	316.00		486,833.56
06/29/2012	06/29/2012	CHECK PAYMENT	0000100106	270.00		486,563.56
06/29/2012	06/29/2012	CHECK PAYMENT	0000100102	250.00		486,313.56
06/30/2012		CLOSING BALANCE				486,313.56
TOTAL				7,266.00	0.00	

Check No. : 0000100101 06/29/2012 Check No. : 0000100102 06/29/2012



Disruption #2 – 9/11

-Check 21 Laws



- US Financial Heart stopped beating for 3 days
 - *Paper Checks do not have to be sent back to originator*
- Overnight, Image Processing has a compelling business case
 - *Federal Reserve Bank, 1/3 of all traffic, majority of transit*
 - *Unisys and IBM hope for \$500 million windfall sales*
- **SortLogic adopted system wide by Federal Reserve Bank**
 - *FRB chooses SortLogic for 90% savings*
 - ***Nobody was ever fired for choosing IBM: Yes, We beat it!!!***

Disruption #3 – Virtual Applications

- SortLogic: Paperless Reject Repair – Industry standard
 - *95% require no operator intervention*
 - *Remaining 5% require no paper, minimal keying*
- SortLogic: Virtual Entry
 - *Aggregation from checkout/back office devices*
- Over half of our sales are virtual products



Disruption #4 –The Industry engineers its own disappearance

- 90% of capacity unneeded without returning paper to originator
- Shoebox readers and file transfers displace big check sorters
- Federal Reserve Bank ceases paper check operations 2013, others follow

- In US, Big Iron Check Sorters
 - 2004: 8400
 - 2018: 10



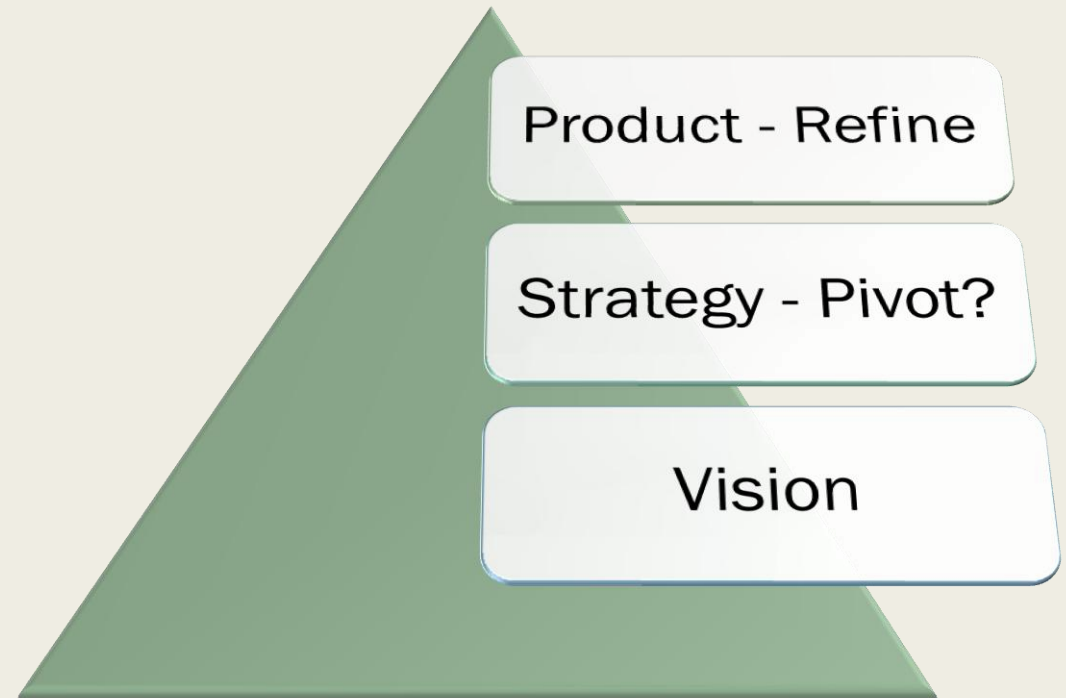
SCIENCE OF A STARTUP

Retrospections and learning from “The Lean Startup” by Eric Ries



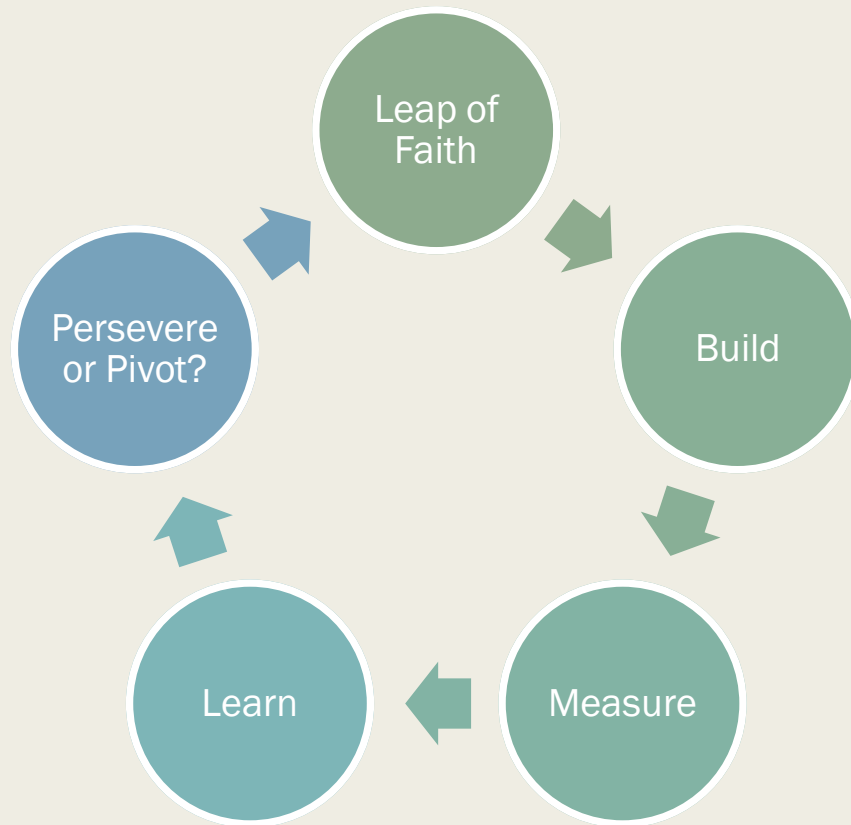
It takes a Vision -a Disruptive Idea

- A New product or service
- A twist that unlocks hidden value
- Repurposing existing product
- Delivering the familiar in a new way



Build, Measure and Learn Cycle

-Persevere or Pivot?



- Strategy may pivot completely based on Learning
- Product may start over based on Strategy
- Success - Do we know what to build?

Customers can't tell you what they want—
Experiments tell you what they do!

What's your Engine of Growth?

- **Sticky Engine – *Customer Retention***
 - *Continuing to Delight existing customers*
- **Viral Engine – *Customer Referrals***
 - *Existing customers attract new customers*
- **Paid Engine – *Customer Purchase***
 - *Advertising and marketing*

- ***Pick your Engine(s) and Experiment/Measure***



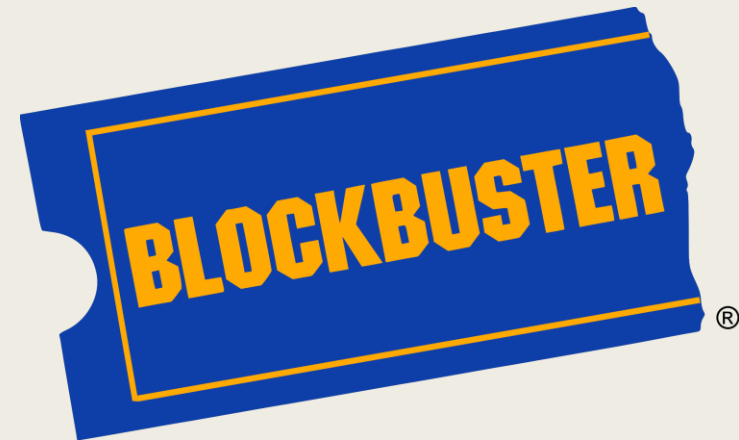
Who gets a share of the Pie?

- Your % share of the equity equal to your share of at-risk contributions. (non-compensated)
 - 1 slice = 1 normalized at-risk contribution
- Cash Contributions
 - *VC, Angel, Crowd funding*
- Non-Cash Contributions
 - *time, ideas, relationships, supplies, equipment, facilities*



Can Big Companies be Startups?

- Remember: Extreme Uncertainty? What does customer wants? Will pay for?
- Google. Facebook. Taco Bell. Intuit. All are still *Startups*
 - *New ideas. Low fidelity experiments, does customer want it?*
- Has a disruptive idea made your big company a Startup?



References

- “The Lean Startup”, Eric Reis, 2011
- “Slicing Pie”, Mike Moyer, 2016