

A close-up photograph of a computer keyboard. The central focus is a bright green key with the word "health" written in white lowercase letters. Surrounding it are various other keys: "caps lock" to the upper left, "z" and "x" to the right, "alt" and "option" below, and "command" to the right. The keyboard is silver and the keys are white with black lettering. The background is slightly blurred, showing more of the keyboard and a dark surface.

e-Health Governance: Measuring the Impact of an Innovative Technology Solution on Culture and Performance at Southlake Regional Health Centre


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June 3rd, 2015

Health System Challenges



Information is **siloes** and **organization specific**

Health System Challenges

A yellow fire hydrant is shown on the left side of the image, with a stream of water spraying out to the right. The background is dark, and the water is bright white, creating a strong contrast. The hydrant has a textured surface and a circular cap on top.

Getting information off the Internet is like taking a drink from a fire hydrant.

Mitchell Kapor

The **information** that is now available to the health system is undoubtedly having a **profound impact** on our system but it also is **creating a significant challenge**.

E.g. MRIs, CT's, Genomes etc.

Health System Challenges

The same consumers that use the health system are online, yet health organizations are **not connected** to the **consumer world**

E.g. Fitbit, MapMyRun, Weight Watchers



Our society increasingly relies on transparent, real time information at a glance, from everywhere...

...what does this look like in healthcare?



Unit 97% 3

Hospital 86%

Welcome to McKesson General Edit

A photograph of a hospital room. In the foreground, there is a white desk with a brown top, holding a book and a yellow folder. In the background, a hospital bed with white linens is visible. The room is dimly lit.

Purpose:

- * Examine impact of MPV technology on leadership, culture, patient flow and hospital performance

Methods:

- * qualitative interviews
- * staff surveys (time series)
- * hospital performance indicators

Culture Shift: Overcoming Organizational Silo's

*"...Currently, **we're very siloed**, not everybody does know other than the bed allocation office and certain managers and administrators that might have a particular view of our bed board, they see all because they're sitting at their desk with the whole hospital in front of them so they know what's empty, what's clean, who's going home, so they have that information in front of them, but **they don't know what's really going on the floor...**"*

Importance of Transparency: Basis for the Decision to adopt Technology

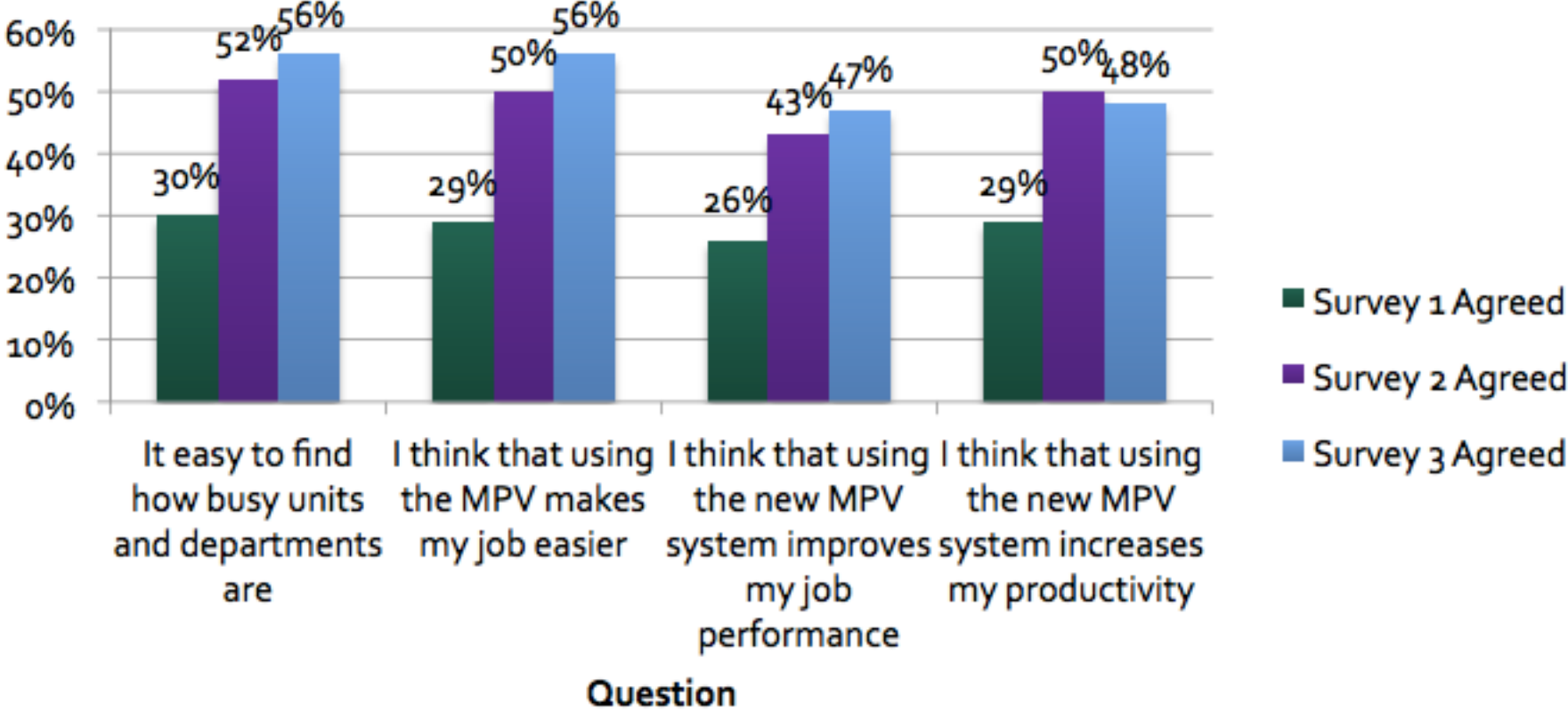
*"Not that they're hiding, because they can't really hide them, once they're discharged in the system, they'll definitely delay giving report. There's a lot of phone calls that are made where people will say no, the bed isn't clean when it actually is, **there's a lot of the in between and I guess people don't know who to believe**, so when they do call the unit and say is this bed ready, can we transfer this patient, the nurse will say no the bed's not cleaned yet, even though it is..."*

Hospital Performance Results:

- **Increased Capacity (Reduced waiting in ED)** (1.46 hours (2011/2012)- 1.28 hours (2012/2013)- 1.42 hours (2013/ 2014))
- **Decreased LOS (Mental Health, Medicine & Cardiology)** (-50% in length of stay correlation with implementation of MPV)
- **Decline in Patient Falls** (there is a significant reduction in patient falls after MPV implementation, however there was a downward trend before implementation)
- **Increase (+25%) in number of patients with discharge plans within 48 hours of anticipated discharge**

Figure 18- Perceived impact of MPV on job performance, productivity and flow of information

Perceived impact of MPV on job performance, productivity and flow of information



Decreased wait times in ER




Increased bed capacity (from 56 to 61 patients/day)

Reduced LOS by 50%: mental health, cardiology

Reduced ED wait time



“MPV system helps create a fair workload
across departments”
Survey responses went from 27% to 56%

A high-angle photograph of three people sitting around a wooden table in a meeting. A man in a purple shirt is on the left, a woman with curly hair in a blue jacket is on the right, and a woman in a green top is in the foreground. They are looking towards the camera. The table is cluttered with papers, a laptop, and several magazines. One magazine is titled 'DISEÑO DE PRODUCTOS Y RELETTES 4', another 'SOCIAL ENGINEERING', and another 'Linux Ubuntu'.

Emergence of a "team culture" focused on achieving quality

"...We have worked really hard at changing our culture to one of a transparent culture rather than siloed based and so where I would suggest previously we cared less about what was happening corporately, now there is both a yes we need to know what's happening in our unit or in medicine, but we also need to know what is happening across the spectrum relative to patient flow"

A photograph of a hospital hallway with a gurney in the foreground. The hallway has white walls, a white door, and a white gurney. The floor is light-colored. The image is overlaid with a semi-transparent dark green filter.

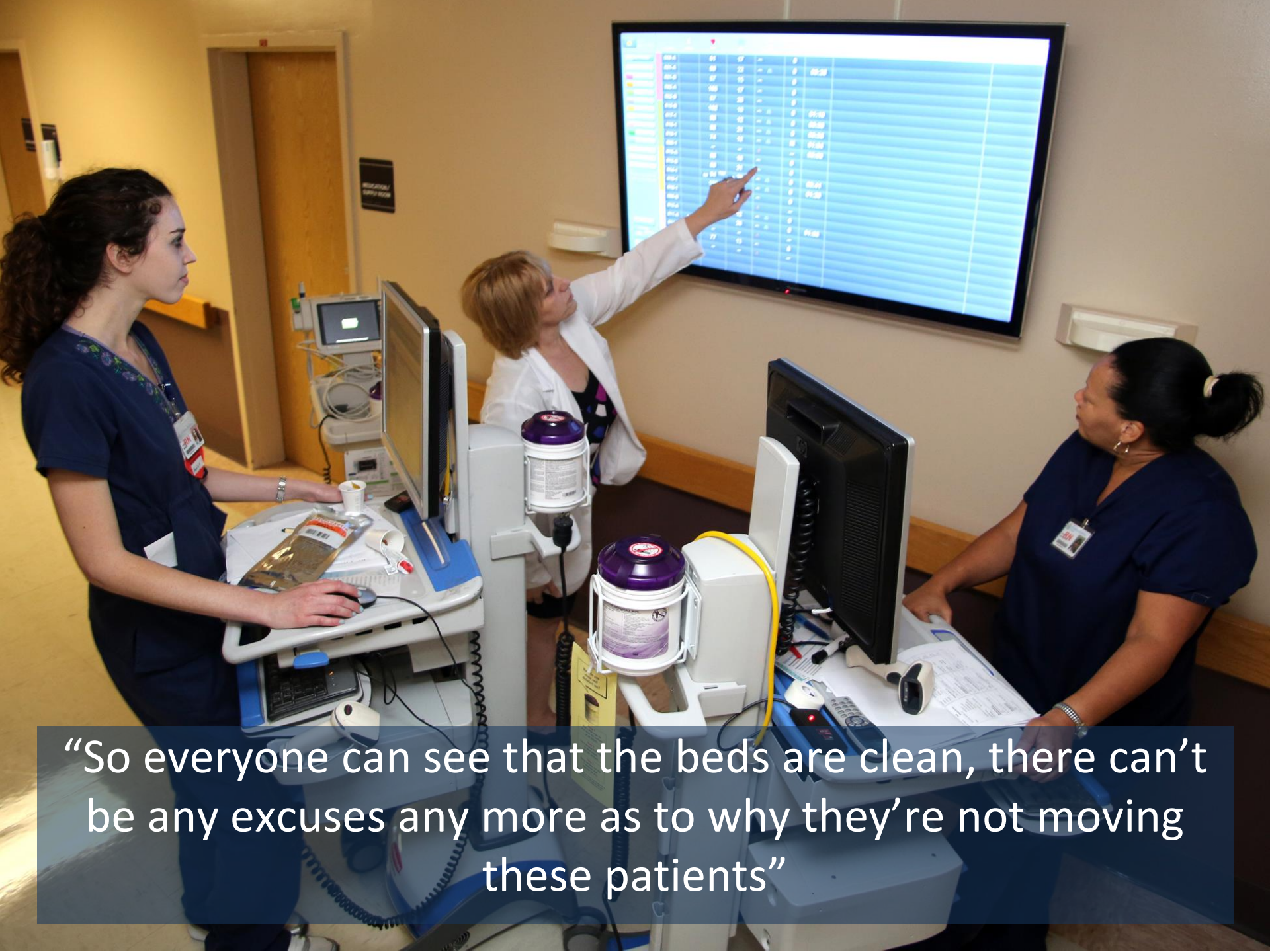
Streamlined, Efficient Communication: "You know everything you need to know in "Real Time"

"Now we're going to know the minute you're gone because even if they don't call it down, discharge the patient themselves or call it down to bed allocation, the cleaner is going to start cleaning that room and you're going to know they're cleaning that room and they haven't been discharged out of the system yet. So, it's going to make so much more information that's needed to know about how to get patient from A to B visible to anybody and everybody, cleaners right through to our CEO."



Importance of Technology: "transforms care at the bedside"

*"I could give not much care for technology for the sake of technology or the cool or the wow factor, it doesn't impress me. **What I like is when it truly transforms care at the bedside.** It makes a difference for patients, for staff, for care providers, **for safety, for quality,** that's when I get energized about **technology,** not just to say, get the latest gizmo or gadget or whatever."*



Room	Bed	Admission	Discharge	Room	Bed	Admission	Discharge
204	11	07	-	204	11	07	-
204	12	07	23	204	12	07	23
204	13	07	15	204	13	07	15
204	14	07	07	204	14	07	07
204	15	07	20	204	15	07	20
204	16	07	07	204	16	07	07
204	17	07	07	204	17	07	07
204	18	07	07	204	18	07	07
204	19	07	07	204	19	07	07
204	20	07	07	204	20	07	07
204	21	07	07	204	21	07	07
204	22	07	07	204	22	07	07
204	23	07	07	204	23	07	07
204	24	07	07	204	24	07	07
204	25	07	07	204	25	07	07
204	26	07	07	204	26	07	07
204	27	07	07	204	27	07	07
204	28	07	07	204	28	07	07
204	29	07	07	204	29	07	07
204	30	07	07	204	30	07	07
204	31	07	07	204	31	07	07
204	32	07	07	204	32	07	07
204	33	07	07	204	33	07	07
204	34	07	07	204	34	07	07
204	35	07	07	204	35	07	07
204	36	07	07	204	36	07	07
204	37	07	07	204	37	07	07
204	38	07	07	204	38	07	07
204	39	07	07	204	39	07	07
204	40	07	07	204	40	07	07
204	41	07	07	204	41	07	07
204	42	07	07	204	42	07	07
204	43	07	07	204	43	07	07
204	44	07	07	204	44	07	07
204	45	07	07	204	45	07	07
204	46	07	07	204	46	07	07
204	47	07	07	204	47	07	07
204	48	07	07	204	48	07	07
204	49	07	07	204	49	07	07
204	50	07	07	204	50	07	07

“So everyone can see that the beds are clean, there can’t be any excuses any more as to why they’re not moving these patients”



Vision for Transforming: tracking and pinpoint where improvement is needed

"I think there will be a lot of reports coming out of that system. So if the nurse is putting into the system that the patient had an order to be discharged then you can track how long it took to clean the bed, or if we said the bed has to be cleaned within 2 hours or discharge or 1 hour, you will be able to measure all of this because everything will be time stamped and you should be able to pinpoint where the improvement needs to occur."

Shifting Accountability: Leadership that "levels the playing field"



Access to information **levels the playing field**; shifting from a top down approach to a model of **lateral collaboration**



International Centre
for Health Innovation

Access to **information must be democratized**, not only within provider teams, but also **including the patient** to improve our health system



Thank you.
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Restaurant Table Management Systems



Canada's Future Health System

A white rectangular sign with a black border and rounded corners is attached to a silver wire mesh fence. The sign features the text 'BUSINESS OPEN AS NORMAL' in bold, black, sans-serif capital letters, arranged in three lines. The background behind the fence is blurred, showing what appears to be an industrial or construction site with yellow and blue elements.

**BUSINESS
OPEN
AS NORMAL**

not only within provider teams, but also **including the patient**
to improve our health system

1) TRANSPARENCY

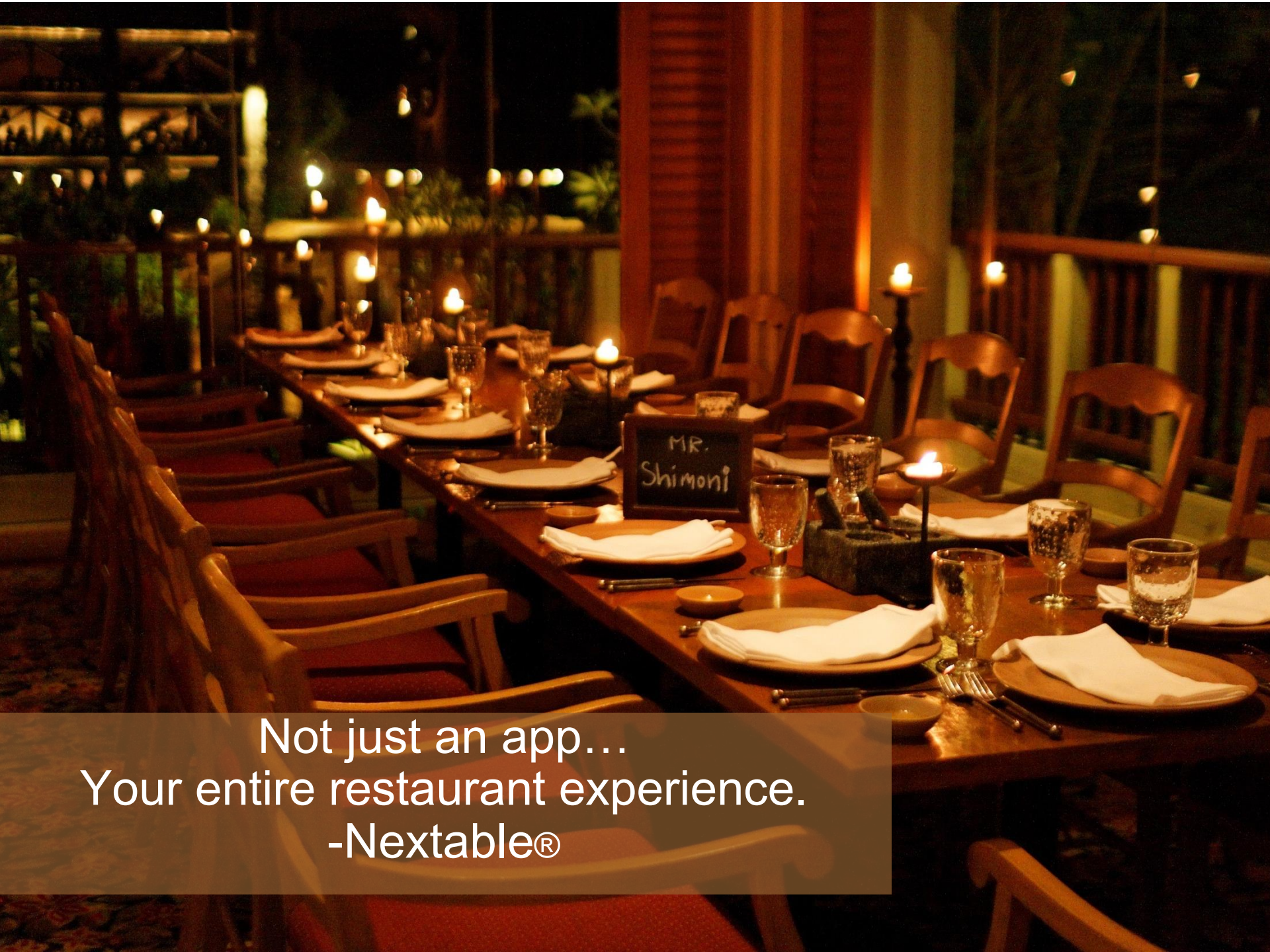


“There’s no reason why everybody shouldn’t be able to see everybody else”

“FedEx InSight® provides real-time status...a level of service to our customers that we were previously unable to provide.”

-Greg Sharkey





Not just an app...
Your entire restaurant experience.
-Nextable®

Culture Shift



- Decreased patient falls
- Reduced length of stays
- Cost savings
- Innovation culture

A woman in a dark uniform and headset is working in a control room. She is looking at a large monitor displaying a radar or flight display. The room is dimly lit with blue light from the monitors and overhead lights. There are various pieces of equipment and screens visible in the background.

Safety Culture: Aviation vs. Medicine

Quality Culture: Automotive Industry vs. Health Care



What does everyone value...



Quality of care



Health IT

Gold Standard of Innovation Adoption