

Before you begin...

Change is hard, and changing complex health systems can be even harder! People move on, technologies change, priorities shift, and auditors might arrive tomorrow—and regulators the day after. Moreover, every project is as unique as the organization to which it is directed. It's natural to feel a sense of trepidation about launching a major new initiative, so as you prepare to embark, we offer some practical wisdom:

First, start small, gather quick wins, and let momentum build over time. For most people, undertaking change initiatives is not their full-time job, so be sure to carve out time in your calendar to block other priorities out and release you to focus on the work.

Second, recognize that you are likely to find yourself under-resourced and under-supported. Be confident that you can do much more with much less than you think. Try to plan ahead and leverage attention when you have it.

Third, accept that people may be apprehensive about your efforts. Despite your best intentions, healthcare professionals may be wary based on their past experiences, competing priorities, or a multitude of other factors. Be respectful towards those who at first seem cool, use empathy, and try to get to the bottom of their concerns.

Fourth, keep your expectations realistic and look for ways to leverage your successes. Demonstrate that progress is being made. Everything will take longer than you think, so strategize accordingly.

Fifth, understand that although efforts to improve are never final, it's important to have a clear endpoint to your project. Make sure you, your team, and your stakeholders recognize key milestones and are aligned on the stopping point.

Finally, appreciate that significant projects demand personal investment. Be kind to yourself, sleep well, enjoy your team, and take time for moments of inspiration—an evening out, a good book, a weekend adventure. Nurture your creative soul, as it is from there that everything else flows.

Excerpt From: “Discovery Design.” Amazon. Future Medical Systems, et al., 2017



DESIGNER'S MINDSET TIPS



Optimistic

Empathic

Inclusive



Experimental

Curious

Action-Oriented

"Usually new devices or IT anger me. But when I see that it's built on our actual workflows then there is real value. I can see my colleagues fingerprints on this. This is real empowerment!"

– Nurse Manager

SYSTEM STORYBOARD

ENVISION THE FULL EXPERIENCE

CONCEPT: _____

TAG LINE: _____

INSIGHT/PRIMARY GOAL: _____

A storyboard is a 2-dimensional prototype. Roughly draw key elements of the experience with stick figures. Include environments, tools, actions, emotions, potential hidden stakeholders, etc. Use as many sheets as you need.

Cheat sheet: sketching emotion



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Storyboard Caption:

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SYSTEM STORYBOARD

ENVISION THE FULL EXPERIENCE

CONCEPT: _____

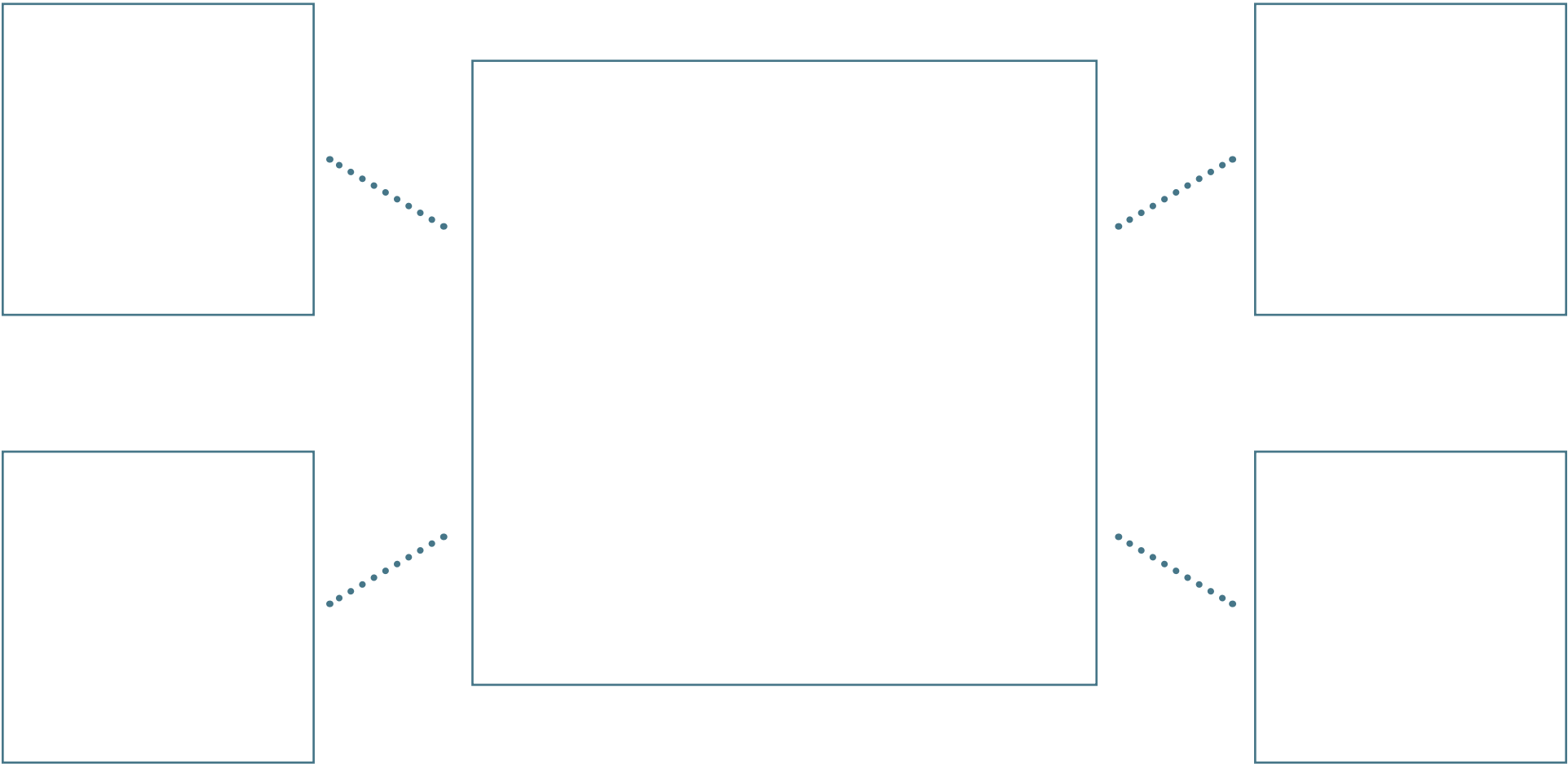
TAG LINE: _____

SYSTEM STORYBOARD

ENVISION THE FULL EXPERIENCE

CONCEPT: _____

TAG LINE: _____





PROTOTYPE TOOLKIT

FRAME YOUR QUESTION

CONCEPT: _____

ELEMENT or FEATURE: _____

What matters most? We wish to learn with this prototype:

Prototype elements

List or sketch all elements, then circle the top priorities to build:

A prototype “asks” a specific question of your users. Frame first what you would like to learn, then create prototype variations for each element.

Great prototypes come in all shapes and levels!

Goal today (check):

- ☐ to uncover (low resolution prototype)
- ☐ to validate (medium resolution prototype)
- ☐ to scale progressively (high resolution prototype)

Audiences to include for input:

A few questions for this audience to spark your discussion guide development:

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-
-
-
-

First steps to try out this idea:

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PROTOTYPE TOOLKIT

MITIGATE RISK

CONCEPT: _____

Hammer out the risks. Think ahead and encourage the front line to identify additional hidden risks as you go.

Risks to consider: *clinical outcomes, infection, distraction, changing workflow, impact on others, engagement, political, cultural, cost*

Design elements to consider in solutions: *people, environments, alignment, roles, services, digital or analog tools, communication*

Contextual constraint or risk:

Mitigation ideas:

Who to involve:

Contextual constraint or risk:

Mitigation ideas:

Who to involve:

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PROTOTYPE TOOLKIT

PLAN SUCCESS

CONCEPT: _____

TEAM: _____

Alignment and solid metrics are core to success in high risk environments. Collaborative, iterative prototyping boosts engagement, buy-in, and seeks to uncover unconventional metrics which may make or break success within a complex system. Consider traditional as well as new metrics and think of this sheet as a thought-starter rather than a tracking tool.

Outcome Success is...

Quantitative Metrics to consider: clinical outcomes, frequency of use, durability, efficiency, staff turnover, resource usage etc

Qualitative Metrics to consider: delight, surprise, reduced complexity, eased cognitive load, intuitiveness, reduced barriers of use, usefulness, reduced risk

Empathic Metrics to consider: human connection, engagement level, familiarity/awareness, satisfaction, workload or stress, team building, patient engagement, reduced burn-out, etc

Financial Metrics to consider: cost, resource allocation, time to complete task, etc

Brand and Political Metrics to consider: potential for high-level buy-in, hospital standing, publishing opportunities, etc

How might we measure these?

Alignment Success is...

Users, stakeholders, partners, champions and challengers:

How might we best engage?:

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PROTOTYPE TOOLKIT

GATHER INPUT TO EVOLVE

CONCEPT: _____

TEAM: _____

Getting value from your prototype means sharing it with others. Whenever possible, do this in context, with the actual people that might use the real solution. As you learn, change your prototype or how you describe it - explore all the facets of the concept and don't be afraid to discard an idea in favor of using the learning to improve (or focus on) a different idea.

Warm-up with your participant:

Observations: *What they said, did, body language, environmental cues*

Questions to ask:

Your interpretations: *gut feel/other observations*



PROTOTYPE TOOLKIT PLANNING FOR SCALE

CONCEPT: _____

TAG LINE: _____

INSIGHT/PRIMARY GOAL: _____

As you ramp up the size of your pilots, you are fine-tuning the expression of the idea iteratively. Start with environments and users that had input on the concept, and gradually involve additional stakeholders who are seeing the idea for the first time.

What we wish to learn with this prototype?:

Contextual constraints and risk within the larger system:

First step:

Next step:

After that:

Outcome Success Looks Like:

*Metrics to consider: old and new
- efficiency, financial, team, human
connection, lowered burn-out, etc*

Alignment Success Looks Like:

Stakeholders to align: old and new