



# Mobile Apps vs Mobile Web for Cessation

A PRIMER

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# Rubric

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- Hi, nice to meet you!
- In brief, why digital cessation?
- State of the Science
  - Mobile cessation apps
  - Online cessation interventions
- Practical recommendations for implementing digital cessation interventions:

Native/Hybrid  
Mobile App

Mobile-  
Optimized  
Website

- How you can learn more on this topic (at this very conference!)

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**Hi, nice to meet you!**

Or, who am I and why am I here?



# Truth Initiative Innovations

## Products

- BecomeAnEX.org: web-based cessation resource + sms
- This is Quitting: young adult cessation mobile app + sms
- UbiQUITxt: standalone text messaging platform
- PositivelySmokeFree: web-based HIV+ cessation resource
- Internal web-based clinical trials mgmt system

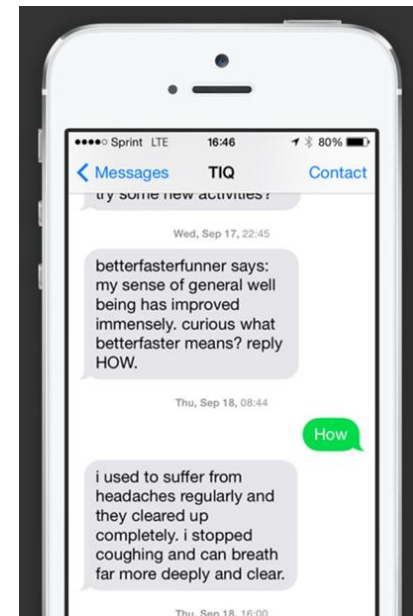


## Projects

- Federally-funded grants
- Internally-funded research/evaluation

## Partnerships/Collaborations

- HBCU/Community Colleges/Universities + TIQ
- Mayo Clinic + Other organizations + BecomeAnEX



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# Why digital cessation?



# Maximizing Impact

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Impact = Reach x Effectiveness

# Want to Go Big? Go Digital.

Topics	2002	2004	2006	2008	2010
Specific disease or medical problem	63%	66%	64%	66%	66%
Certain medical treatment or procedure	47	51	51	55	56
Exercise or fitness	36	42	44	52	*
Diet, nutrition, vitamins, or nutritional supplements	44	51	49	*	*
Prescription or over-the-counter drugs	34	40	37	45	*
Doctors or other health professionals	*	*	*	47	44
Hospitals or other medical facilities	*	*	*	38	36
Alternative treatments or medicines	28	30	27	35	*
How to lose weight or how to control your weight	*	*	*	33	*
How to quit smoking	6	7	9	*	*
Problems with drugs or alcohol	8	8	8	*	*
End-of-life decisions	*	*	*	*	7
Any other health topic	*	*	*	26	28
<b>At least one item in that year's survey</b>	<b>80</b>	<b>79</b>	<b>80</b>	<b>83</b>	<b>80</b>

Source: Pew Research Center's Internet & American Life Project, 2002-2010 Survey. Margin of error for all surveys is +/- 3 percentage points for the full sample of internet users. Margins of error for sub-populations are higher.

# Population Impact

	<u>EFFICACY</u>	x	<u>REACH</u>	=	<u>IMPACT</u>
	(% abstinent)		(# using method annually)		(total # quitters)
None (unaided)	3%		16,000,000		480,000
Rx NRT (1995)	14%		2,500,000		350,000
OTC NRT (1996)	14%		6,300,000		882,000
<b>Internet</b>	<b>17%</b>		<b>10,000,000*</b>		<b>1,700,000</b>
Internet + Telephone	20%		320,000**		64,000
Behavioral counseling	24%		395,000		94,800
Inpatient treatment	32%		500		160

\* 9% of Internet users search for cessation assistance = 10,000,000 (Source: Pew Internet)

\*\* US quitlines receive calls from 320,000 smokers annually (Source: NAQC, 2008)

Adapted from Shiffman et al. (1998), *Annual Review of Public Health*.



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# State of the Science

- Mobile apps
- Online interventions

# Online Interventions


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- Tailored and interactive Internet programs yield higher quit rates than usual care or written self help at 6 months or longer.
- Future studies should carefully consider optimizing the interventions which promise most effect.
- Very little research on mechanisms of effectiveness.

Substance Abuse and Rehabilitation

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REVIEW

## Systematic review and meta-analysis of Internet interventions for smoking cessation among adults

This article was published in the following Dove Press journal:  
Substance Abuse and Rehabilitation  
18 May 2016  
[Number of times this article has been viewed](#)

Amanda L Graham<sup>1,2</sup>  
Kelly M Carpenter<sup>3</sup>  
Sarah Cha<sup>1</sup>  
Sam Cole<sup>3</sup>  
Megan A Jacobs<sup>1</sup>  
Margaret Raskob<sup>3</sup>  
Heather Cole-Lewis<sup>4,5</sup>

**Background:** The aim of this systematic review was to determine the effectiveness of Internet interventions in promoting smoking cessation among adult tobacco users relative to other forms of intervention recommended in treatment guidelines.

**Methods:** This review followed Cochrane Collaboration guidelines for systematic reviews. Combinations of “Internet,” “web-based,” and “smoking cessation intervention” and related keywords were used in both automated and manual searches. We included randomized trials published from January 1990 through to April 2015. A modified version of the Cochrane risk of bias assessment tool was used. We calculated risk ratios (RRs) for each study. Meta-

# Mobile Apps

Over 400 quit smoking apps on Android/iPhone market

Analysis by Abrams et al (2013) of the most popular apps found low adherence to clinical practice guidelines

Studies of effectiveness show early promising signals:

- <10 published studies (preliminary eval, pilot RCTs)
- Several ongoing trials

# Pros and Cons

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## Web

Broadest  
Reach

Adherence  
Varies

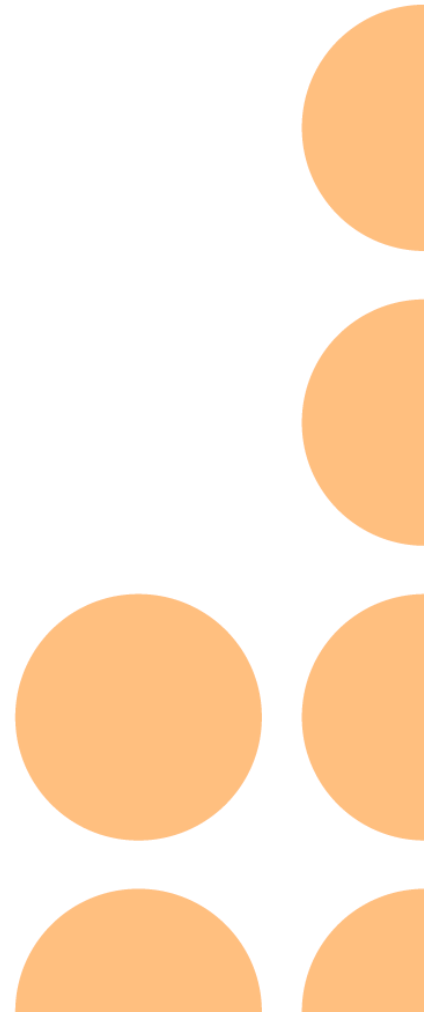
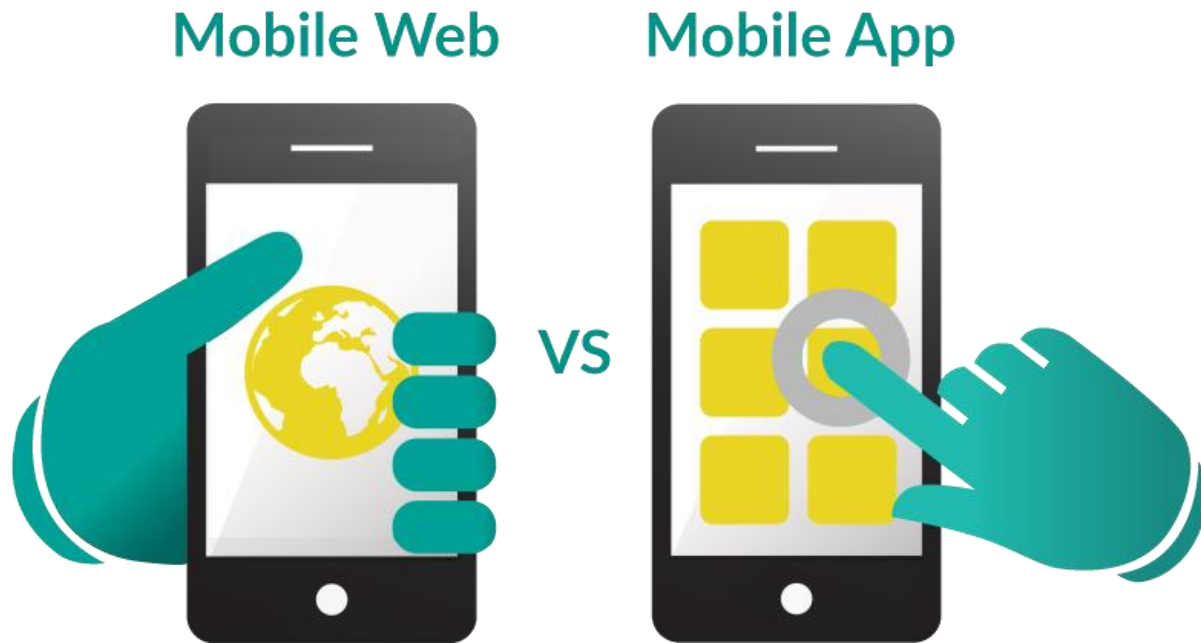
## App

Multi-Modal

Unknown  
Effectiveness

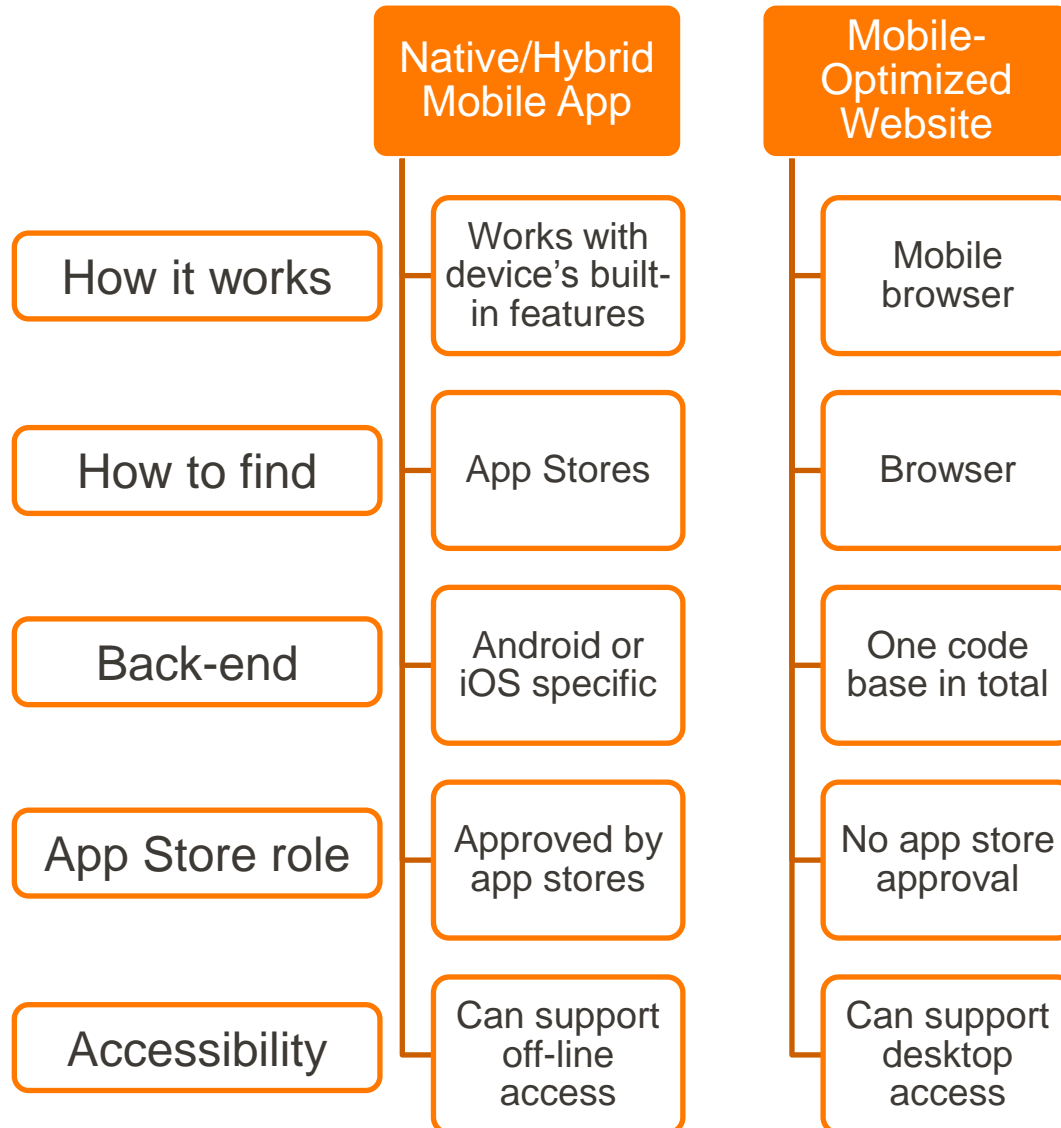
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# Practical Recommendations



# Two Ways to Get “Mobile”

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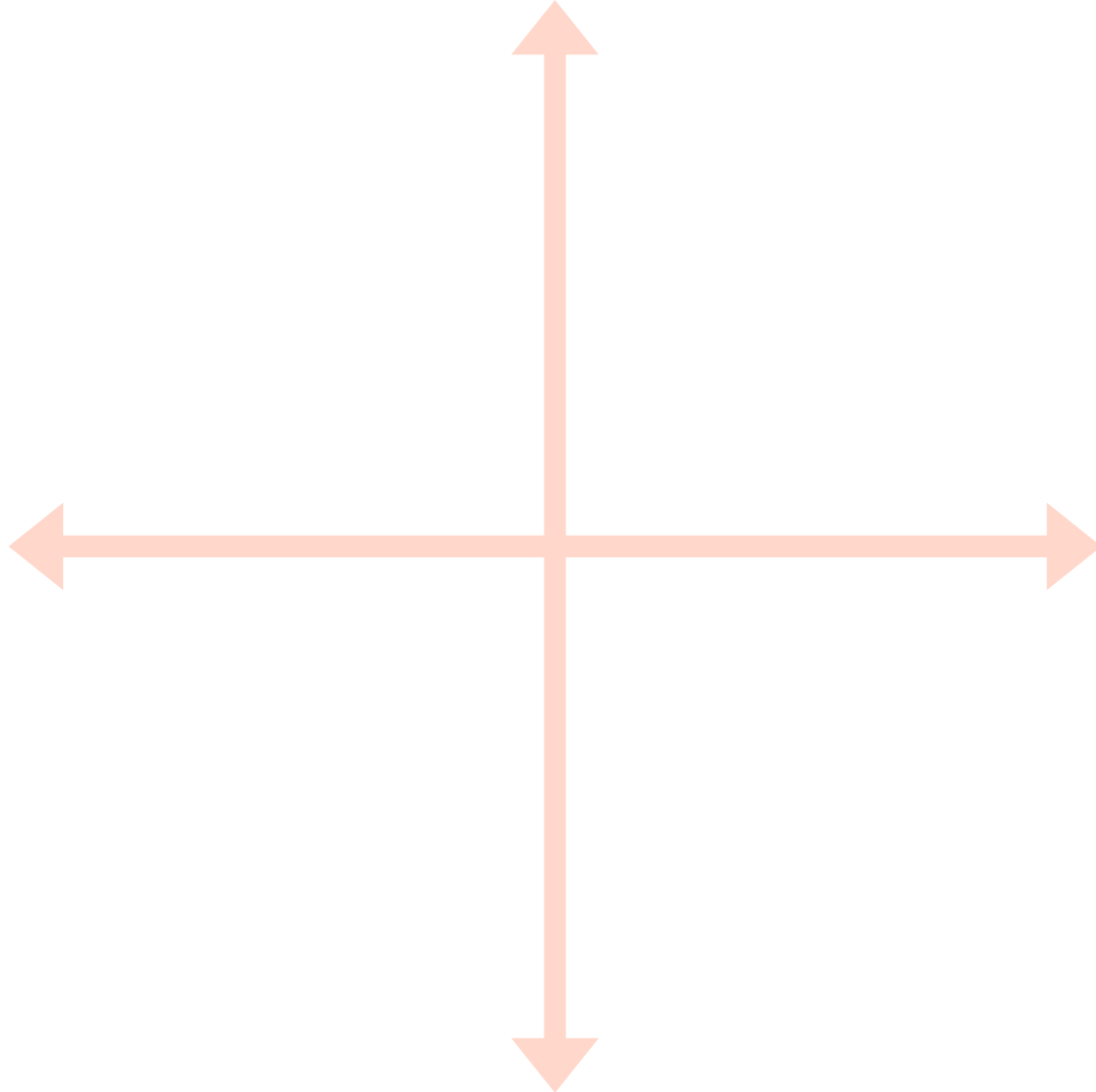
# Build, Buy, Borrow, Buddy: Benefits

More Ownership

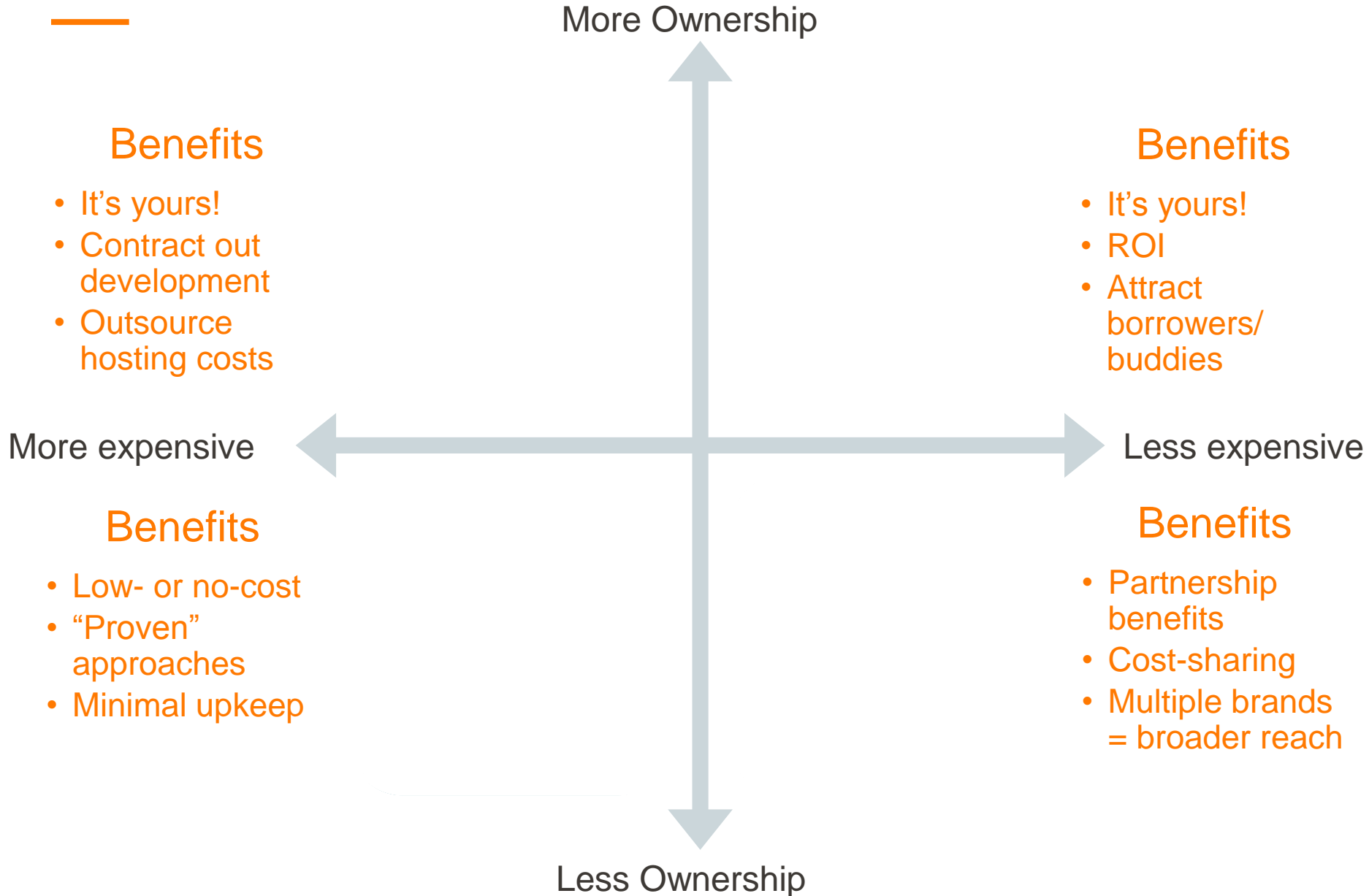
More expensive

Less expensive

Less Ownership



# Build, Buy, Borrow, Buddy: Considerations





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# Learning More



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**Thank  
you**

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