



OPTIMIZING THE DESIGN-BUILD PROCESS

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STATE OF THE MARKET

When it's hot it's HOT!

- Non-residential activity:
 - Offices, retail, medical, colleges, churches, schools, government buildings, etc.
 - 2015 – 9% increase to \$4.6 billion
 - 2016 – another 5% to \$4.9 billion





PROJECT SPECTRUM

- Charles Schwab campus
- Google campus
- Union Tower West
- Various Brighton Blvd projects
- CSU Stadium
- DaVita expansion
- Panasonic Enterprise Solutions
- Re-development of Market Street Station
- Denver Water Operations Complex
- Former University of Colorado hospital
- Sun Valley EcoDistrict
- St Anthony's Hospital
- West Denver Renaissance Collaborative
- Gaylord Conference Center
- National Western Center

STATE OF THE MARKET

CONSTRUCTION EMPLOYMENT 2007–2016 (In Thousands)

Big change in 2013, 2014.

Year	Employment	Percentage Change
2007	167.8	0.0%
2008	161.8	-3.6
2009	131.3	-18.9
2010	115.1	-12.3
2011	112.5	-2.3
2012	115.8	2.9
2013	127.5	<u>10.1</u>
2014 ^a	142.3	<u>11.6</u>
<u>2015^b</u>	150.5	5.8
<u>2016^c</u>	160.2	6.4

- Lack of skilled construction labor will dampen the pace of construction activity
- Construction schedules lengthening
- Construction costs increasing



IN A SUPER HEATED ECONOMY...

The greatest advantages that design-build can give you is –

- ***Speed to market***
- ***Early knowledge of cost***
- ***Appropriate allocation of risk***
- ***Greater value for every dollar spent***



DBIA'S FINDINGS

Key Factors for Success

KEY FACTORS FOR SUCCESS IN DESIGN-BUILD

- The need for complete buy-in from the entire team, including all players from the owner's side
- Selection of the right team
- Properly managing expectations
- Comprehensive assessment of not just the project, but overall organization goals



KEY FACTORS FOR SUCCESS IN DESIGN-BUILD

- Personnel educated in the nuances of design-build project delivery and management
- Goal alignment and collaboration among all parties (owner, contractor, architect, specialty contractors, etc.)
- Properly written performance based RFPs
- Strong leadership





GETTING READY FOR DESIGN-BUILD

CHALLENGES TO EFFECTIVE DESIGN-BUILD DELIVERY

- The inability for seamless inter-agency sharing of information
- Risk adverse nature of contracting officers (goal of avoiding protests drives to a focus on price, and often hinders creativity and innovation)
- Workload of procurement professionals who often can't find time for innovative options or training



CHALLENGES TO EFFECTIVE DESIGN-BUILD DELIVERY

- Lack of specific knowledge of design-build by legal professionals
- Poorly written source selection documents
- Use of price as a primary deciding factor when selecting a team
- Lack of creativity and innovation
- Inability to maintain a high level of expertise due to staff turnover
- Inability to properly define requirements





FIRST STEPS

Figure Out What You Want




FIGURE OUT WHAT YOU WANT

Owner Control

- Desire to control design details.
- Desire to control project outcome.
- Desire to have control of all prime contractors.
- Desire to empower more innovative project solutions.
- Desire for design excellence.




FIGURE OUT WHAT YOU WANT

Owner Relationships

- Desire to have direct relationship with designer.
- Willingness to establish a more professional relationship with contractor.
- Desire to avoid adversarial relationships.
- Ability to enhance project coordination.
- Ability to reduce project claims.
- Desire to integrate the “voice” of the contractor in the planning process.




FIGURE OUT WHAT YOU WANT

Project Budget

- Adversity to change orders.
- Need to establish budget at earliest possibility.
- Best value for funds invested.

FIGURE OUT WHAT YOU WANT

Project Schedule

- Timing to establish definitive project scope.
- Timing to establish definitive construction cost.
- Ability to fast track a project.
- Total project duration.
- Desire to avoid delays due to disputes or claims.




FIGURE OUT WHAT YOU WANT

Owner Risk

- Adversity to change orders.
- Owner's ability to make timely key decisions.
- Ability to reduce gaps between services.
- Liability for the success or failure of the design.



DRIVING FORCE BEHIND EFFECTIVE DESIGN-BUILD

Right People, Right Process, Right Tools

THE RIGHT PEOPLE



THE RIGHT PROCESS

What Project
Delivery System?

What
Procurement
Method?

What
Contract Format?

Project Delivery Systems	Procurement Methods	Contract Formats
Construction Management at Risk (CMR) also known as CM/GC	Best Value (BVS)	Cost Plus Fee
Design-Bid-Build (DBB)	Low Bid	Guaranteed Maximum Price (GMP)
Design-Build (DB)	Negotiated	Lump Sum (or Fixed Price)
Multi-Prime (MP)	Qualifications-Based (QBS)	Target Price
	Sole Source (or Direct Select)	Unit Price

Items listed in alphabetical order.

KEY CONSIDERATIONS

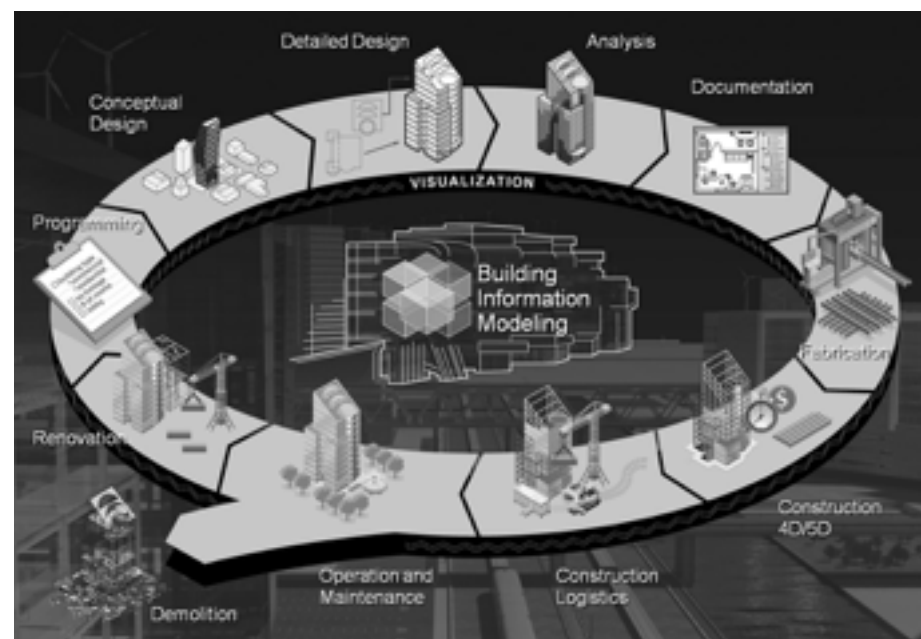
Key Considerations

- Cost efficiencies can be achieved since the contractor and designer are working together throughout the entire process:
 - Fewer changes, fewer claims and less litigation.
 - Earlier knowledge of firm costs.
 - Change orders typically limited to owner changes.
- DB can deliver a project more quickly than conventional DBB or CMR.
- Owner can, and should, specify performance requirements in lieu of prescriptive specifications.
- Ability to enhance project coordination.
- Ability to reduce project claims.
- DB team qualifications are essential for project success; owner must be willing to place a heavy emphasis on the qualifications portion of the selection process.
- Owner must be willing to allow the DB team to handle the design details.
- Owner's entire team must make the "mental shift" to a different way to deliver their project.

THE RIGHT TOOLS

Bring to bear all tools that enhance:

- Collaboration
- Coordination
- Integrated teaming
- Integrated solution finding
- Risk mitigation
- Waste reduction
- Value generation
- Innovation





THE HUMAN BEING FACTOR

Engaging Differently





WHAT IF PEOPLE WERE NOT THE
PROBLEM?

WHAT IF THE PROCESS IS WHAT HAS MADE US FEARFUL OF ONE ANOTHER?

A system that pits us against one another
Keeps us from finding real solutions
Robs us of our ingenuity and spirit

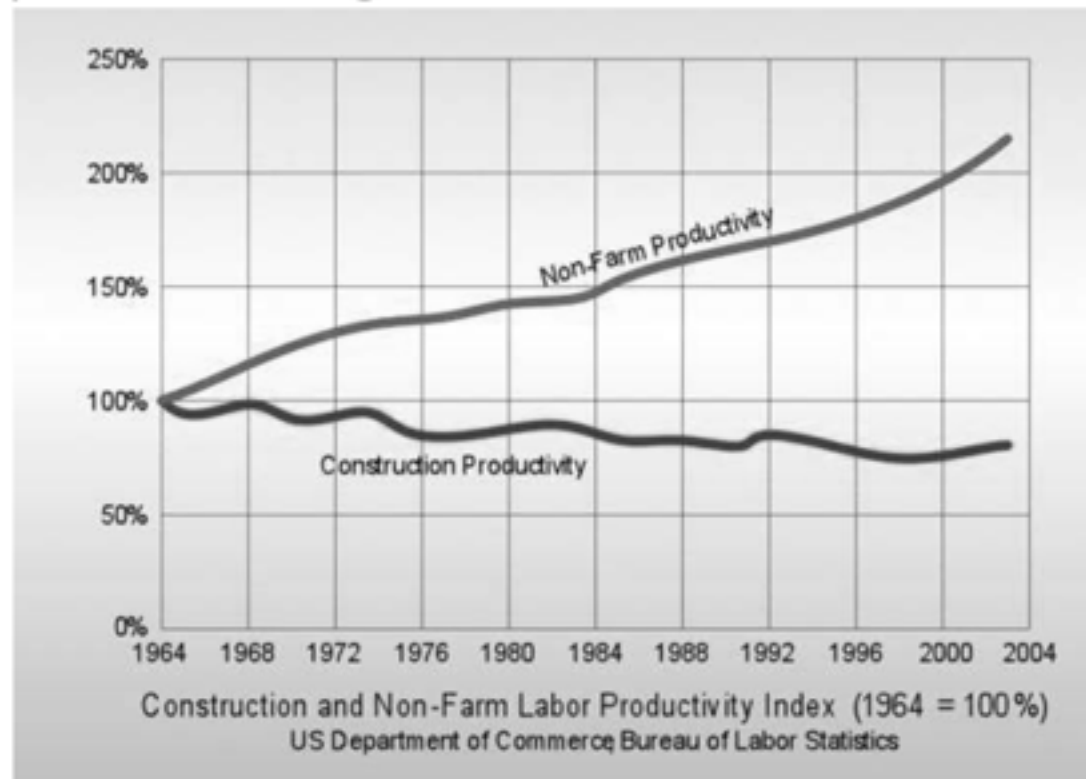


THIS MENTALITY HAS LED
US NOWHERE



HISTORICALLY UNDERPERFORMED

Underperforming



CONTINUING TO UNDERPERFORM

Continuing to Underperform



Paul Teicholz
article
updated,
March 14,
2013



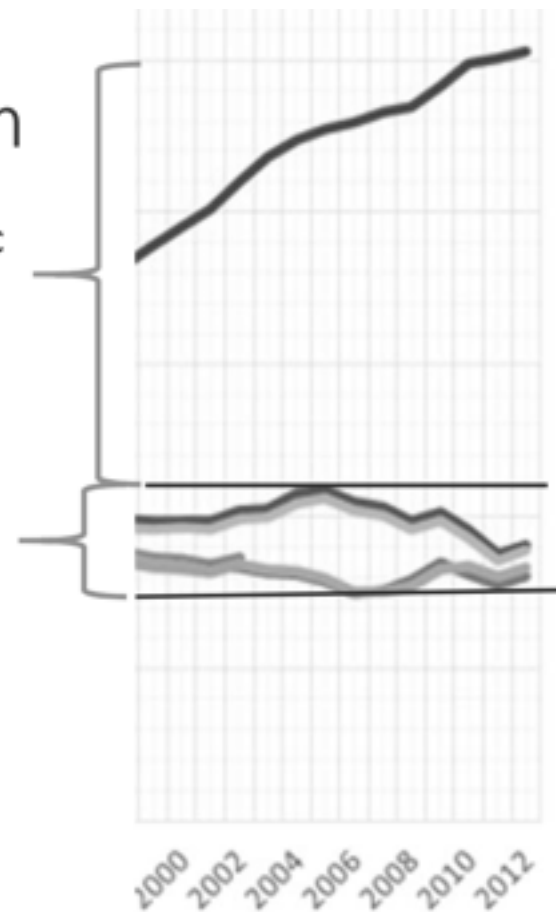
NOT GETTING BETTER

Continuing to Underperform

Since 2004

Continued dramatic
increases in
productivity

Continued
decreases in
productivity



LOW BID, LUMP SUM AND DESIGN-BID-BUILD

ADVANTAGES

- Easy to understand
- No learning curve
- Courts are familiar with this model as well
- Gives the owner some belief in contractual price certainty



DISADVANTAGES

- Very best value is day bids are opened; goes downhill after that
- Treats General Contractors as fungible, replaceable commodities
- Someone always loses
- Gambling at its most sophisticated level
- Does not rely on developing and using information
- Tries to sell the risk of bad things to others
- Signed before trades are on board

LOW BID, LUMP SUM AND DESIGN-BID-BUILD



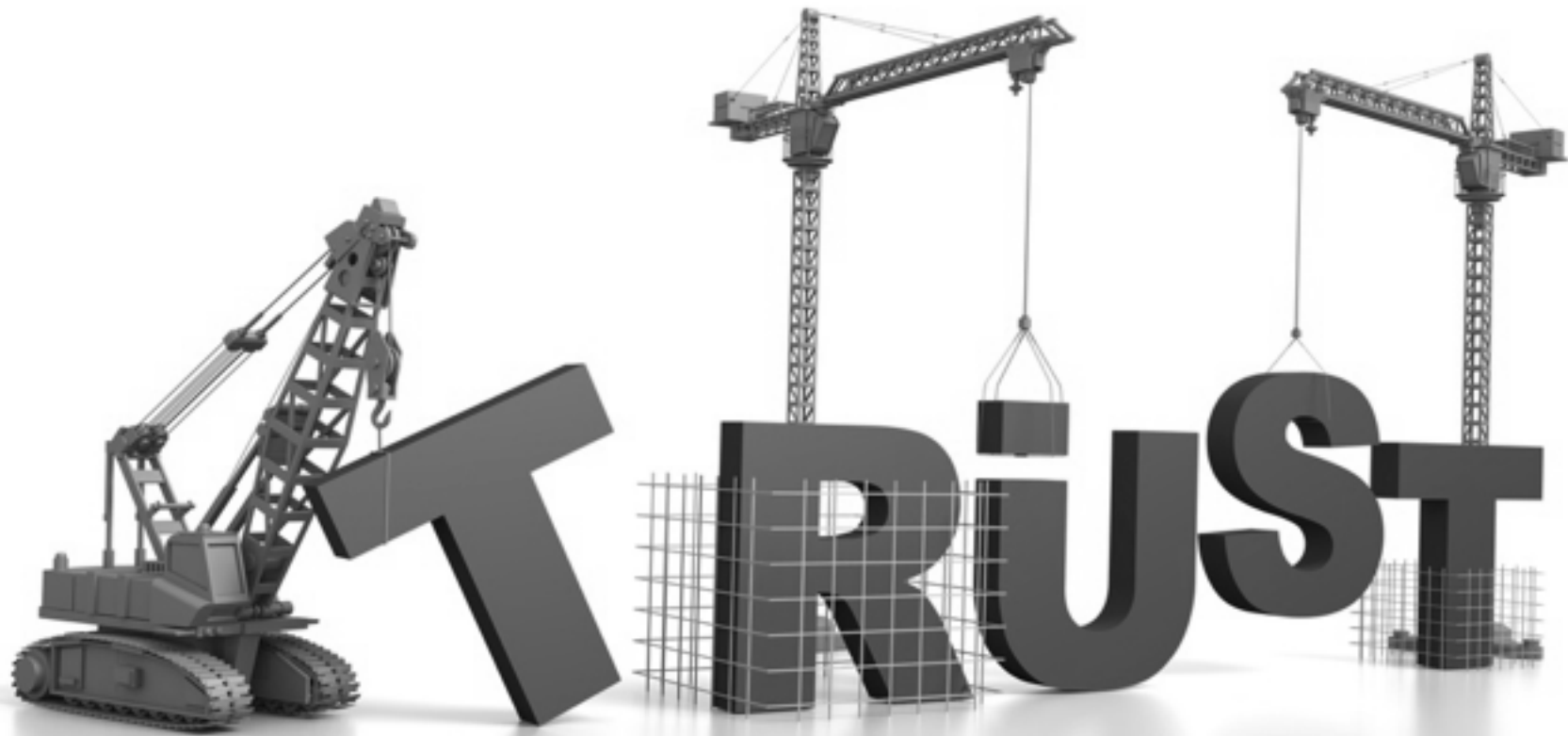
What did you just buy?

1. Contentious partners whose primary focus is to get that profit back.
2. Only what is indicated in the Bid Documents.
3. Arguments, Delays, Change Orders.
4. A Group of Trades who most likely have very little understanding of your needs, that have never worked together.



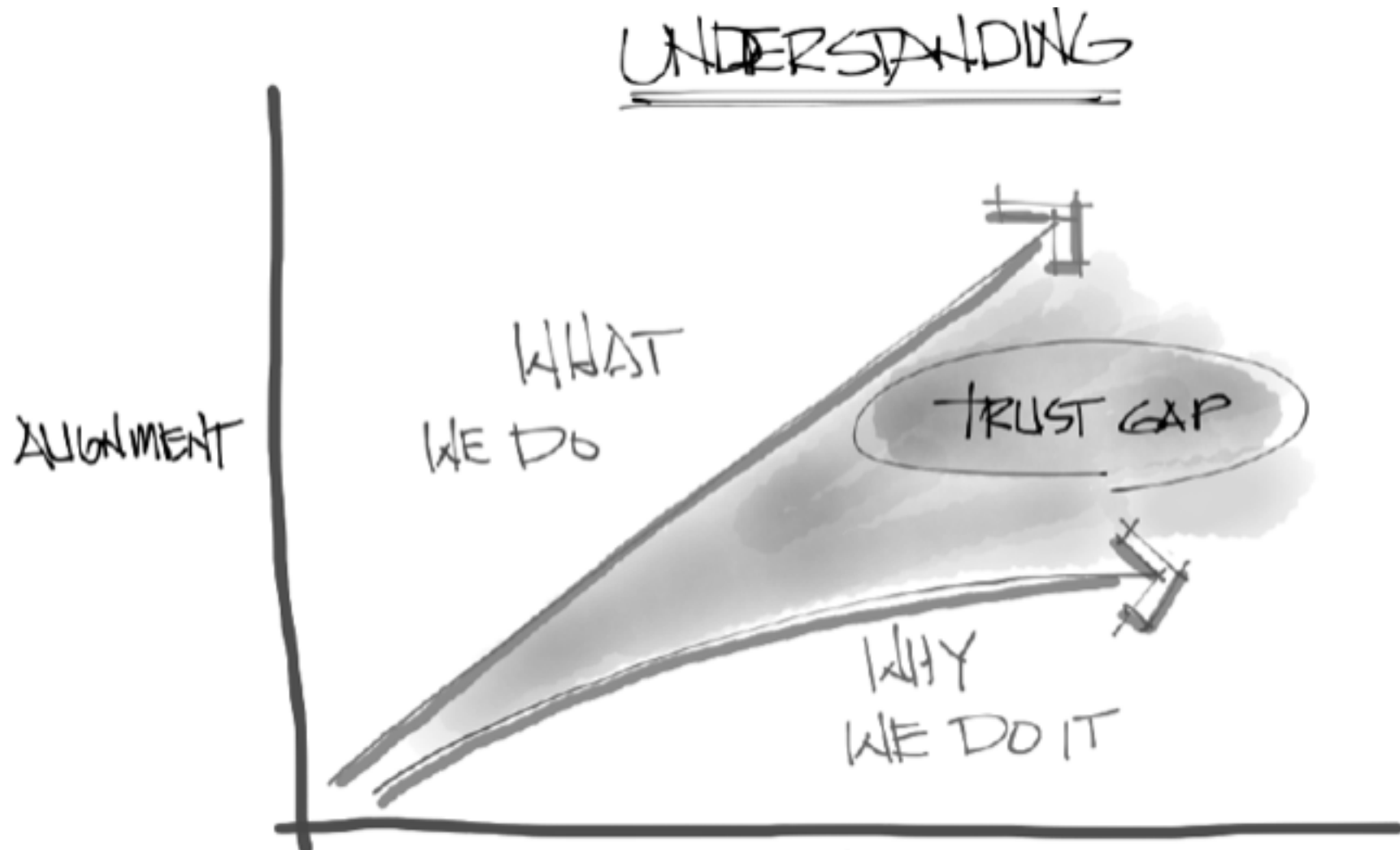


ONE THING THAT
MAKES ALL THE
DIFFERENCE



Respect, Transparency, Open Communication

CLOSING THE TRUST GAP



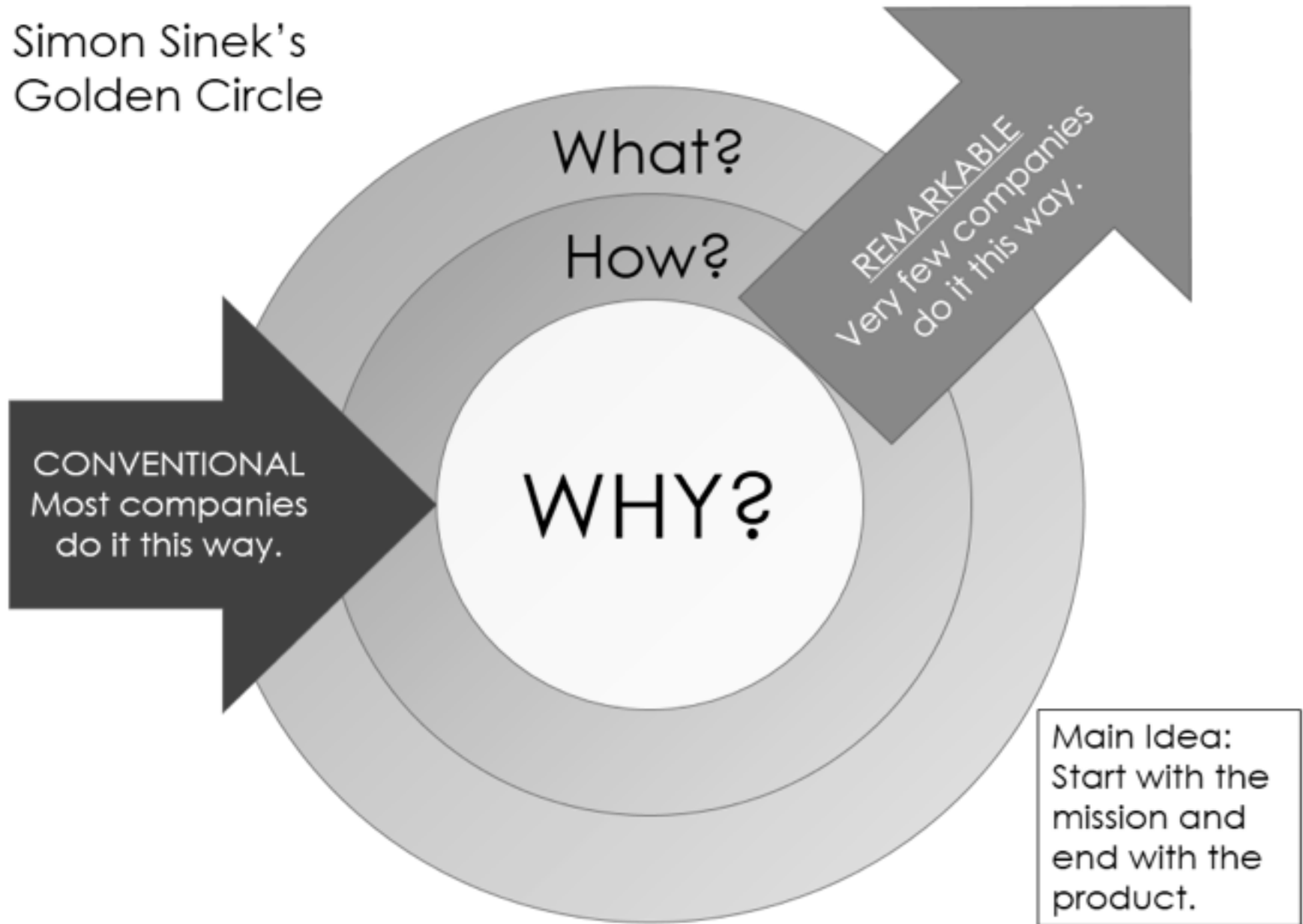


WHY?

Spend Time on Figuring This Out -
Writing a Preamble



Simon Sinek's
Golden Circle



What?

How?

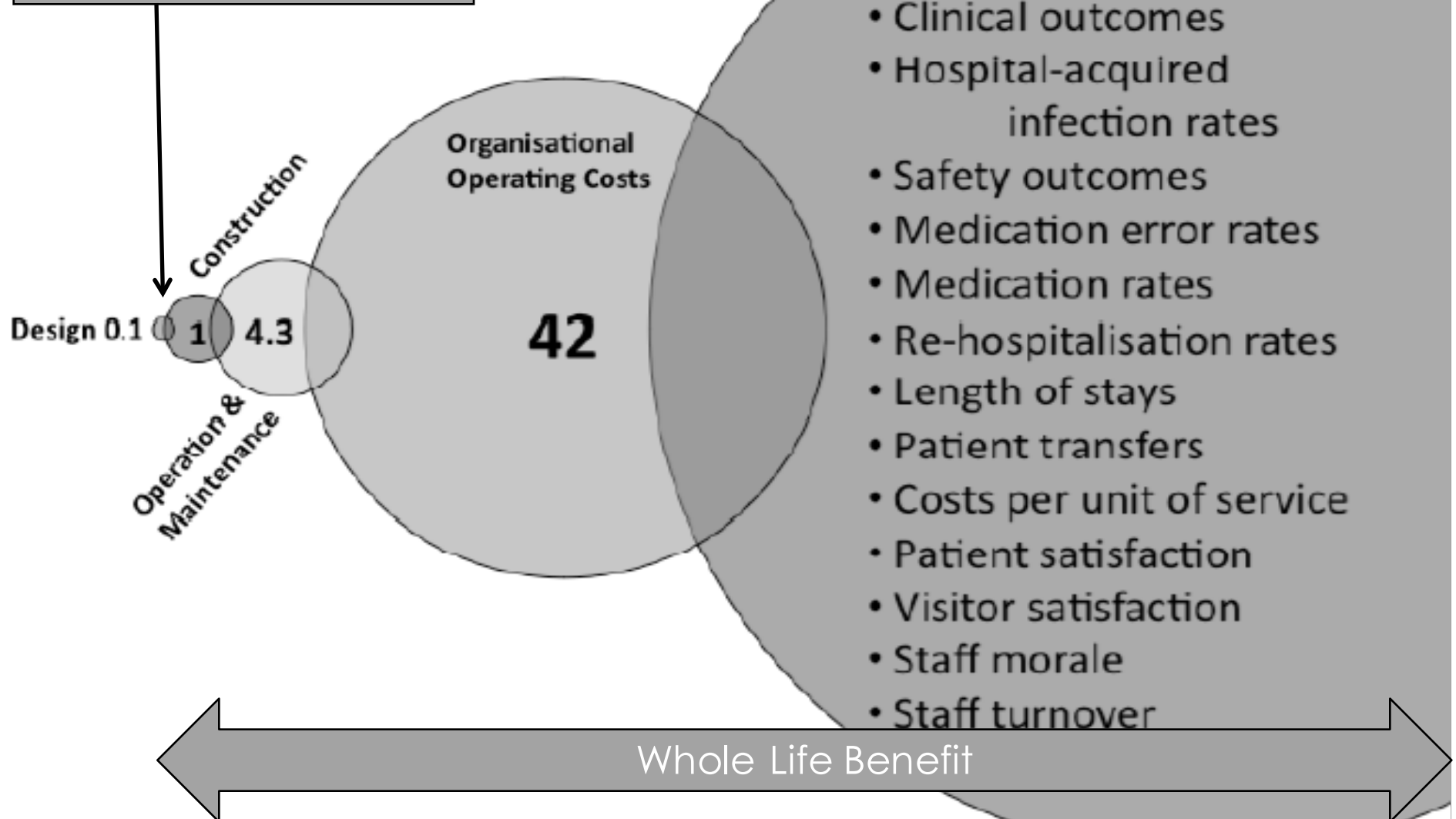
WHY?

CONVENTIONAL
Most companies
do it this way.

REMARKABLE
Very few companies
do it this way.

Main Idea:
Start with the
mission and
end with the
product.

Collaborative, integrated design is where we really unlock value for the client





NEW WAY OF DOING BUSINESS

Doing What Matters



ELEVATE PERSPECTIVE

Define - Learn - Share





ELEVATE RELATIONSHIPS


Influence - Partner - Connect





ELEVATE IMPACT

Leap - Live





Creative destruction occurs when something new kills something older

Ready to change the game?
LET'S TALK.

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