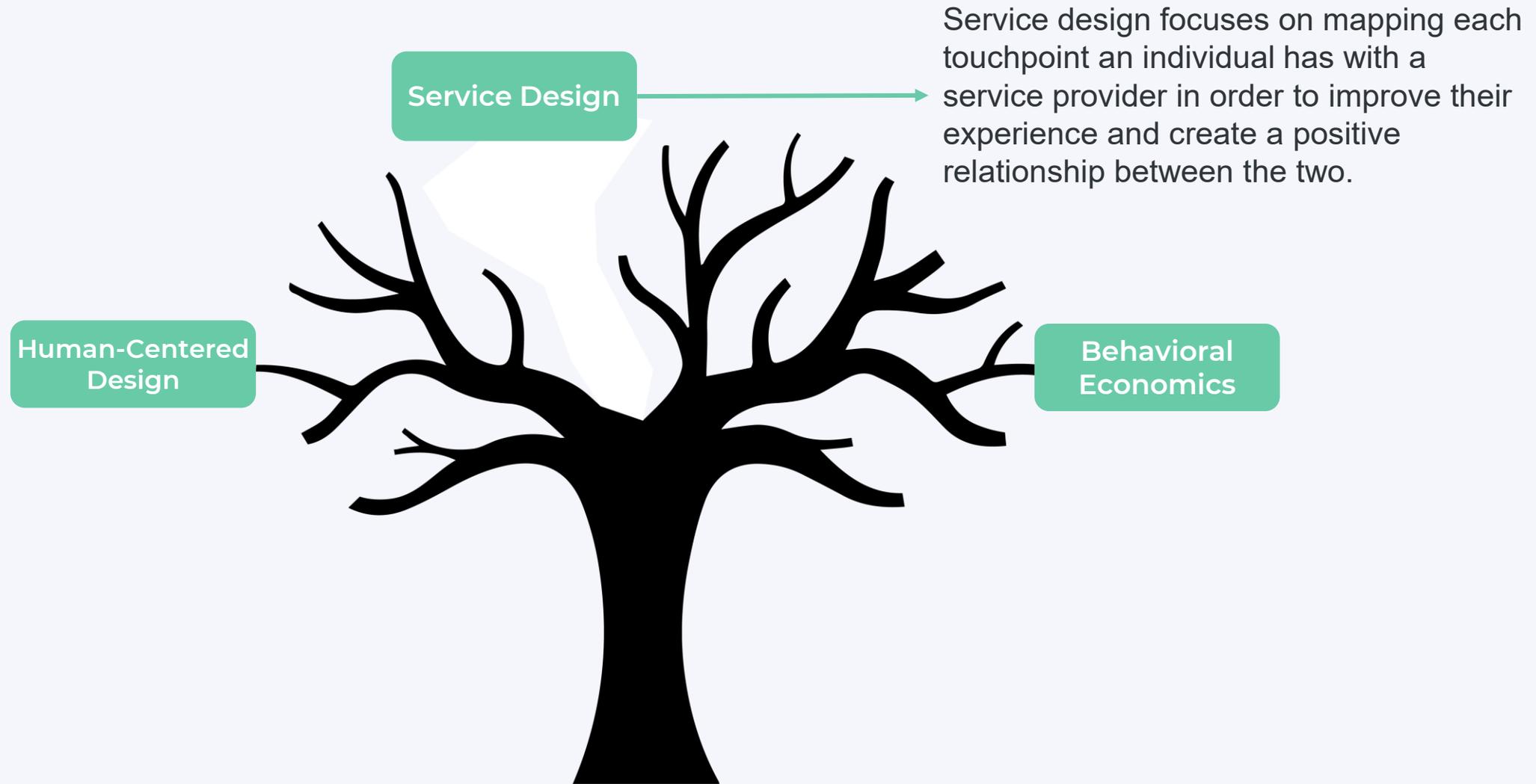
The background features a close-up of hands writing on various colored sticky notes (pink, orange, blue) with a black marker. The entire scene is overlaid with a semi-transparent red filter. A white rectangular border frames the central text.

The Psychology of Design

Nadine Dechausay | January 21, 2021

A Design Tree



Agenda



**Definition of
Human-Centered
Design
(aka Design
Thinking)**



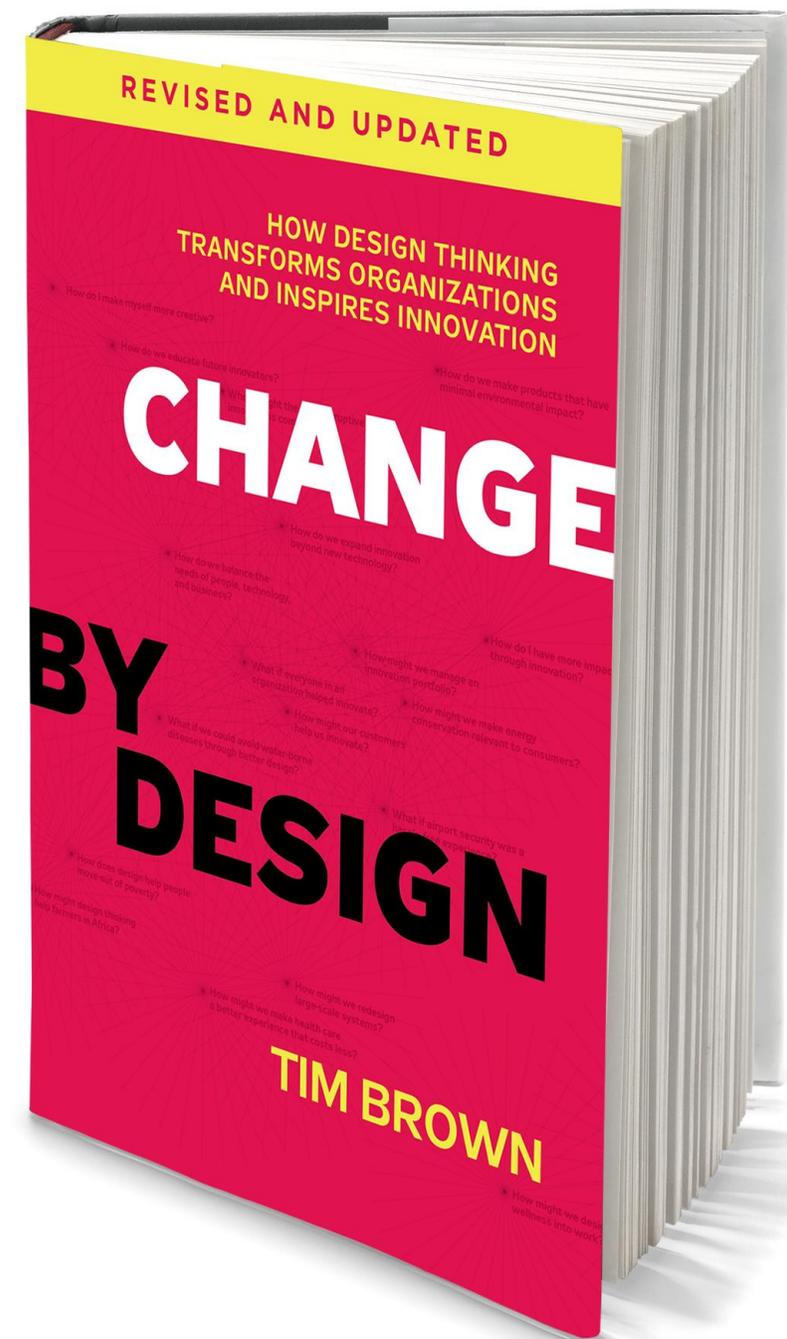
**Introduction to
Behavioral Economics
(aka Behavioral
Science, Behavioral
Diagnosis and Design)**



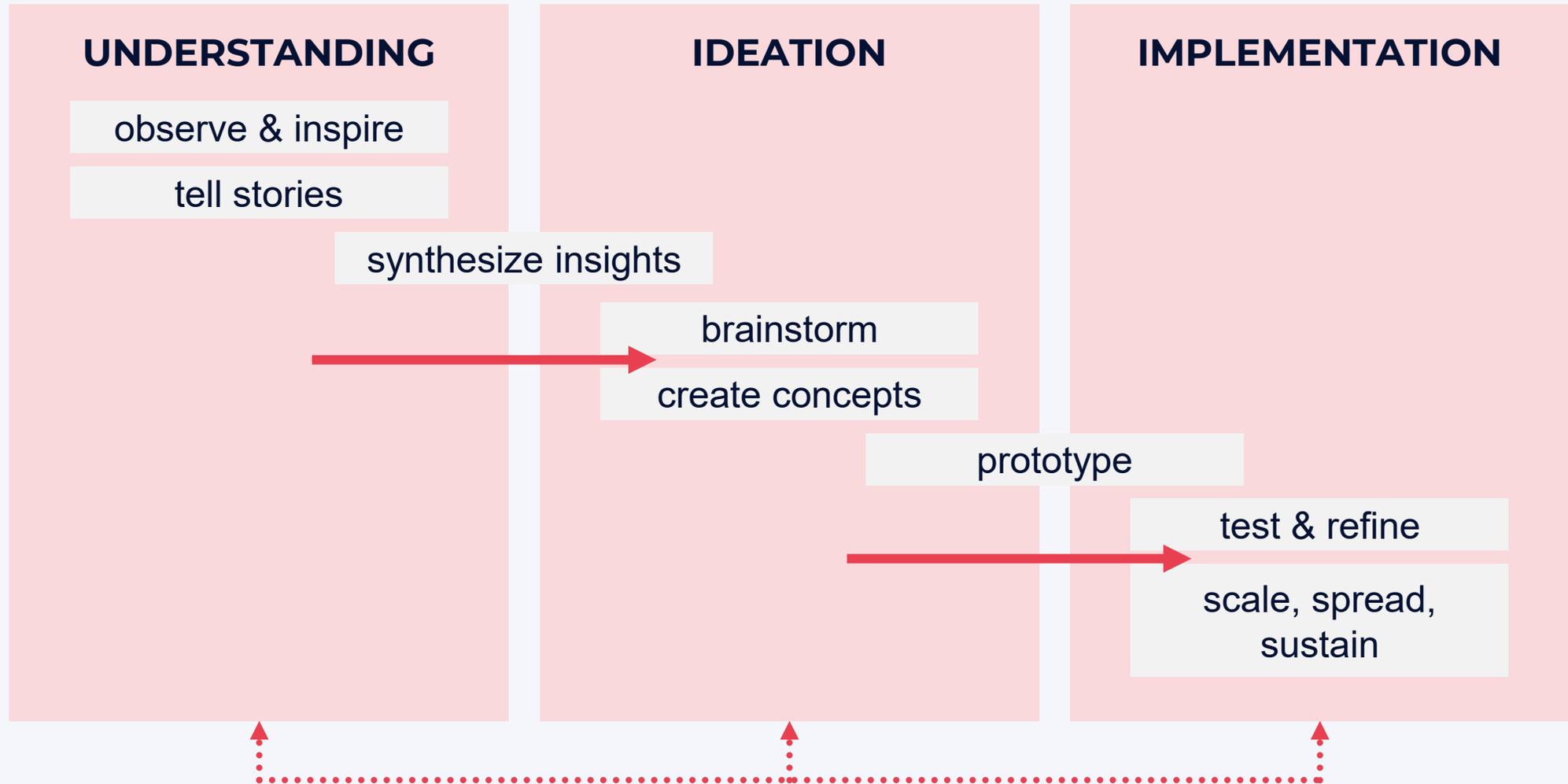
**Comparison of HCD
and BE**

“[Human-centered design is] a process that starts with people you’re designing for and ends with new solutions that are purpose-built to suit their needs. Human-centered design is about cultivating deep empathy with the people you’re designing for; generating ideas; building a bunch of prototypes; sharing what you’ve made with people you’re designing for; and eventually, putting your innovative solution out into the world.”

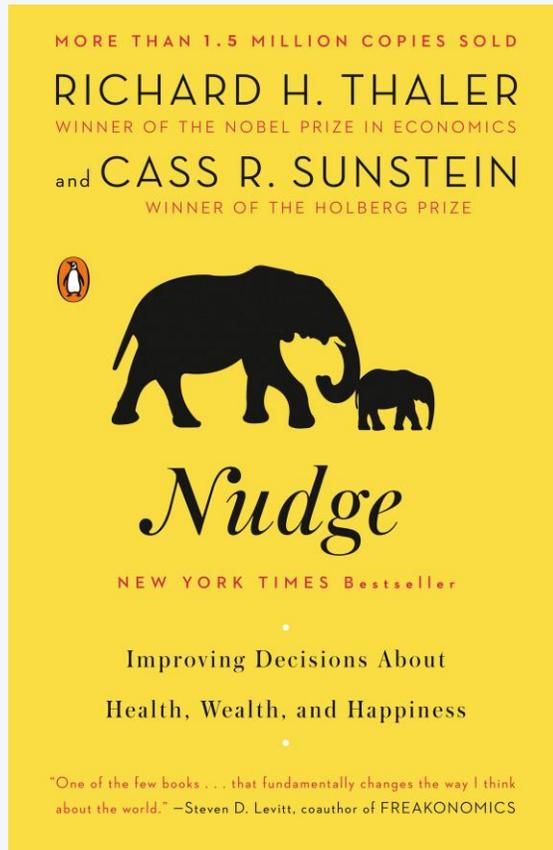
Tim Brown, IDEO chair



Human-Centered Design Process



Behavioral Economics



Cass Sunstein



Richard Thaler



Daniel Kahneman



Amos Tversky

1st Insight from Behavioral Economics



Design is everywhere, and it is never neutral



FIGHT COVID-19

Get a COVID-19 vaccination. It's the best way to protect yourself, your family and your community.

www.vaccine.gov

2018-2019 Iowa Application for Free & Reduced Price School Meals/Milk

STEP 1 List ALL Household Members who are infants, children, and students up to and including grade 12. If more space is required for additional names, complete the page 2.

Child's First Name	MI	Child's Last Name	Sex	Grade	Child's School	Grade	Free	Reduced
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>

STEP 2 Do any Household Members (including you) currently participate in one or more of the following assistance programs: Food Assistance, FIP, or EIP/RP?

STEP 3 Report Income for ALL Household Members (Skip this step if you answered 'Yes' to STEP 2.)

STEP 4 Contact Information and Adult Signature

Street Address (if available) Apt # City State Zip Employee Phone (optional) Social (optional)

Printed name of adult completing the form (Adult Household member) Signature of adult completing the form Print completed form and sign Today's date

DO NOT WRITE BELOW THIS LINE. FOR ADMINISTRATIVE USE ONLY.

Annual income comparison: Weekly x 52; Bi-weekly x 26; 3 Times per Month x 12; Monthly x 12

Household Income \$ Weekly Bi-weekly Twice Monthly Monthly Annually Household Size

Application Approved: Income Faster Check Free Food Assistance Head Start (documentation required) Homeless/Migrant/Runaway/Local OHW (documentation required)

Eligibility Determination: Free Reduced Free MML Application Denied: Incomplete Over income limits

Determining Official: Effective Date: Confirming Official: Date: Following Signature: Date:

2nd Insight from Behavioral Economics



The users of the products and services we're designing are predictably irrational



Bounded Rationality



Bounded Self-Control



Bounded Self-Interest

3rd Insight from Behavioral Economics



We should design to help people to achieve the best outcome for them



2 Behavioral Science Examples

ideas **42**



**Behavioral
Interventions to
Advance
Self-Sufficiency**

cabs 
at mdrc

Why don't people show up for court when they receive a criminal summons?

Standard Assumption

- People who do not show up are actively defying the legal system and therefore the only logical response to failure to appear is ratcheting up the punishment

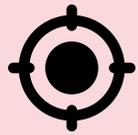
Behavioral View

- Cause related to program design
- How strong is the fit between the demands of this process or the messages that are being communicated, and the cognitive and behavioral needs of the users?

Behavioral Diagnosis & Design

Define

Use data to quantify the outcome(s) you are trying to improve



Design

Use behavioral theories to redesign the process to counteract bottlenecks



Diagnose

Create a map of the process and identify friction between the program and the user, (i.e., “bottlenecks”)



Test

Use a strong evaluation method to determine if service design change has improved target outcome(s)



Quick Facts

Location

- New York City

Population

- Defendants cited for low-level criminal offenses

Targeted Behavioral Change

- Increase show rate in court

CRC-3206 (5/12)												
Complaint/Information												
The People of the State of New York vs.												
Name (Last, First, MI)												
Street Address										Apt. No.		
City						State			Zip Code			
ID/License Number				State		Type/Class		Expires (mm/dd/yy)		Sex		
Date of Birth (mm/dd/yy)			Ht	Wt	Eyes	Hair	Plate/Reg					
Reg State		Expires (mm/dd/yy)		Plate Type	Veh Type	Make	Year	Color				
The Person Described Above is Charged as Follows:												
Time 24 Hour (hh:mm)			Date of Offense (mm/dd/yy)					NYC Park Copy	County			
Place of Occurrence								NYC Park Copy	Precinct			
In Violation of Section		Subsection		VTL	Admin Code	Penal Law	Park Rules	Other				
Title of Offense:												
Bronx Criminal Court - 215 E 161 st Street, Bronx, NY 10451												
Kings Criminal Court - 346 Broadway, New York, NY 10013												
Redhook Community Justice Center - 88-94 Visitation Place, Brooklyn, NY 11231												
New York Criminal Court - 346 Broadway, New York, NY 10013												
Midtown Community Court - 314 W 54 th Street, New York, NY 10019												
Queens Criminal Court - 120-55 Queens Boulevard, Kew Gardens, NY 11415												
Richmond Criminal Court - 67 Targee Street, Staten Island, NY 10304												
Defendant stated in my presence (in substance):												
I personally observed the commission of the offense charged herein. False statements made herein are punishable as a Class A Misdemeanor pursuant to section 210.45 of the Penal Law. Affirmed under penalty of law.												
Complainant's Full Name Printed						Rank/Full Signature of Complainant			Date Affirmed (mm/dd/yy)			
Agency			Tax Registry #					Command Code				
The person described above is summoned to appear at NYC Criminal Court located at:								Summons Part		County		
Date of Appearance (mm/dd/yy)								At 9:30 a.m.				

DEFENDANT'S COPY

Intervention #1 Description

INTERVENTION #1

REDESIGN CITY'S SUMMONS FORM

Label as court appearance ticket

Move court date and time near top

Clearly indicate court location

Highlight consequences of missing court

BEFORE

CRC-3206 (5/12)

Complaint/Information
The People of the State of New York vs.

Name (Last, First, MI)

Street Address Apt. No.

City State Zip Code

AFTER

CRC-3206 (1/16)

Criminal Court Appearance Ticket

Name (Last, First, MI) Date of Birth (mm/dd/yy)

Cell Phone Number (where court may contact you) Home Phone Number (where court may contact you)

Cell Phone Number () Home Phone Number ()

Show up to court on:
Court Appearance Date (mm/dd/yy): at: 9:30 a.m.

Your court appearance location: Other (specify)

Bronx Criminal Court Kings & New York Criminal Court Midtown Community Court Redhook Community Justice Center

****To avoid a warrant for your arrest, you must appear at court. At court, you may plead guilty.**

Please see back for exceptions for Public Consumption of Alcohol

Court Locations: You must appear at the court location listed below.

Bronx Criminal Court 1 Centre Street, Bronx, NY 10451
Kings & New York Criminal Court 1 Centre Street, Bronx, NY 10451
Redhook Community Justice Center 88-94 Vile Hill Road, Queens, NY 11375
Midtown Community Court 314 W 54th Street, New York, NY 10019
Queens Criminal Court 120-55 Queens Boulevard, Queens, NY 11355
Richmond Criminal Court 26 Central Ave, Staten Island, NY 10314

23,000 Warrants avoided

Intervention #2 Description

INTERVENTION #2

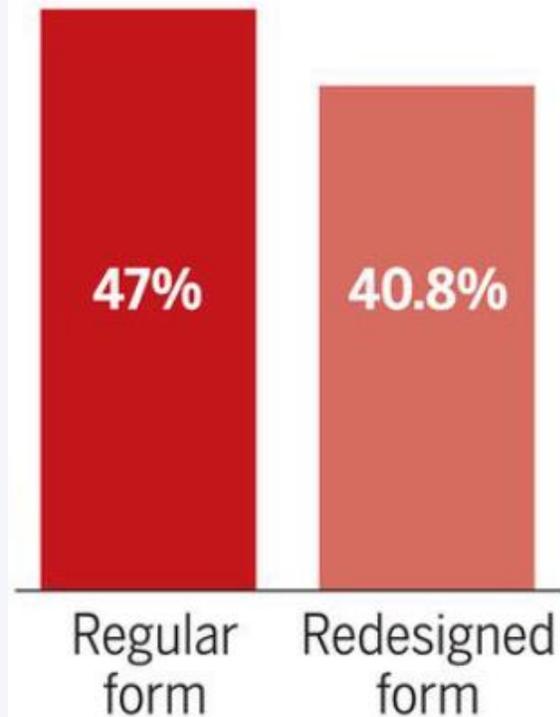
SEND TEXT REMINDERS IN ADVANCE
OF DEFENDANT'S COURT DATE



Intervention Results

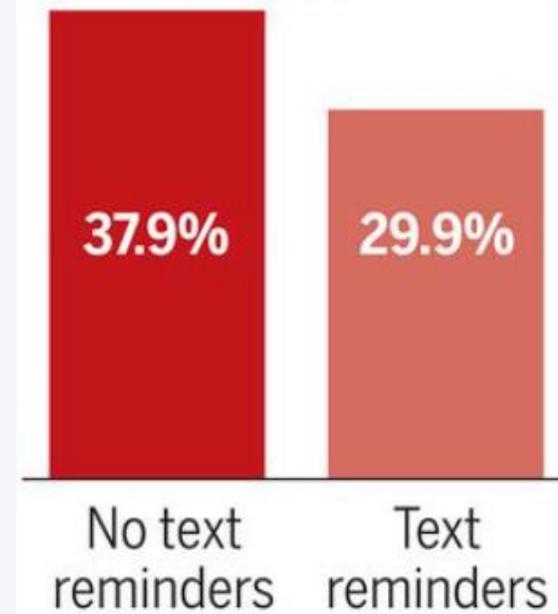
Intervention #1

Failure-to-appear rates



Intervention #2

Failure-to-appear rates



How might BE solutions differ from that of HCD?

Date/time at top

Loss aversion

GLUE LINE

CRC-3206 (1/16)

Criminal Court Appearance Ticket

Name (Last, First, MI) _____ Date of Birth (mm/dd/yy) _____

Cell Phone Number (where court may contact you) _____ Home Phone Number (where court may contact you) _____

Show up to court on:
Court Appearance Date (mm/dd/yy): _____ at: **9:30 a.m.**

Your court appearance location: Other (specify) _____

Bronx Kings & New York Midtown Redhook Queens Richmond

****To avoid a warrant for your arrest, you must show up to court.****
At court, you may plead guilty or not guilty.
Please see back for exceptions for Public Consumption of Alcohol and Public Urination offenses.

Court Locations: You must appear at the court location identified above.

Bronx Criminal Court 215 E 161st Street, Bronx, NY 10451
Kings & New York Criminal Court 1 Centre Street, 16th Floor, New York, NY 10007
Redhook Community Justice Center 88-94 Visitation Place, Brooklyn, NY 11231
Midtown Community Court 314 W 54th Street, New York, NY 10019
Queens Criminal Court 120-55 Queens Boulevard, Kew Gardens, NY 11415
Richmond Criminal Court 26 Central Ave, Staten Island, NY 10301

You are Charged as Follows.

Title of Offense: _____

Time 24 Hour (hh:mm) _____ Date of Offense (mm/dd/yy) _____ County _____

Place of Occurrence _____ Precinct _____

In Violation of Section _____ Subsection _____ VTL Admin Code Penal Law Park Rules Other _____

For Additional Information and Questions:

Visit the website or call the number below for additional information about your court appearance and translation of this document.

www.mysummons.nyc
OR
Call 646-760-3010

Defendant stated in my presence (in substance): _____

I personally observed the commission of the offense charged herein. False statements made herein are punishable as a Class A Misdemeanor pursuant to section 210.45 of the Penal Law. Affirmed under penalty of law.

Complainant's Full Name Printed _____ Rank/Full Signature of Complainant _____ Date Affirmed (mm/dd/yy) _____

Tax Registry # _____ Agency _____ Command Code _____

DEFENDANT'S COPY

Why don't people pay their child support orders on time?

Standard Assumption

- People who don't pay their court ordered child support are simply showing contempt for the process or don't have the means

Behavioral View

- The system isn't providing enough information and support to adopt new, difficult habit

Quick Facts

Location

- Denver, Garfield, Arapahoe, and El Paso counties in Colorado

Population

- Noncustodial parents with newly established child support orders

Targeted Behavioral Change

- Increase on-time, and full payment

Original Child Support Payment Process

Custodial parent petitions for child support with Colorado Division of Child Support Services

Paternity confirmed

Order established through administrative conference or court

Noncustodial parent receives legal documents indicating amount of obligation

Later, NCP receives letter from CDCSS with a copy of order and payment information

First payment due 30-45 days later

NCPs with regular employment required to pay by income withholding begin seeing deductions 60 days later

Intervention design

- Built a user-centered process that honors the parent-child relationship, integrates a new routine of making child support payments into the payor's life, and ensures that parents are aware of the risks associated in missing or underpaying
- Added a planning meeting immediately after the order was established and incorporated best practices from science of goal setting



Elements of the Redesign: “Stay in the Green Zone” Infographic

STAY IN THE GREEN ZONE BY PAYING CHILD SUPPORT REGULARLY AND IN FULL

EXAMPLE: JOHN HAS \$100 MONTHLY ORDER



YELLOW ZONE
Paying less than the full monthly payment

Unless John can pay immediately, he needs to call his case worker

RED ZONE Paying less than the full monthly payment due may lead to



This shows the most common child support enforcement actions.

Elements of the Redesign: Wallet card

MY PAYMENT INFO

Name of your child(ren) _____

FSR # _____

Monthly Payment Due _____

I WILL PAY:

Weekly Biweekly Monthly

Each time I make a payment I will pay:

\$ _____

If you cannot make your payments please call us at XXX-XXX-XXXX. For more information, please visit our website <https://childsupport.state.co.us>. We are here to help you.

I will make my first payment on _____

Make sure your full payment is processed by the 27th of each month.

S	M	T	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Circle the date(s) you plan to make payments.

ONLINE BANKING

Cost: **FREE**

Connect to the Colorado Family Support Registry through your online bank account. You will need to enter your FSR number and the FSR address:

Family Support Registry
P.O. Box 2171
Denver, CO 80201-2171

1 day to be processed.

AUTOPAY (RAW)

Cost: **FREE**

Enroll here:
<http://tinyurl.com/jpnfjlv>

Enrollment takes 5 days.

1 day to be processed.

PAY BY PHONE

Cost: **FREE**

Enroll here:
<http://tinyurl.com/gvyum3e>.
Receive your PIN in 5 days.

Call **1-800-374-6558**, enter your PIN, and choose payment amount.

1 day to be processed.

CHECK OR MONEY ORDER

Cost: **49¢** stamp plus a money order fee of **75¢ – \$1.25** if applicable.

Purchase money order at Walmart, 7-Eleven, or the post office.

Write your FSR number and name, and mail to:

Family Support Registry
P.O. Box 2171
Denver, CO 80201-2171

2-3 days to be processed from the day letter is received.

CASH

PayNearMe (Cost: **\$1.99**)
Enroll online and bring your barcode.
Find payment locations at <http://tinyurl.com/zs39bjt>
3-4 days to be processed.

MoneyGram (Cost: **\$4.99**)
Find payment locations at <http://tinyurl.com/oa5afwu>
Bring FSR number and "receive code" 14651.
3-4 days to be processed.

I will pay at > _____

CREDIT OR DEBIT CARD

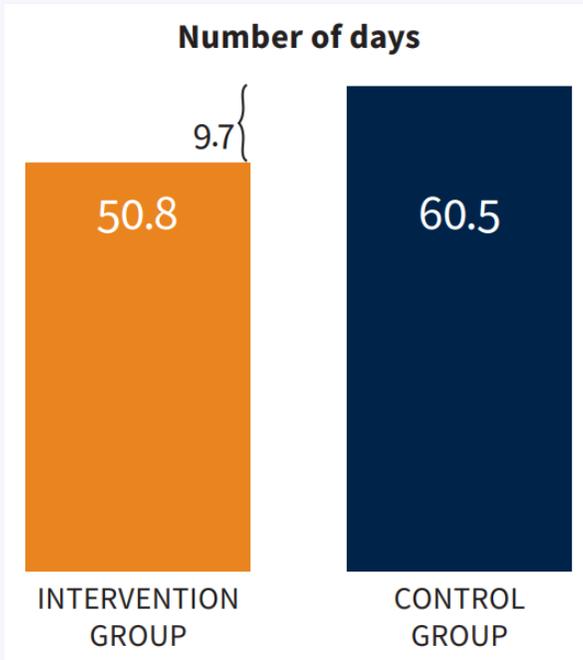
Value Payment Systems
Cost: **2.95%** of payment (e.g. \$5.90 for \$200 order) or **\$4.95**, whichever is greater.
Make payments at <http://tinyurl.com/jnbnze9>
3-4 days to be processed.

MoneyGram
Cost: **\$7.99** for payments under **\$300**. Fee varies with order amount.
Make payments at <http://tinyurl.com/zsulymt>
3-4 days to be processed.

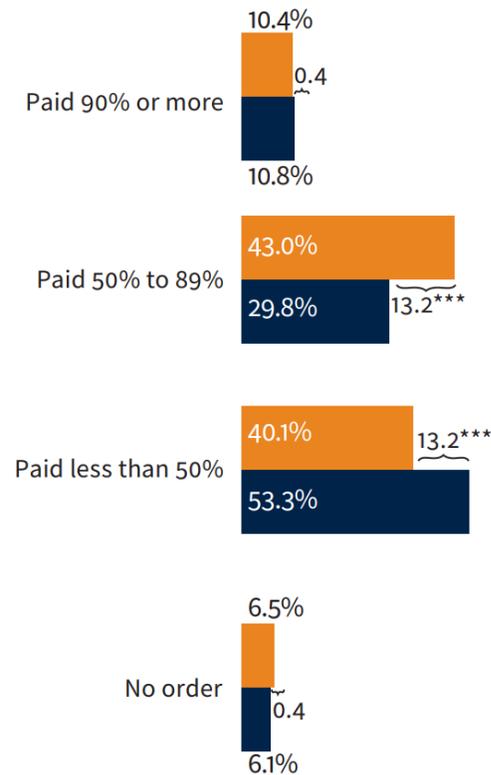
Intervention Results

- Parents who received the intervention paid more in the first three months, made their first payment earlier, and paid a greater amount of their order.

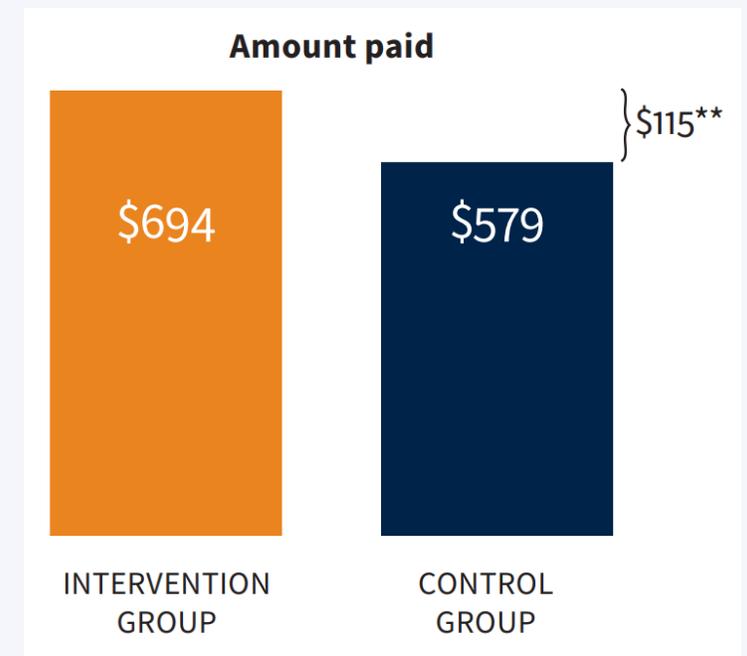
Average days until first payment



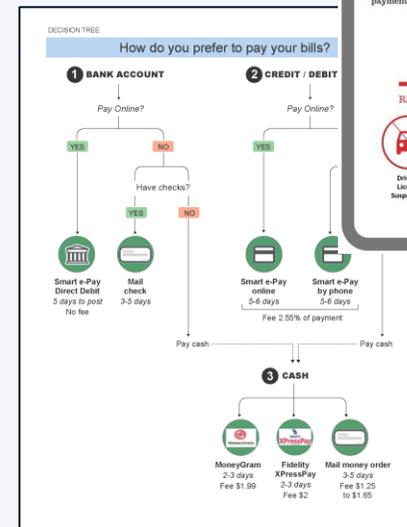
Percentages paid of total monthly amounts due (Months 1-3)



Average total amount paid during Months 1-3



How might the solution have been different is designed from HCD approach?



make my first payment on

ONLINE BANKING

Cost: FREE

Make sure your payment is processed by e 27th of each month.

Connect to the Colorado Family Support Registry through your online bank account. You will need to enter your FSR number and the FSR address.

Family Support Registry P.O. Box 2177 Denver, CO 80201-2177

1 day to be processed.

AUTOPAY / BANK

Cost: FREE

Enroll here: <http://hsrnet.com/join/fsv>

Enrollment takes 5 days.

1 day to be processed.

1 the date(s) you plan to payments.

FAY BY PHONE

Cost: FREE

Enroll here: <http://hsrnet.com/join/fsv>

Receive your PIN in 3 days.

Call 1-800-874-4558, enter your PIN, and choose payment amount.

1 day to be processed.

CHECK OR MONEY ORDER

Cost: 4% stamp plus a money order fee of 95¢ - \$1.15 (if applicable).

Purchase money order at Walmart, 7-Eleven, or the post office.

Write your FSR number and name, and mail to:

Family Support Registry P.O. Box 2177 Denver, CO 80201-2177

2-3 days to be processed from the date letter is received.

CASH

PayNearMe (Cost: \$1.99)

Enroll online and bring your barcode.

Find payment locations at <http://hsrnet.com/locate>

3-4 days to be processed.

MoneyGram (Cost: \$4.99)

Find payment locations at <http://hsrnet.com/locate>

Bring FSR number and Taxicave code 1463.

3-4 days to be processed.

CREDIT OR DEBIT CARD

Value Payment Systems

Cost: 2.9% of payment (e.g. \$5.00 for \$100 order) or \$4.95, whichever is greater.

Make payments at <http://hsrnet.com/locate#>

3-4 days to be processed.

MoneyGram

Cost: \$3.99 fee payments under \$100. Fee varies with order amount.

Make payments at <http://hsrnet.com/locate>

3-4 days to be processed.

Behavioral Economics & Human-Centered Design

