

# Producing More With Less: A Case Study

**Dramatic Improvements**  
**Customer Focused**  
**Empowerment**  
**Responsive**  
**Execution**  
**TQL/TQM**  
**Team**  
**Efficient**  
**Contribution**  
**Market Driven**  
**Result Oriented**  
**Concurrent Engineering**

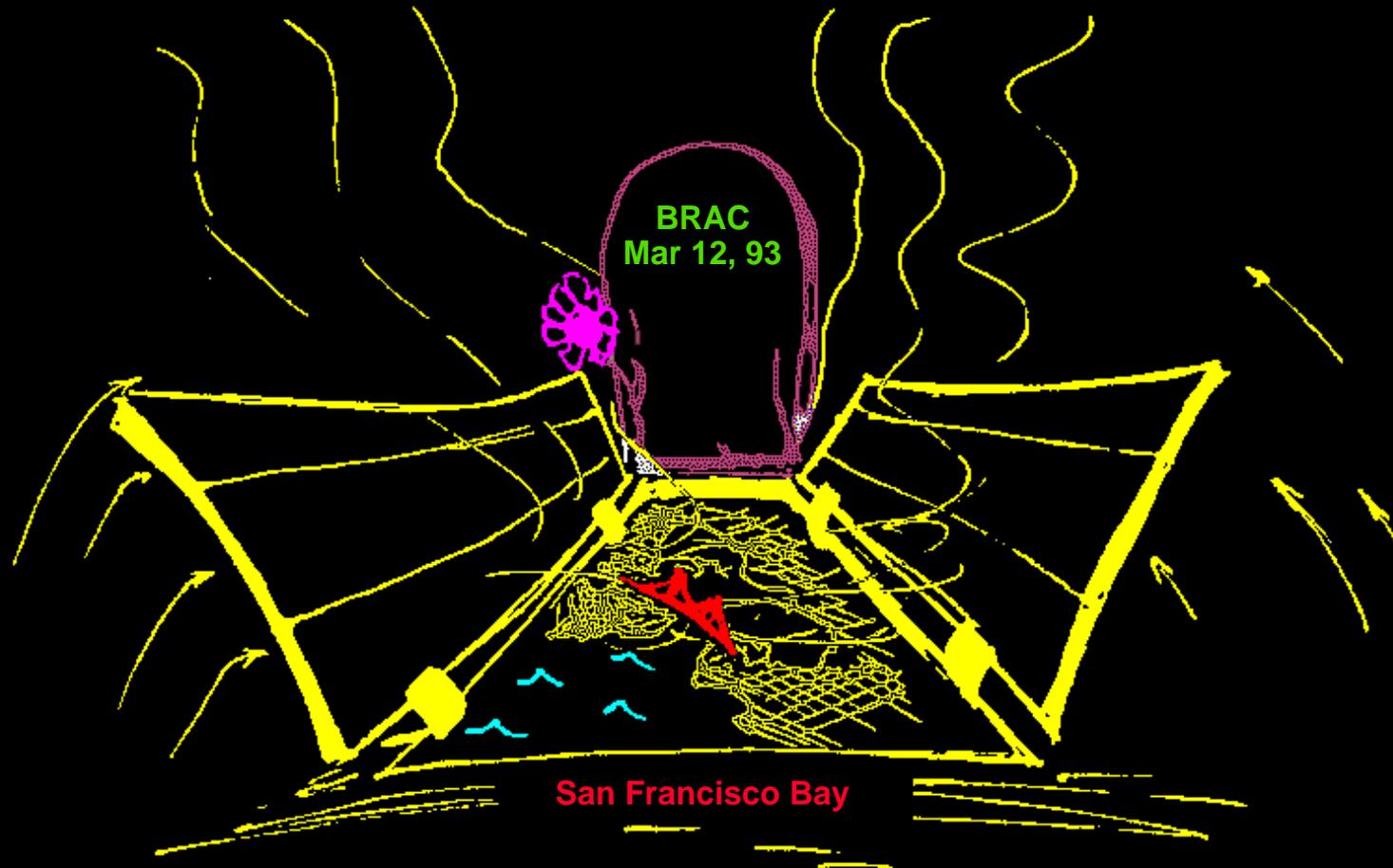


- Centralized/Decentralized
- Reengineering
- Performance
- Break-even
- Synergistic
- Adaptive
- Flexible
- Innovative
- Competitive
- Value-Added
- Rule Breaking
- Information Technology

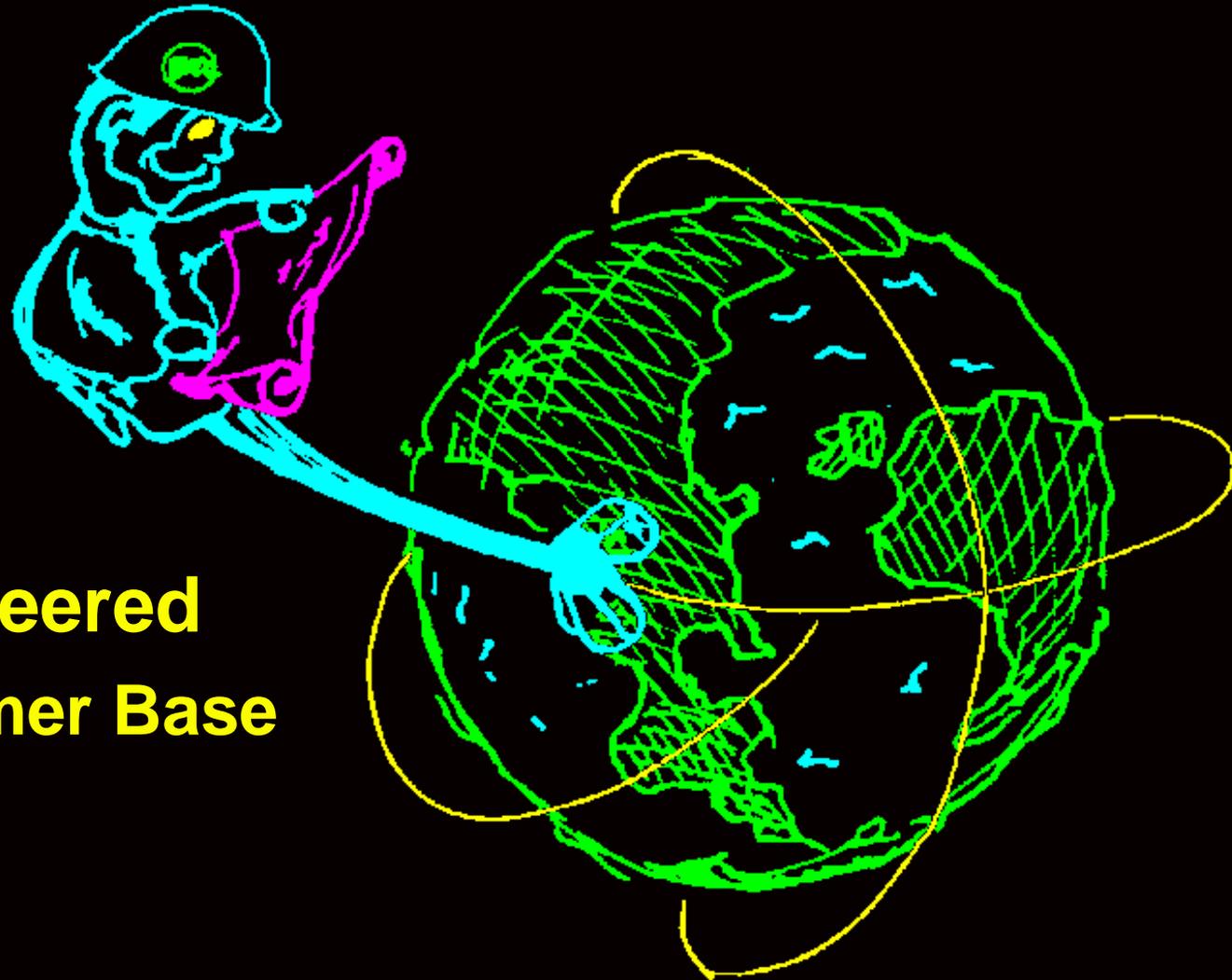
**Engineering Group**

# What Happened ?

Engineering Design Workload Evaporated

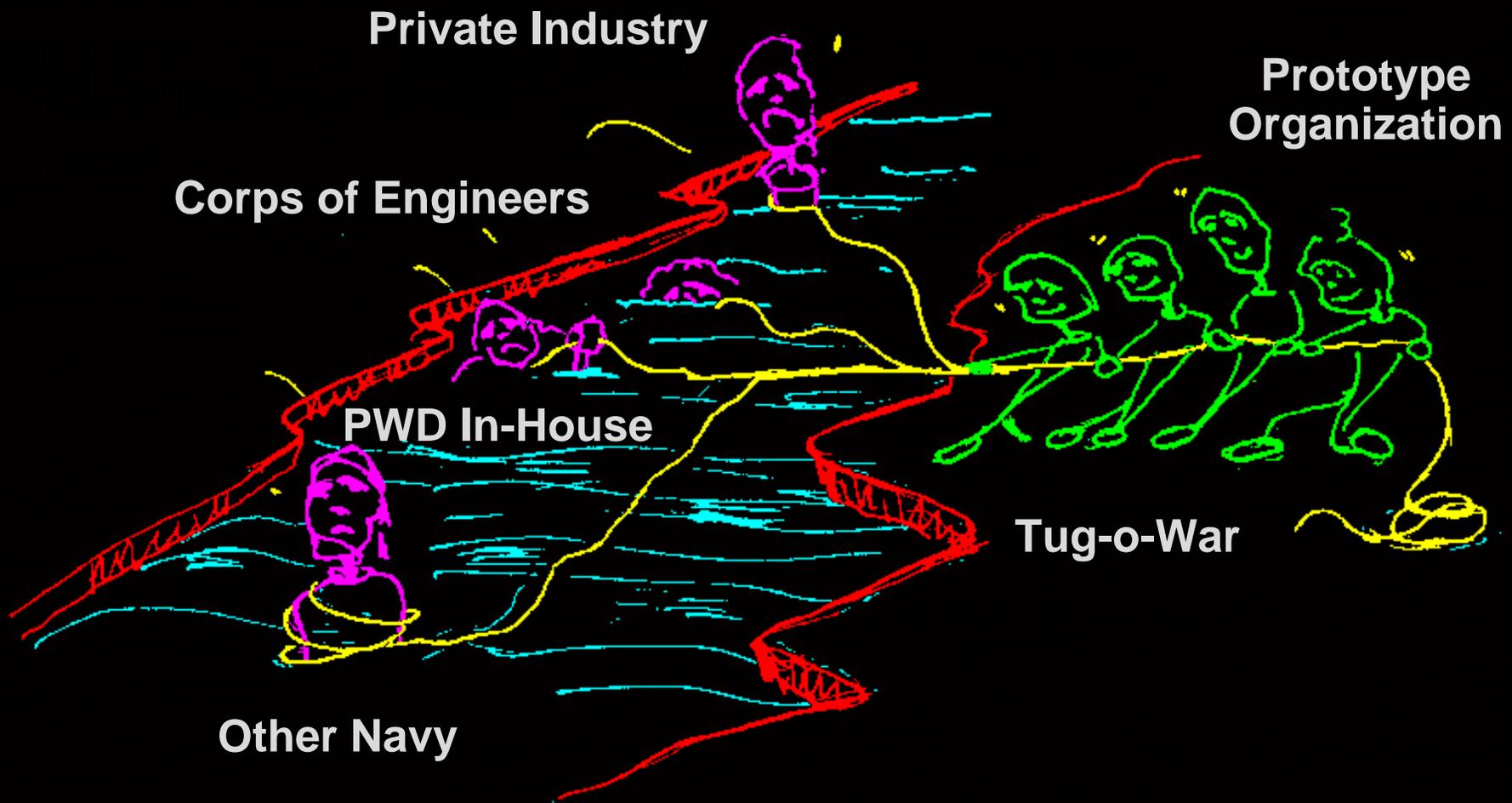


# The World is Our Territory

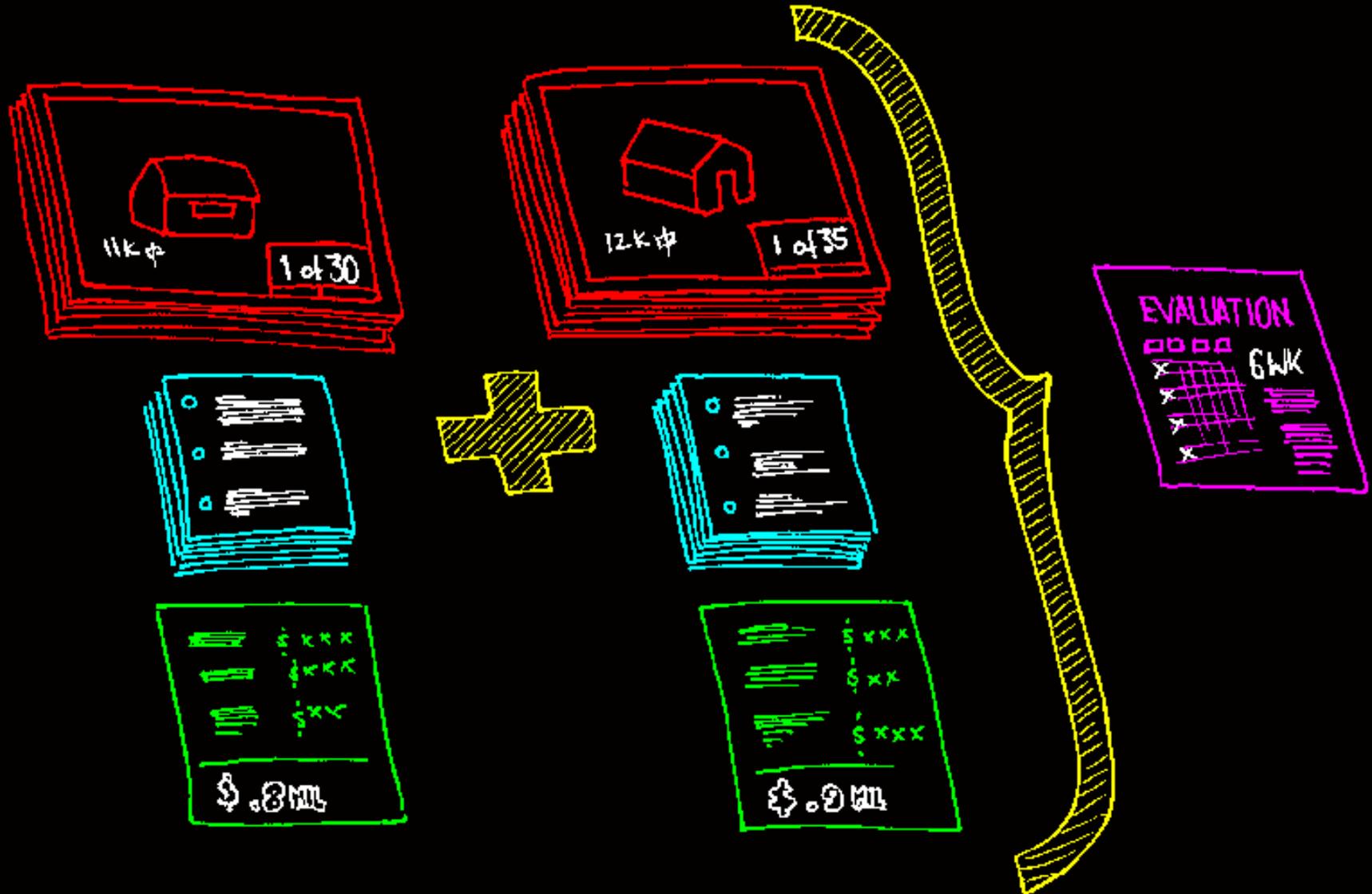


**Reengineered  
Customer Base**

# Business Competition



# Fast In-House Execution



# New Customers

## Outside California:

Puget Sound NSY, WA  
NUWC Keyport, WA  
NAVHOSP Keyport, WA  
NAS Fallon, NV  
MCAS YUMA, AZ  
PWC Norfolk, VA  
PWC Det. Philadelphia



**CHARTERED/TRADITIONAL  
CUSTOMERS**

**(10% Work Load)**

# Results After One Year

- **Highest work volume**
- **Highest productivity**
- **Self-sustaining**
- **High morale**

# Engineering Vision

“Customers Come to Us  
Because of Our Excellence”

*Richard Lumb*  
*Harry P. Sisson*  
*Ernest Johnson*  
*Alfred W. [unclear]*  
*Michael [unclear]*  
*Dr. [unclear]*  
**TED BROCK**  
*THIS YEAR*  
*Ramon S. Calera*  
*George W. [unclear]*  
*William [unclear]*  
**Edgar [unclear]**  
*Ruth [unclear]*  
*John [unclear]*  
*Robert [unclear]*  
*Milton [unclear]*  
*Orlin [unclear]*  
*Larry S. [unclear]*

*Benjamin A. [unclear]*  
*David V. [unclear]*  
*Spencer [unclear]*  
*Langley [unclear]*  
*Joseph [unclear]*  
*Kanapany [unclear]*  
*Katherine [unclear]*  
*Maria [unclear]*  
*Hed [unclear]*  
*J. S. [unclear]*  
*Heather [unclear]*  
*Connie P. [unclear]*  
*James [unclear]*  
*William [unclear]*  
*Willy [unclear]*  
*Nicholas P. [unclear]*

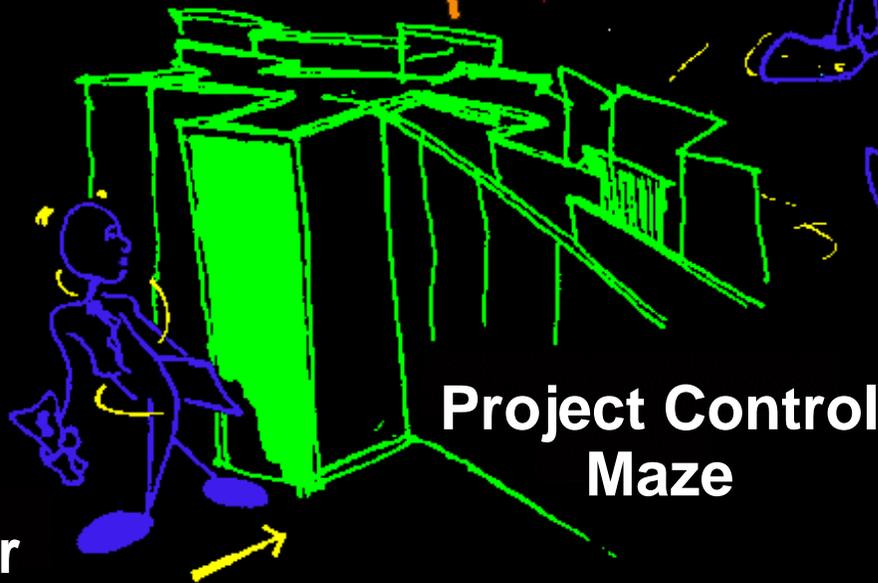
*Leo [unclear]*  
**BEN S PEREZ**  
*Loiza C. [unclear]*  
*Victor [unclear]*  
*Figueroa [unclear]*  
*E. A. [unclear]*  
*Don [unclear]*  
**Raymond Y. Lee**  
*James E. [unclear]*  
*Ally [unclear]*  
*M. Jane [unclear]*  
*Elizabeth [unclear]*  
*Ed [unclear]*  
*Benjamin [unclear]*  
*P. [unclear]*  
*Frank [unclear]*  
*William [unclear]*  
*Aluna [unclear]*  
*Alvin [unclear]*

# Traditional Workflow

**Supervisor  
Assigns/Reviews**



**De-motivated  
Workers**



**Customer**

**Project Control  
Maze**

# Reengineered Leadership Process

- **Empowerment**
  - responsibilities to the lowest level
  - supervisors to lead, motivate, coach, mediate & support
- **Volunteerism**
  - all are “general engineers”
  - be the best one can be
- **Accountability**
  - everybody depends on everybody
  - increase individual competency

# Project Managers

## PROJECT MGRS      CUSTOMER/PROJECT TYPES

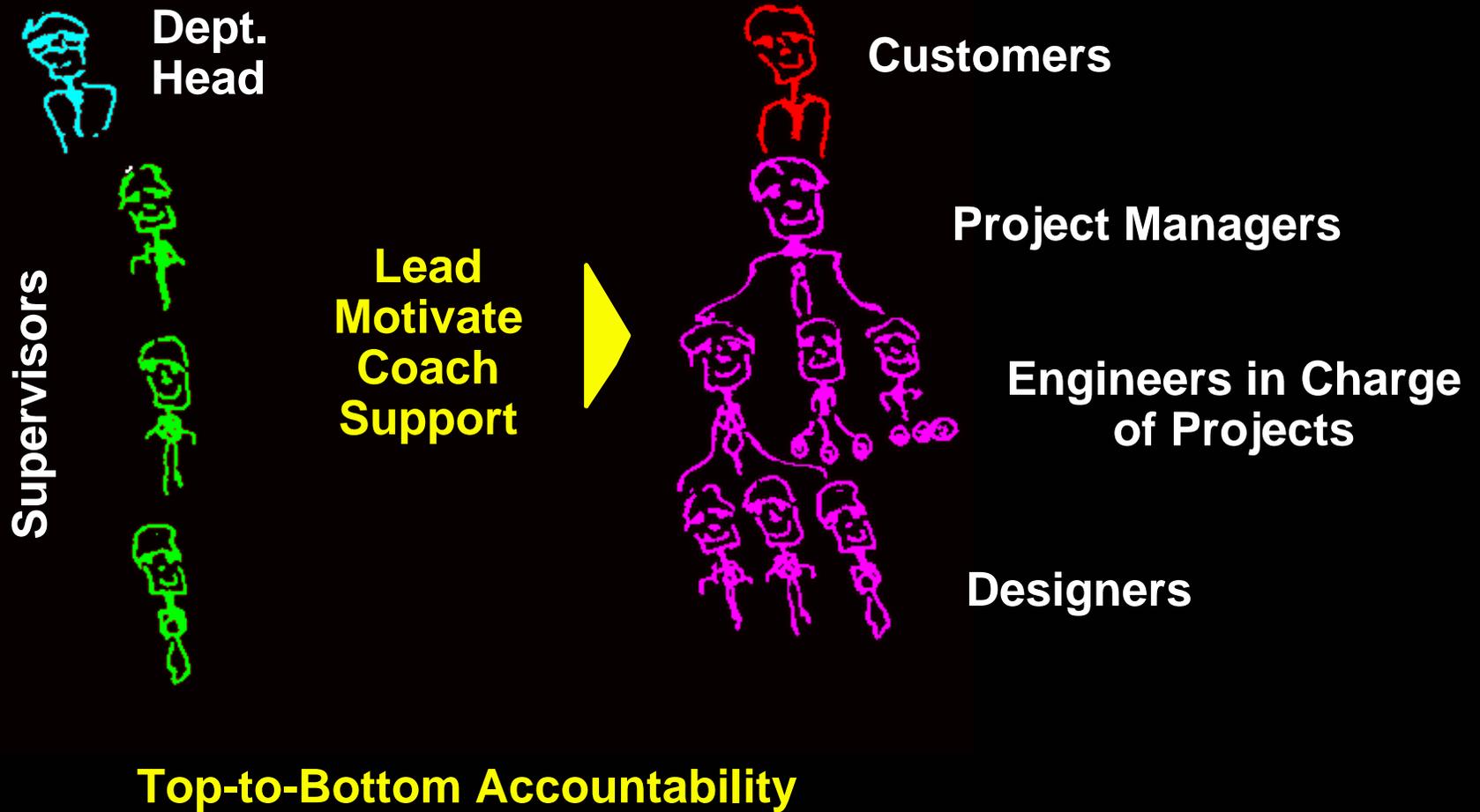
<b>Victor Austria</b>	Nellis AFB, NV
<b>Philip Azcuna</b>	MINSY WESTDIV (Facilities) Hamilton (Non-HSG) USCG
<b>Bill Gin</b>	Treasure Island Oakland Army Base NAS Fallon, NV
<b>Ted Jeong</b>	Travis AFB
<b>Kathy Johnescu</b>	McClellan AFB NAVWEAPSTA Concord NADEP HUD
<b>Chris Lee</b>	GGNRA NAVCOMSTA Stockton NAS Alameda Port Hueneme NCBC

<b>Al Lum</b>	FISC (Formerly NSCO) NAS Lemoore
<b>Larry Miloslavsky</b>	Monterey PG School Army Reserve
<b>Tom Moreno</b>	Point Molate Moffett Field NAVHOSP Oakland Onizuka AFB DRMS
<b>Ben Pease</b>	MCAS Yuma, AZ
<b>Jose Reyes</b>	PWCSFB Housing WESTDIV (BRAC Proj) Planning Projects
<b>Ed Wong</b>	Vandenberg AFB Pt. Mugu NAWC
<b>Ben Perez</b> <b>Ken Wu</b>	Lead/Asbestos Proj Environmental Proj NAS Whidbey Island

# “Matrix” Operation

		PT. MUGU					TRAVIS AFB					NAS LEMOORE				
		PROJECT A	B	C	D	E	PROJECT A	B	C	D	E	PROJECT A	B	C	D	E
Code 410				D												
									D							
Code 421				D												
	ED WONG			PM					PM EIC				PM EIC D			
Code 422																
				EIC												
									D							

# Accountability



# Voluntary Project Team



# Three Fixes

Customer's  
Paper Work

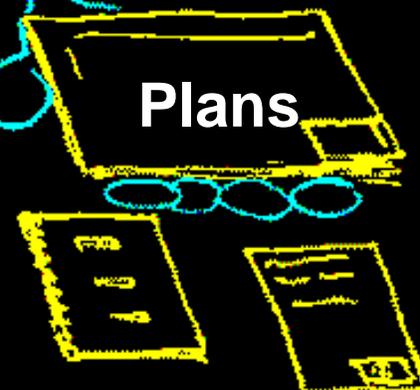


Concentrate on  
Project Execution



Fixed: Scope, Price & Time

Plans

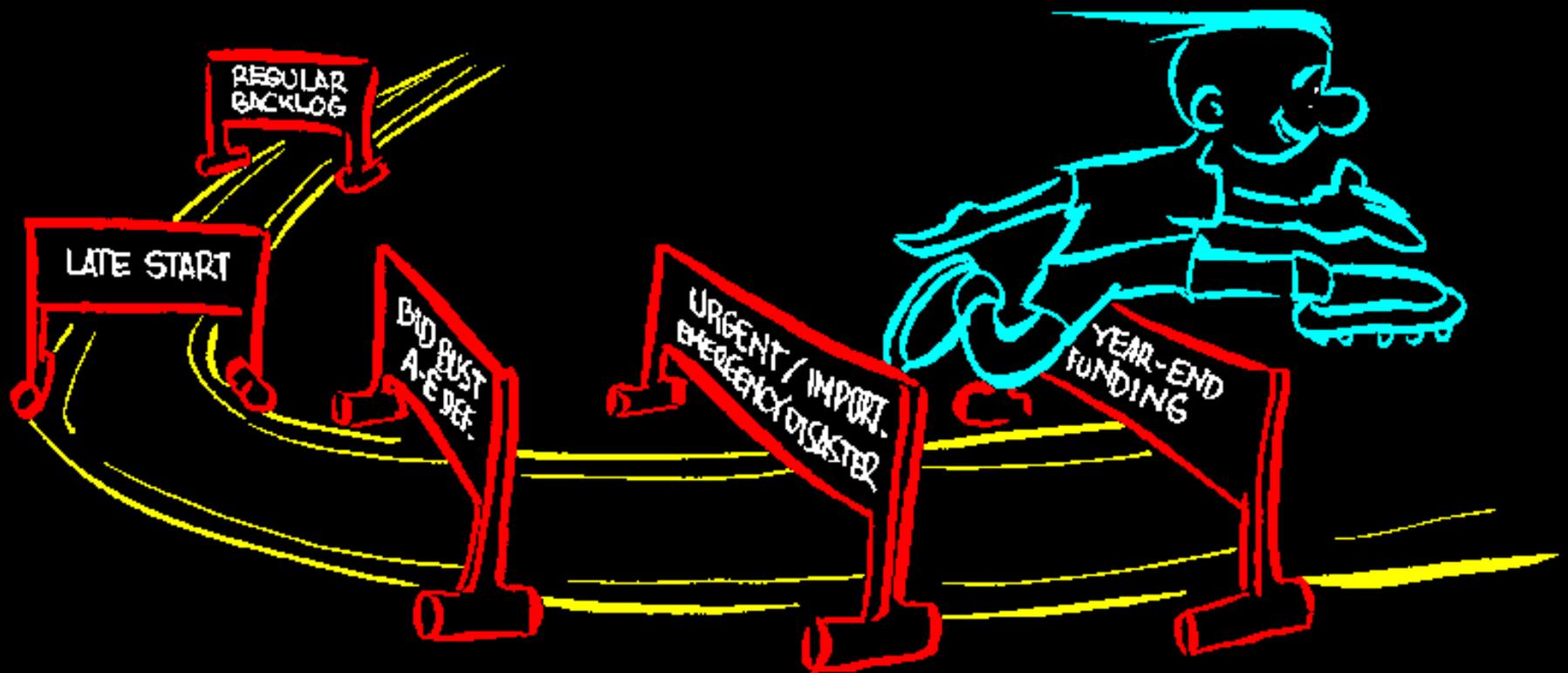


Spec

Cost



# In-House Design to Solve Customers' Problems



**Executing  
The Customer's Work  
Is  
Our Top Priority !!**

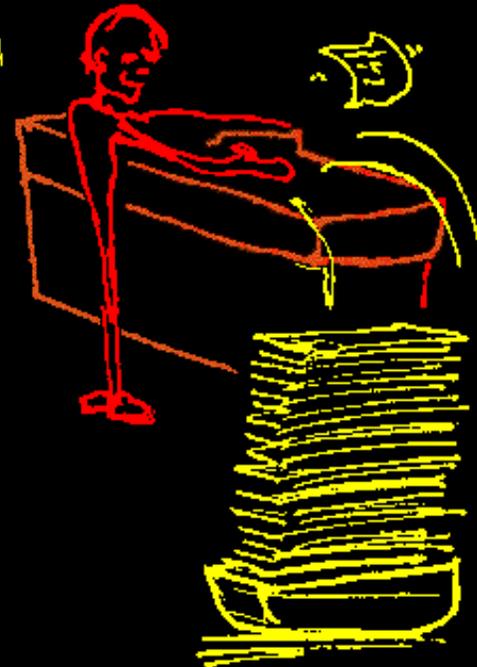
# Healthy Internal Competition

Name Appears on  
White Board



Worker w/o  
Customer-Paid Project

Do "Any"  
Productive Work



# Volunteer Task Coordinators

## TECHNICAL

**Asphalt:**

**Construction Details :**

**Cost Estimating :**

**Interior Design:**

**Landscape:**

**Roofing:**

**Seismic:**

**Alex Villacorta**

**Tom Moreno**

**Philip Azcuna**

**Connie Vega**

**Janet Tai**

**Ted Jeong**

**Ted Brock**

## ADMINISTRATIVE

**Awards :**

**Copier Repair:**

**Earthquake Preparedness :**

**Office Automation/Windows :**

**Publication/Subscription:**

**Safety/Security:**

**Social Events :**

**Ralph Salumbides**

**Ben Pease**

**Bill Gin**

**Marie Fong**

**Jane Ropiak**

**Tom Moreno**

**Willy Borje**

**Lolita Cuevas**

# “Non-Stop” Line of Succession

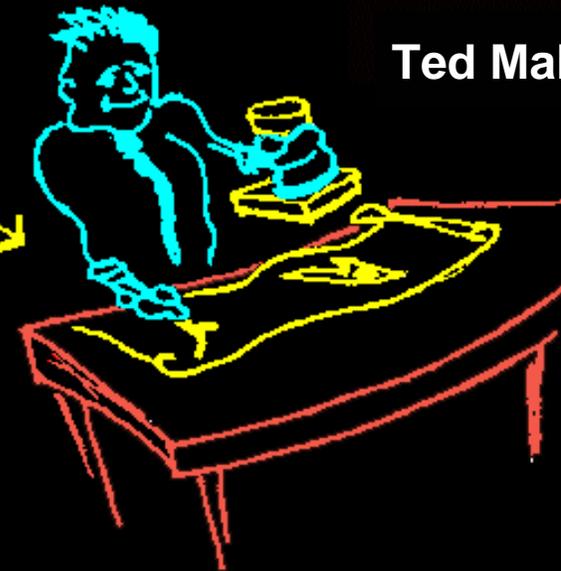
Group Director  
Travel in DC



Kathy at Job Site



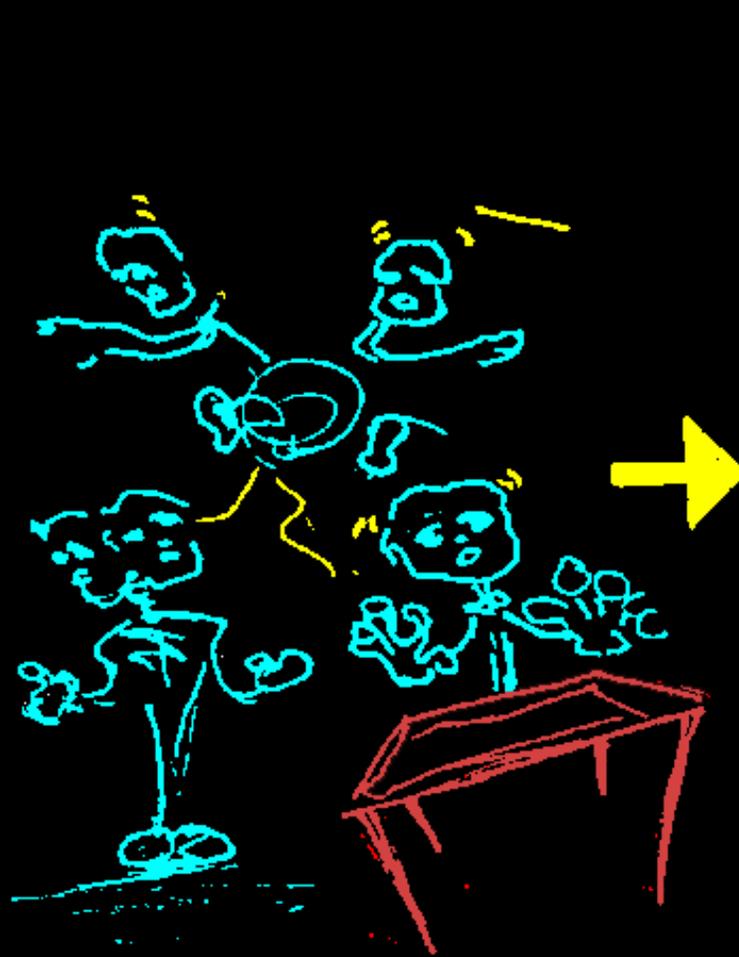
Ted Make Decision



Ralph w/ Customer



# Reengineered Mentality



**Working Hard (Presumed)**



**Working Smart (Pursued)**

**CAD  
Network  
Digital Photo**

# Reengineered Organization

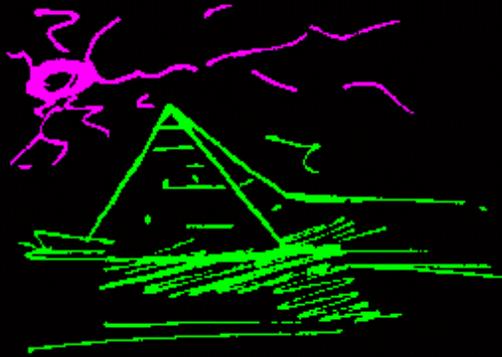


**Cut Layers of Mgmt.  
& Overhead**

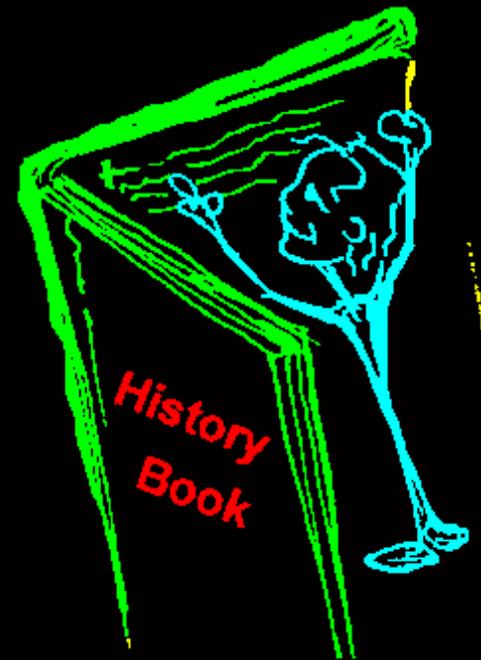
**Entrepreneurial &  
Self-Sustaining**

# Noble Goal

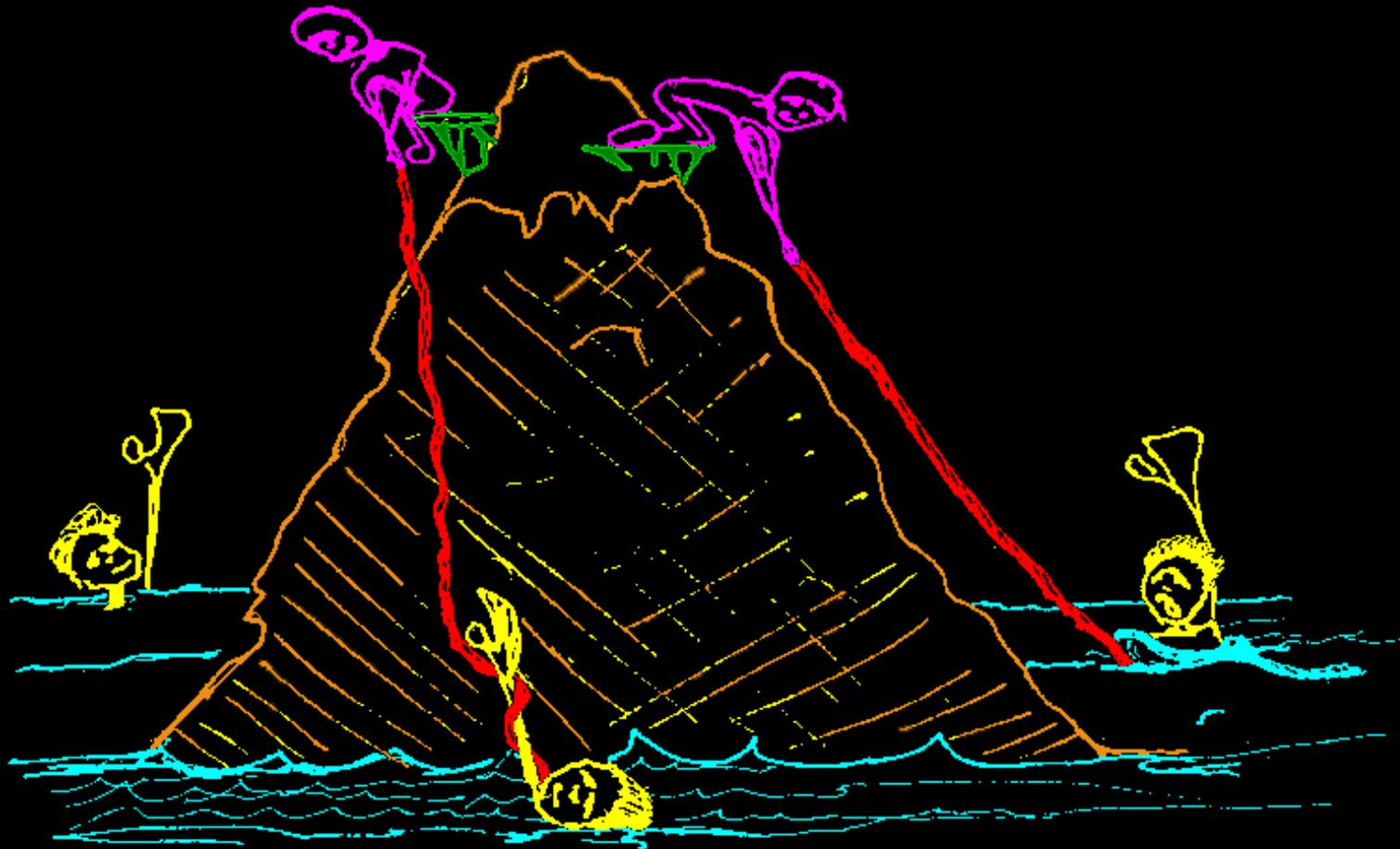
The Big Bang!



**Best In-House  
Eng. Design  
in Navy**



# Re-Inventing Government Prototype

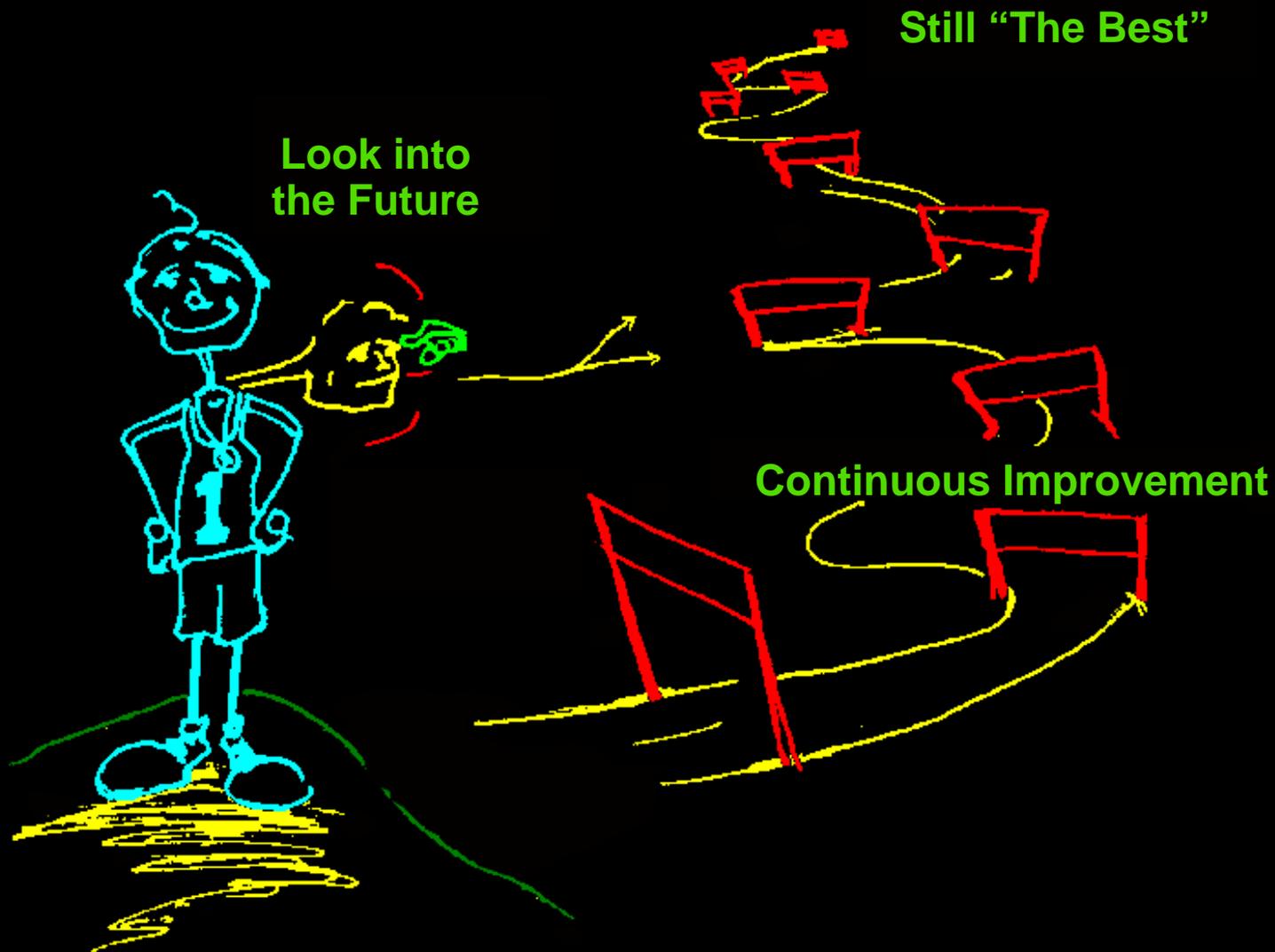


**Other Federal Government**

# Upbeat Engineering Group



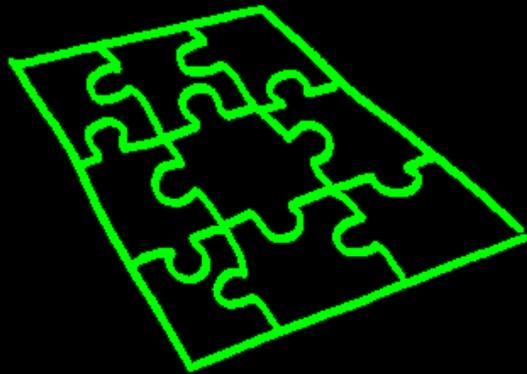
# Continuous Challenge



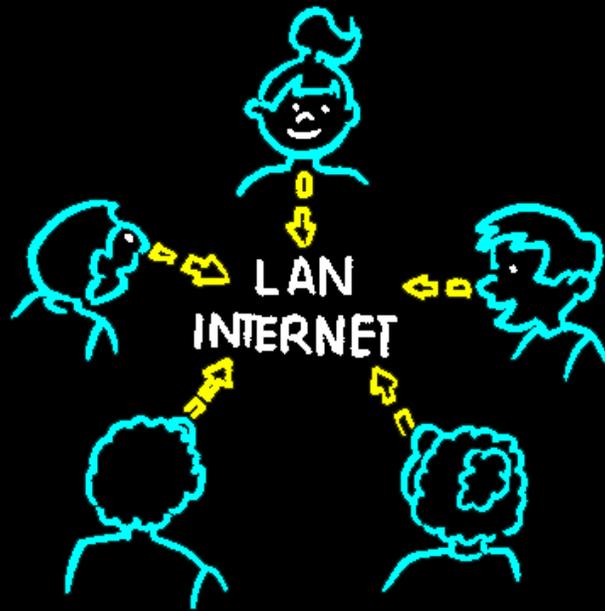
**Next .....**

**Reengineer  
the Workflow Process**

# Information Sharing



COMPLETE



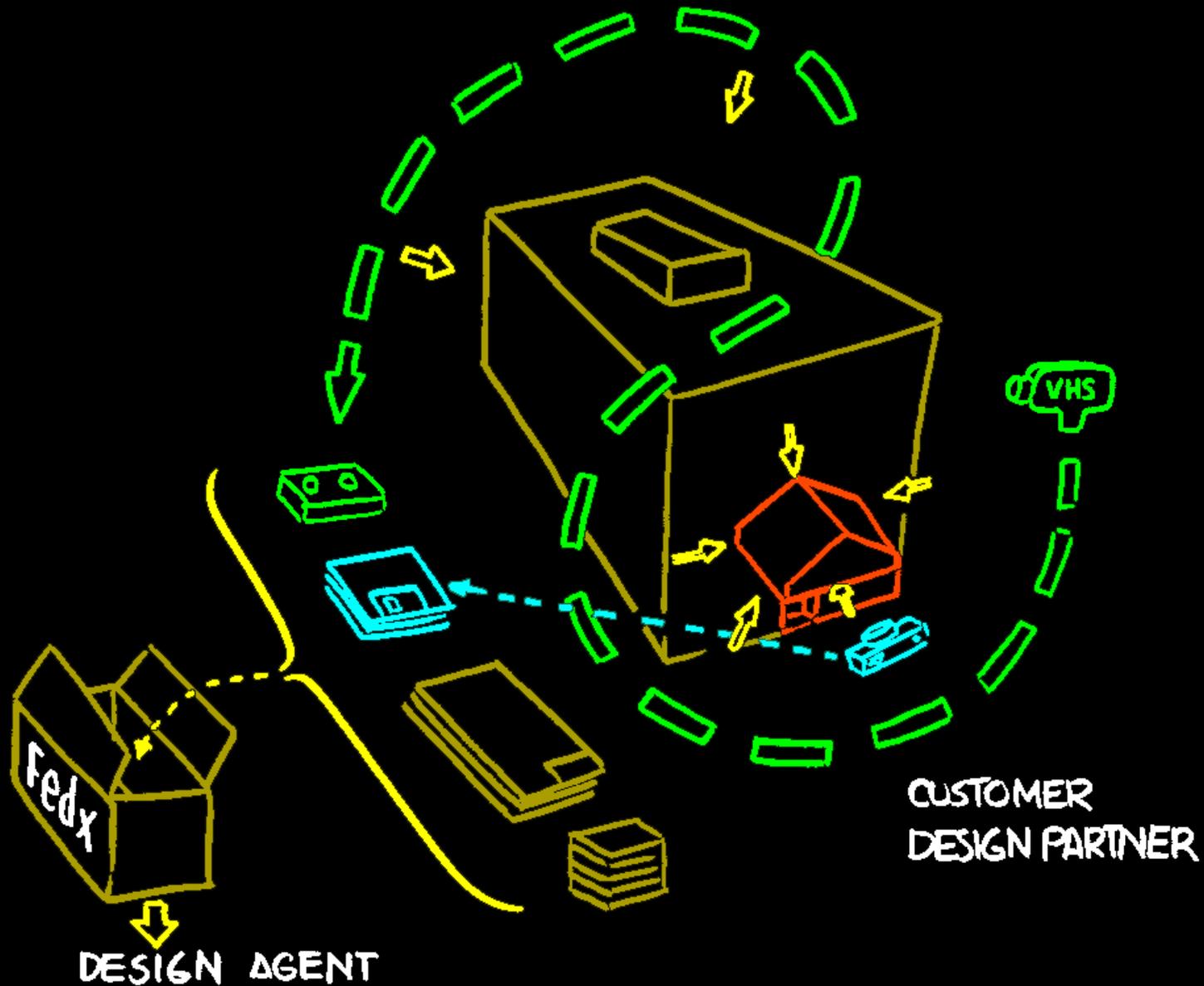
OPEN



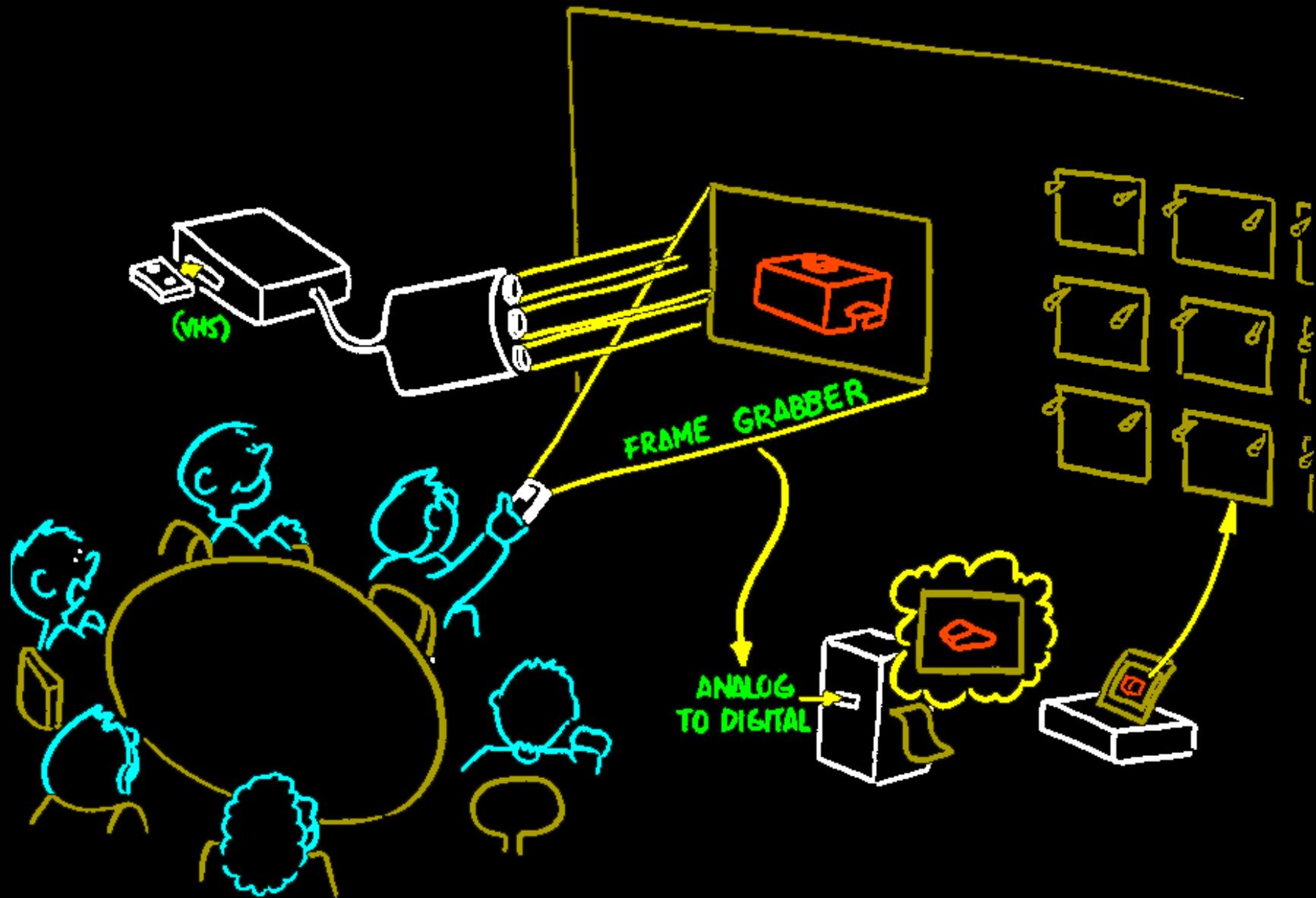
INSTANTANEOUS

# Remote Design:

## Remote Eyes & Ears



# Remote Design: Multimedia Room

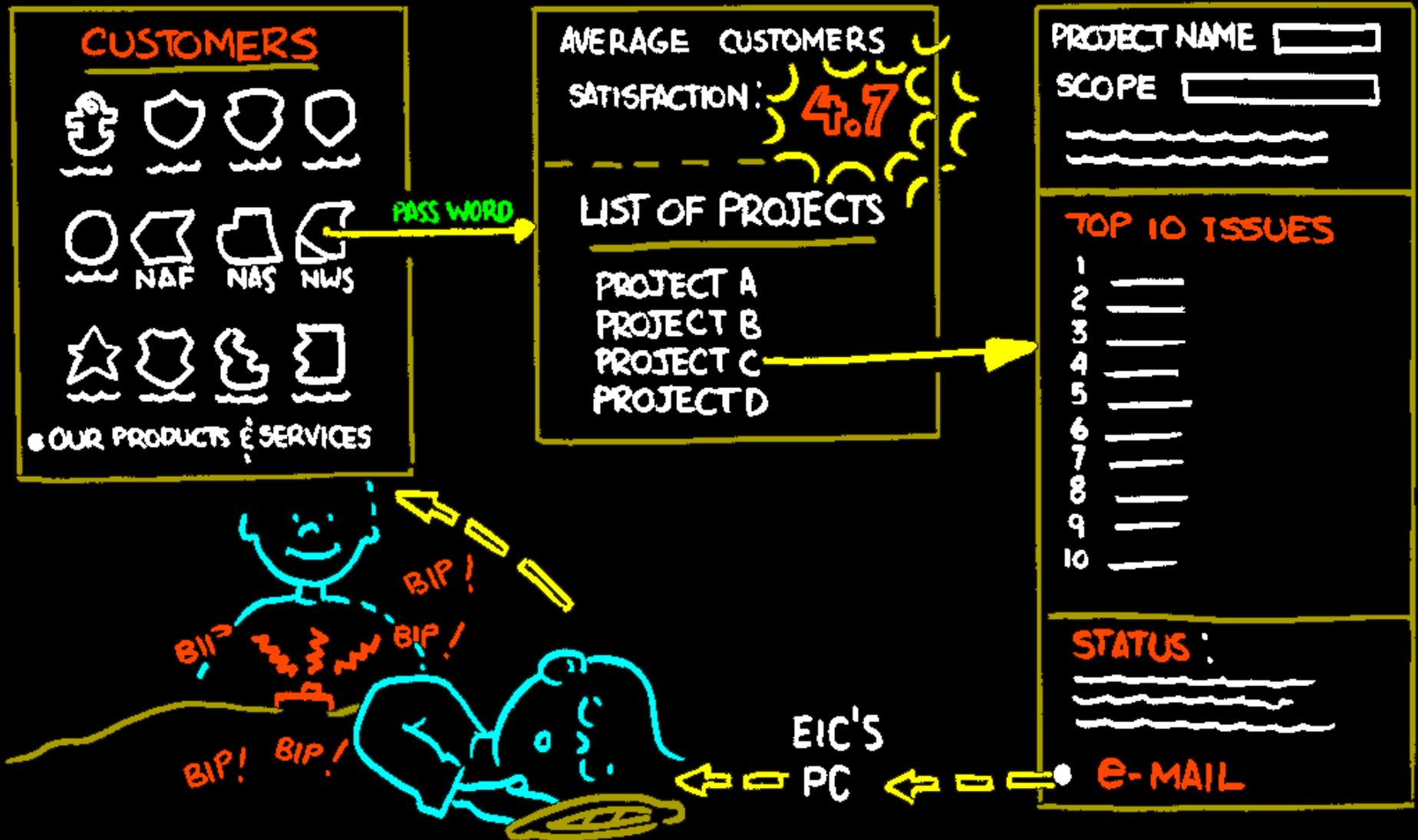


# Remote Design: Collaborative Drawing & Writing

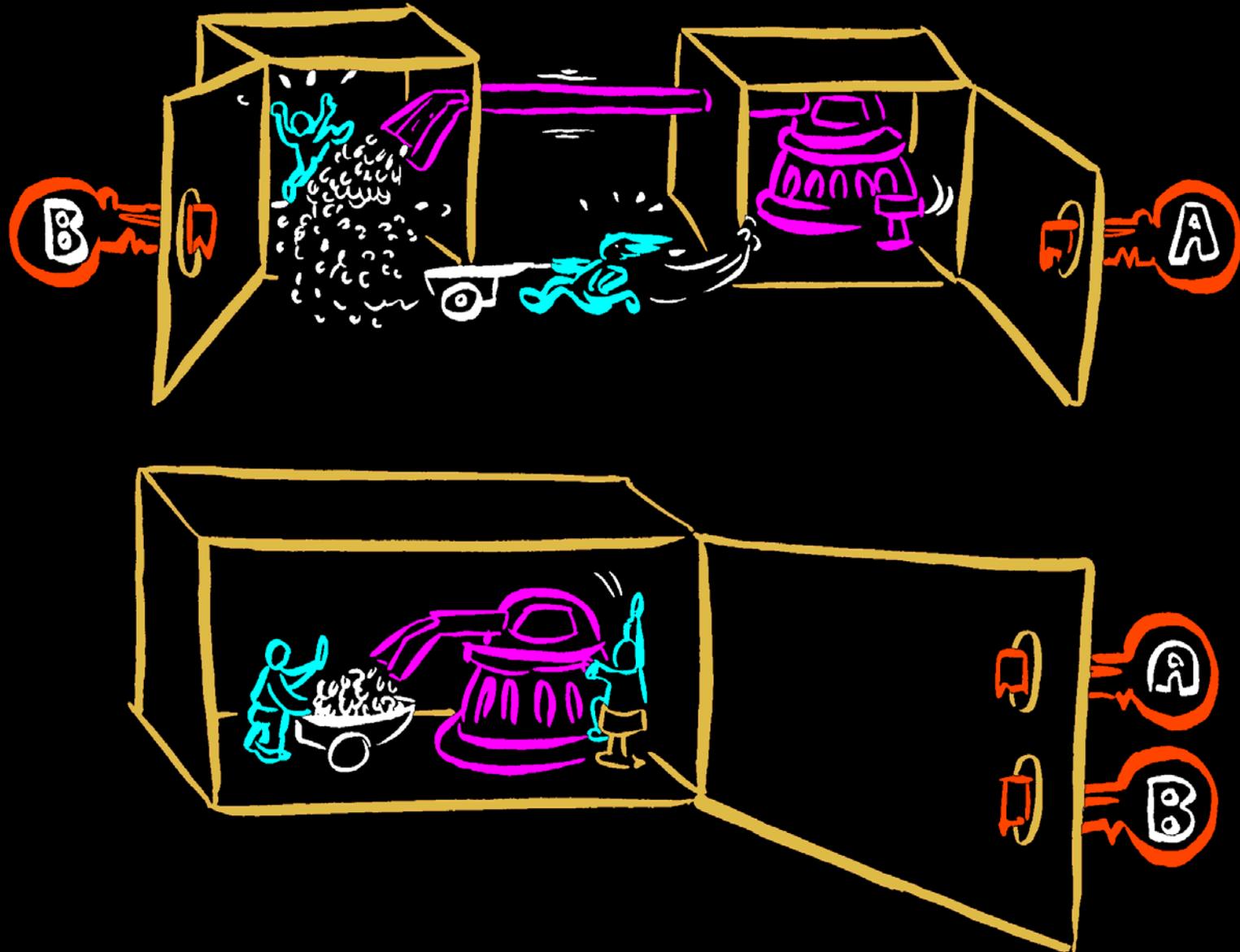




# Project Status Web Page

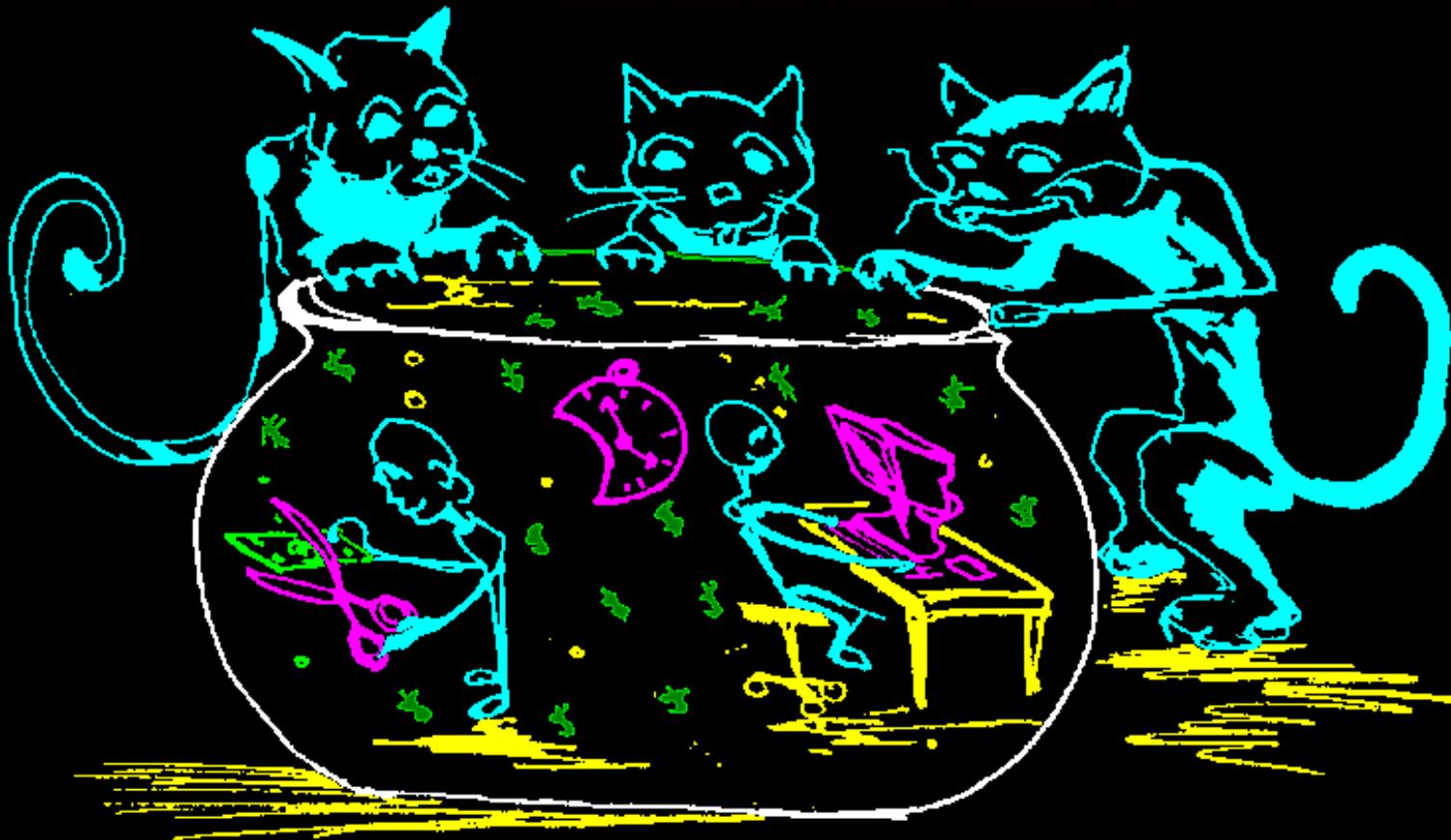


# Keys for Engineering Success



# Future of a Successful Start-Up

## Buyout Prospects

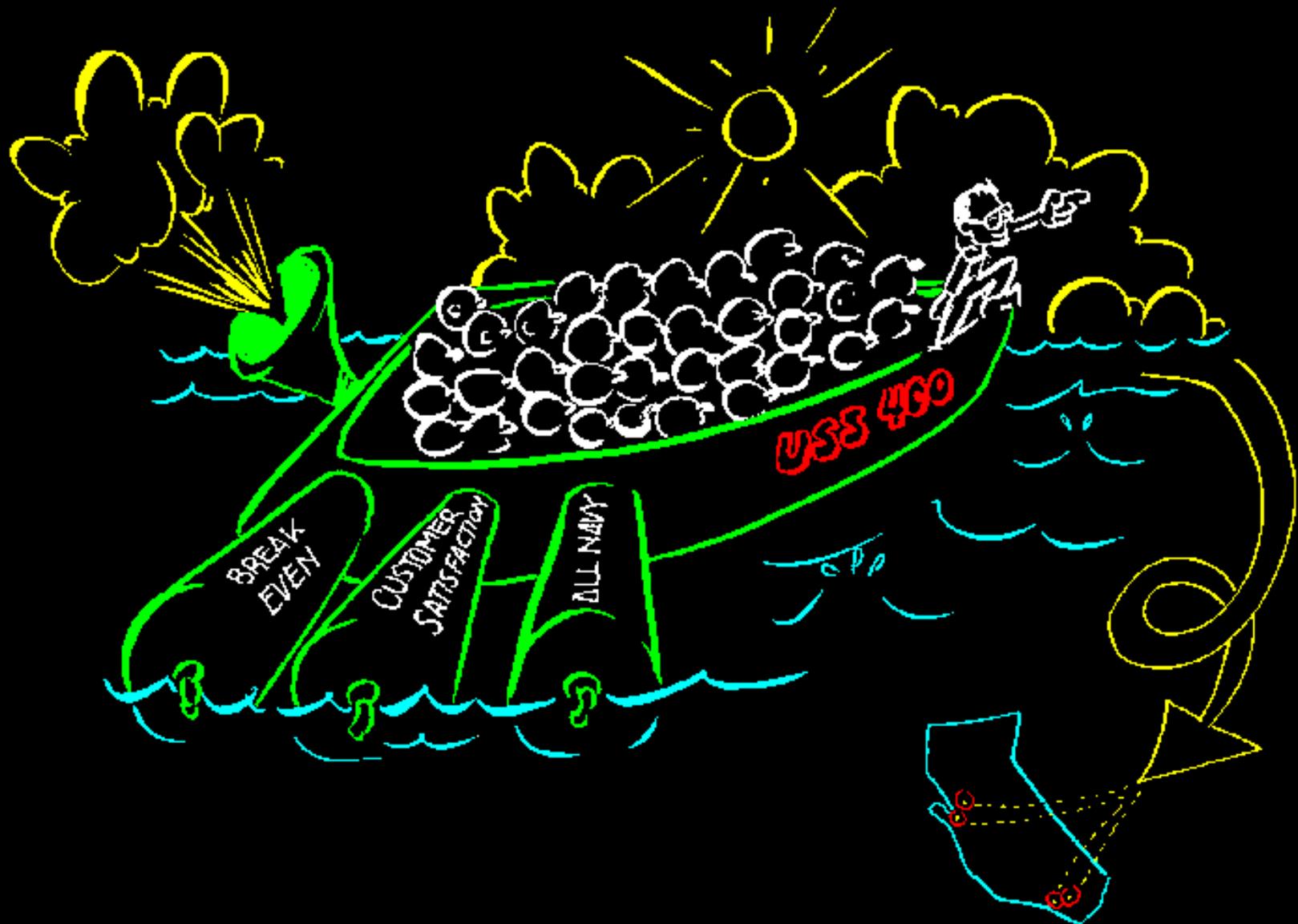


**Cut  
Cost**

**Cut  
Time**

**Leverage  
Technology**

# Potential Spin-Offs

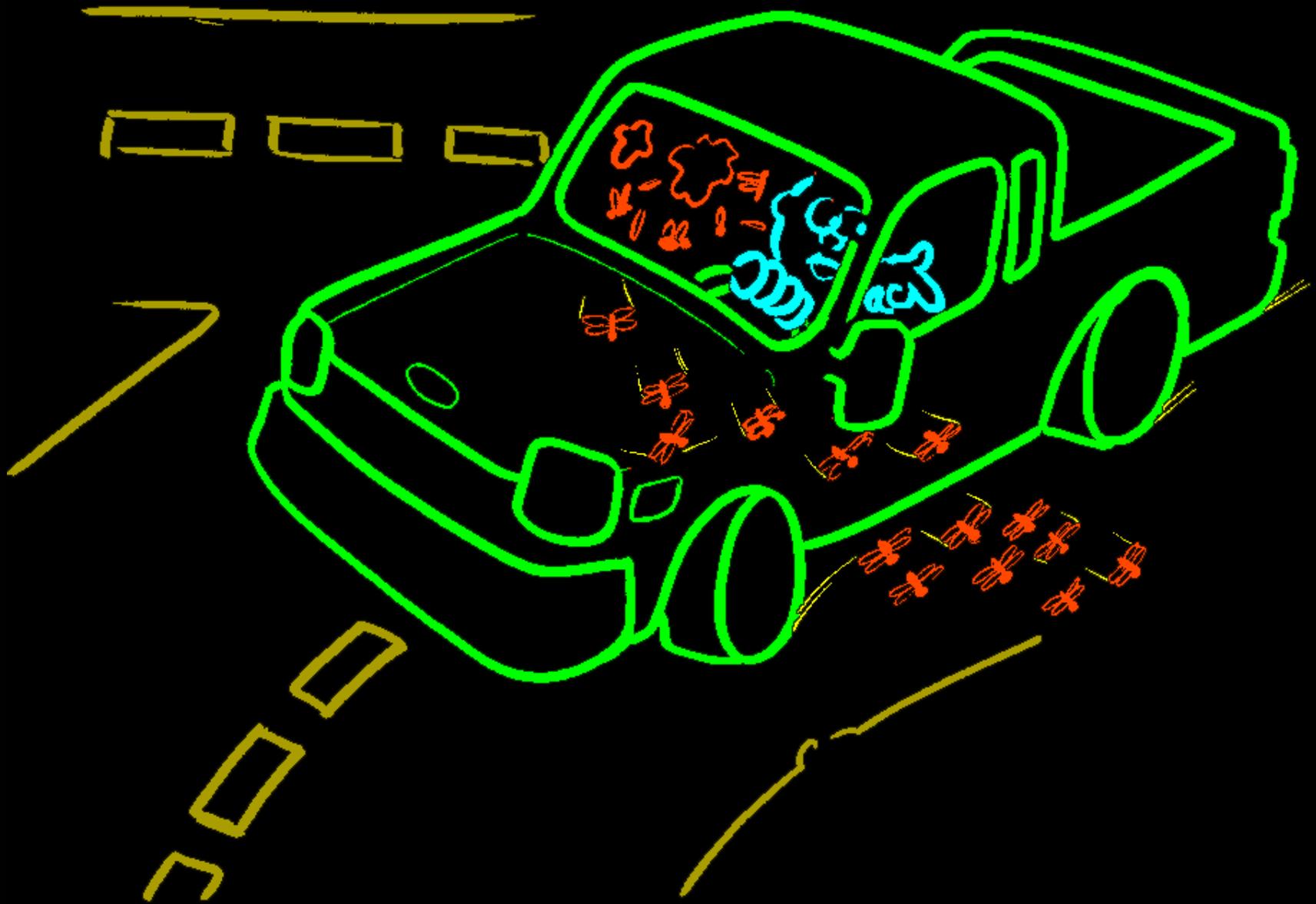


# Velocity of Change



OSCAR

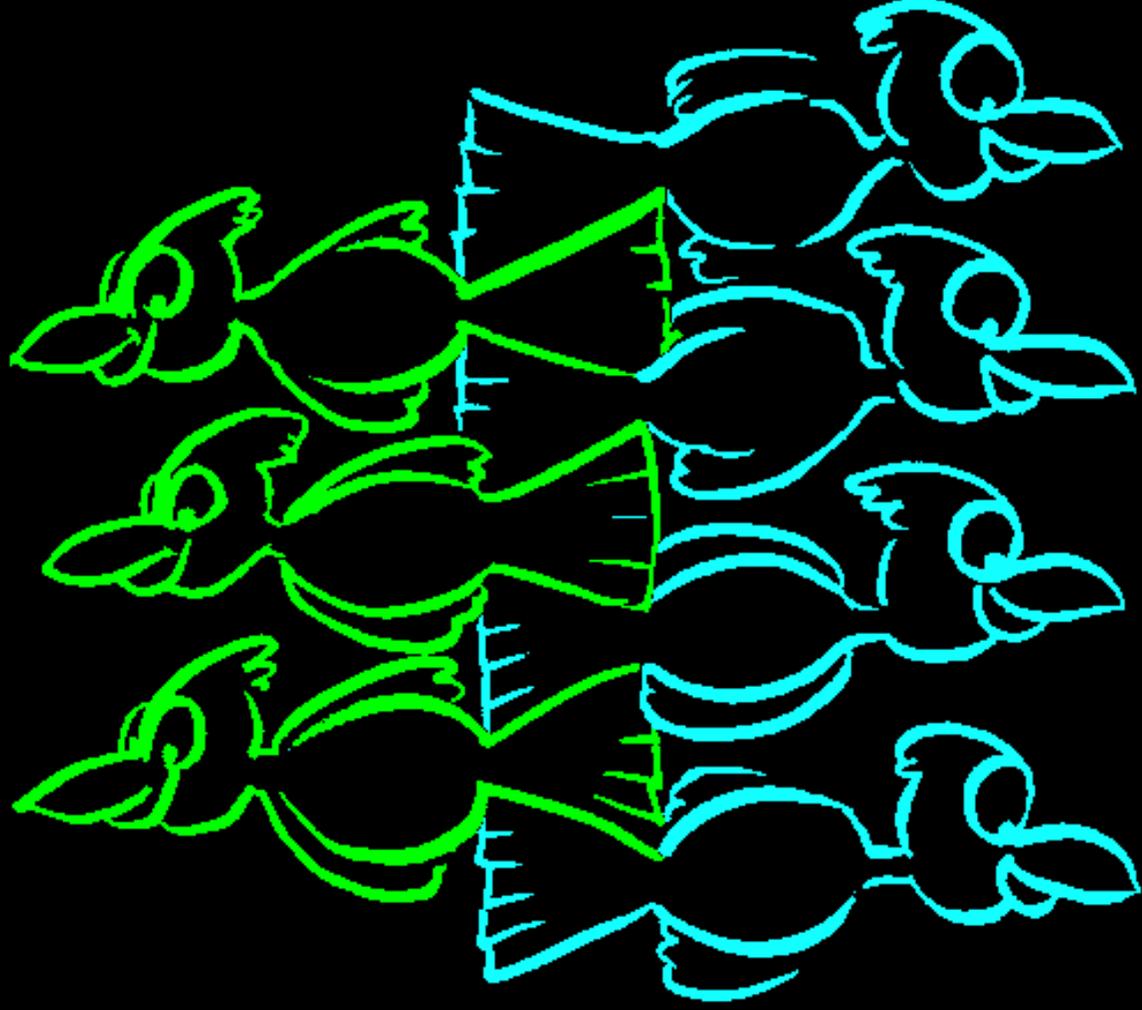
# Windshield or Bug



**Only One Person Has Taken  
Severance Pay,  
Involuntarily !!**

# Perfect Fit

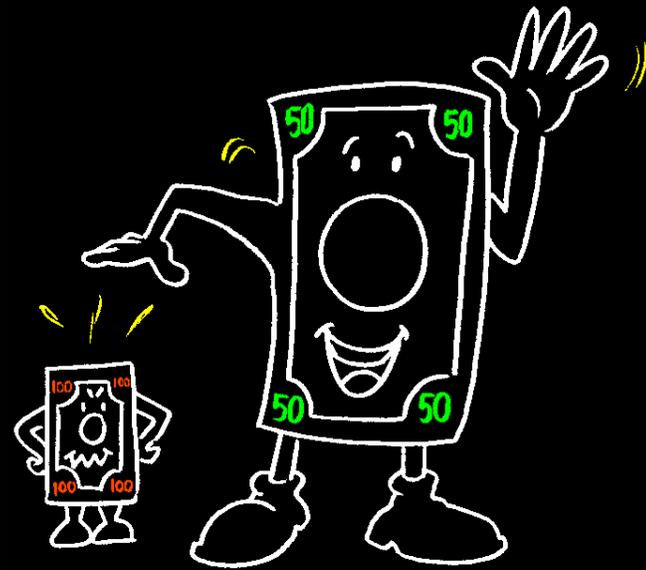
**Empowerment, Volunteerism  
& Accountability (EVA)**



**Remote Engineering**



# Results



# Thank You.



OSCAR.T.