

# Transformative Work Design

(Because Good Work Matters)

**Sharon K. Parker**

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July 13<sup>th</sup> 2016

Breakfast By the Bay

# Plan



What on earth is work design?  
(And why does it matter?)



Is there untapped potential for  
work design?



If work design is so important,  
what can we do about it?



How is work changing, and what  
is the role of work design?

# What is work design?

## Good work design has:

3. The autonomy to make decisions?

4. Tasks that are meaningful?

5. Support from your colleagues and boss?







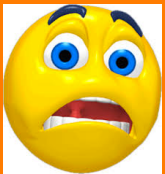
6. Challenging tasks yet a manageable work load??

**High Job Resources  
(Psychological)**



**Reasonable Job  
Demands**

# Work Design Model

	Low-Moderate Demands	Mod. to high demands	
Low Job Resources (no control, red tape, low social contact/support, no flexibility)	<b>“Passive Job”</b> 	<b>Stressful Job</b>  	
High Job Resources (autonomy, support, feedback, flexibility, etc.)	<b>“Cushy” Job</b> 	<b>Active Jobs</b> 	<b>Very high demands</b> <b>Hyper-Active Jobs</b>  



35% of  
jobs!!

# “Passive” Jobs



**Low-mod.  
Demands**

**Low Job  
Resources**

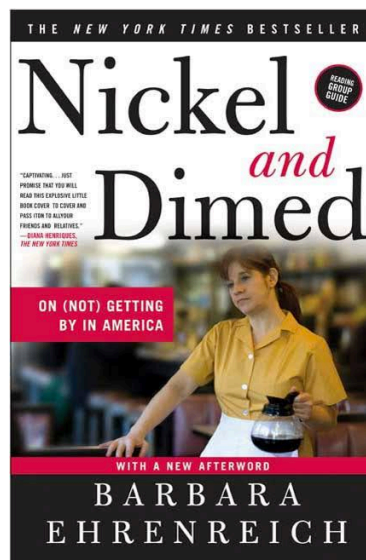
**“Passive Job”**  
Repetitive  
Boring, routine  
Highly scripted  
Low autonomy over  
decisions  
Insecure, inflexible



## EFFECTS

**For individuals** – disengaged, ‘bore-out’  
musculoskeletal injuries, lack of development

**For organisations** – wasted talent, turnover,  
absenteeism, impaired performance (‘that’s  
not my job’ mentality), accidents.



25% of  
jobs!!

# “Stressful” Jobs



THE UNIVERSITY OF  
**WESTERN**  
AUSTRALIA

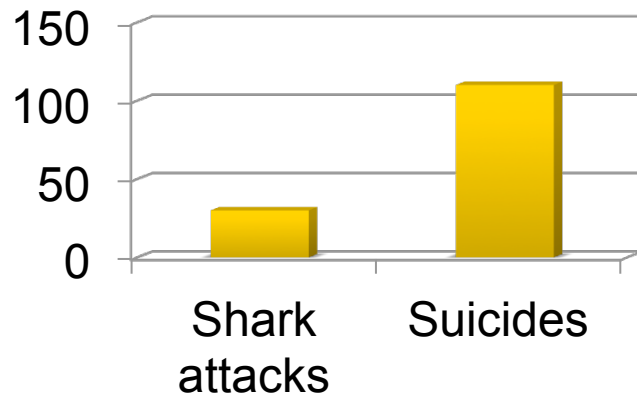
	High Demands
Low Job Resources	<b>“Stressful Job”</b> Time pressure Long working hours Emotional pressures AND Low autonomy Low support



## EFFECTS

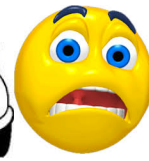
**For individuals** – anxiety/ depression, burnout, mistakes, cardiovascular disease,

**For organisations** – turnover, absenteeism, presenteeism, accidents, workers’ compensation claims



12% of jobs!!

# Hyper-Active” Jobs



THE UNIVERSITY OF  
WESTERN  
AUSTRALIA

Very high  
Demands

High Job  
Resources

“Saturated Job”

Time pressure  
Long working hours  
Emotional pressures



## EFFECTS

### For individuals

- Engaged, committed, creative
- stress-related ill-health (physical, mental), home-work conflict



## For organisations

### Why Women Still Can't 'Have It All'

ANNE-MARIE SLAUGHTER

JUN 22, 2012, 4:06 AM



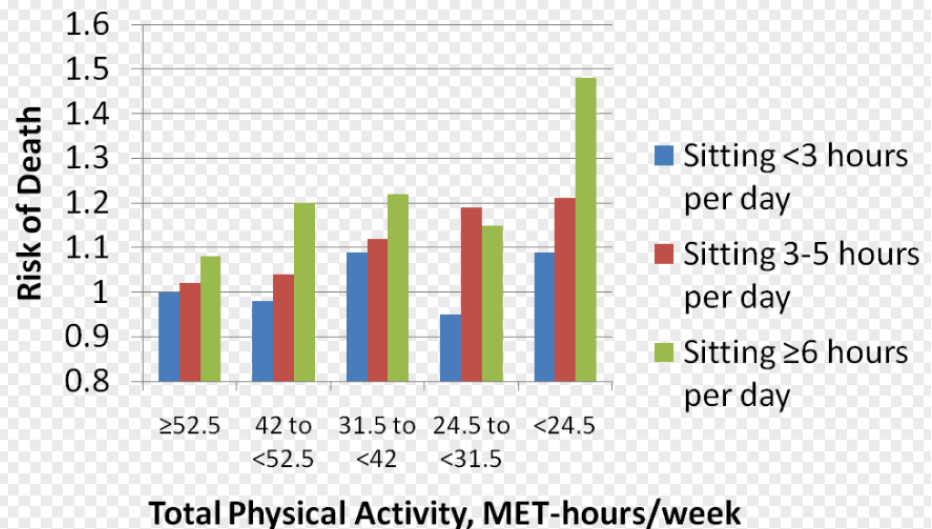
FACEBOOK



TWITTER



REDDIT



*“sitting is the new smoking”*

# Many Poor Work Designs



## Labour exploitation, slave-like conditions found on farms supplying biggest supermarkets

**Four Corners** By Caro Meldrum-Hanna, Ali Ru

Updated 7 May 2015, 4:23pm

### Stress in academy 'could cost universities'

Paper finds increased administration and policy changes are raising stress in scholars

June 5, 2016

By [John Elmes](#) Twitter: [@JElmes\\_THE](#)



Stress, long hours as  
roles deterring staff fr

Save

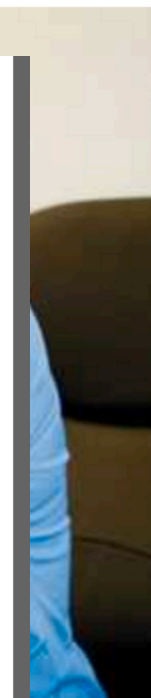
**BUSINESS JOURNAL** JANUARY 7, 2016

**PRINT**

**SHARE**

## The Worldwide Employee Engagement Crisis

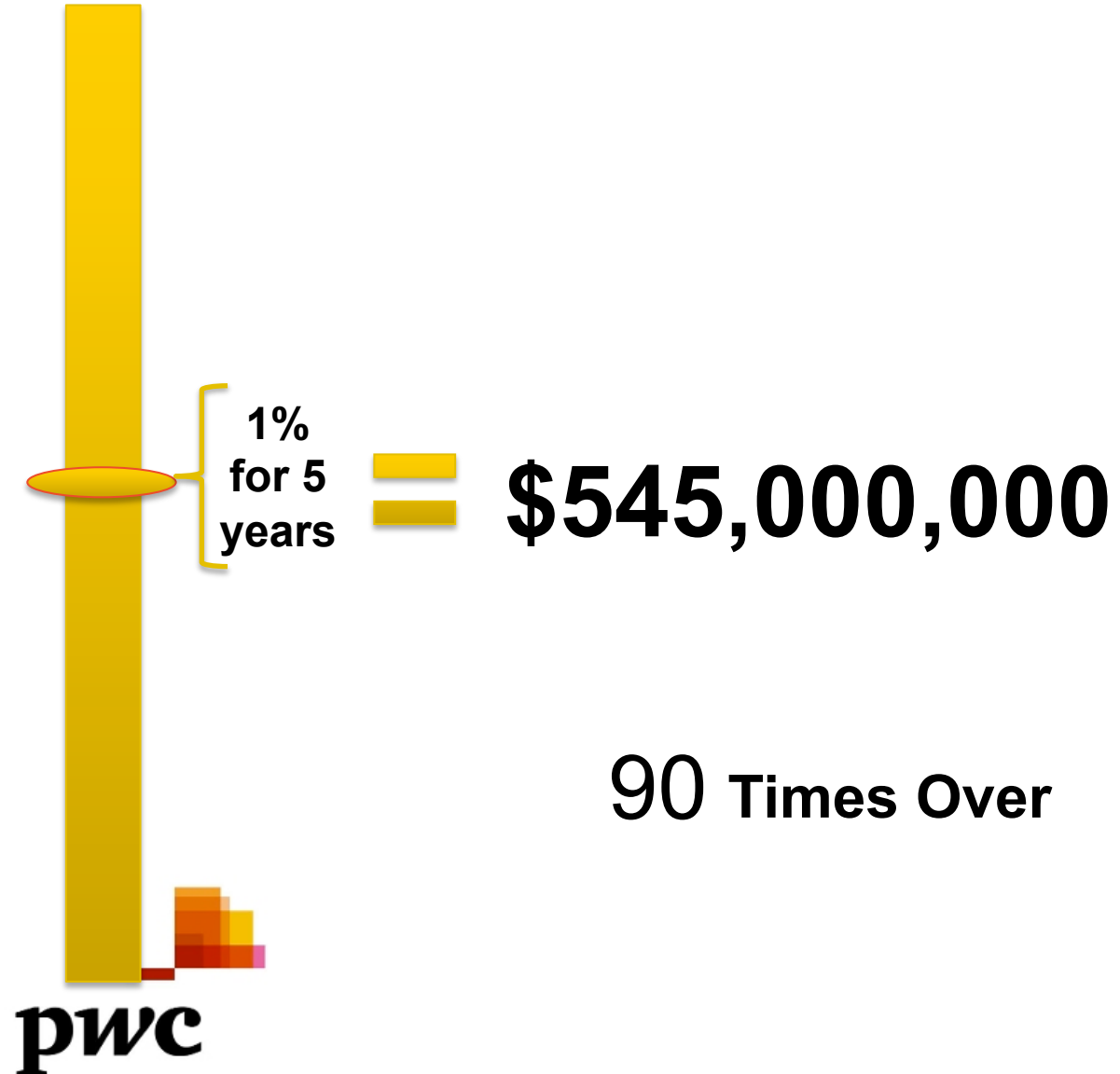
by Annamarie Mann and Jim Harter





# With A Large Price Tag

**Work Stress  
costs  
\$10.9 billion  
per year**



# Key Message 1

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*For the price of good work design you get...*

# Plan



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(And why does it matter?)



Is there untapped potential for  
work design?

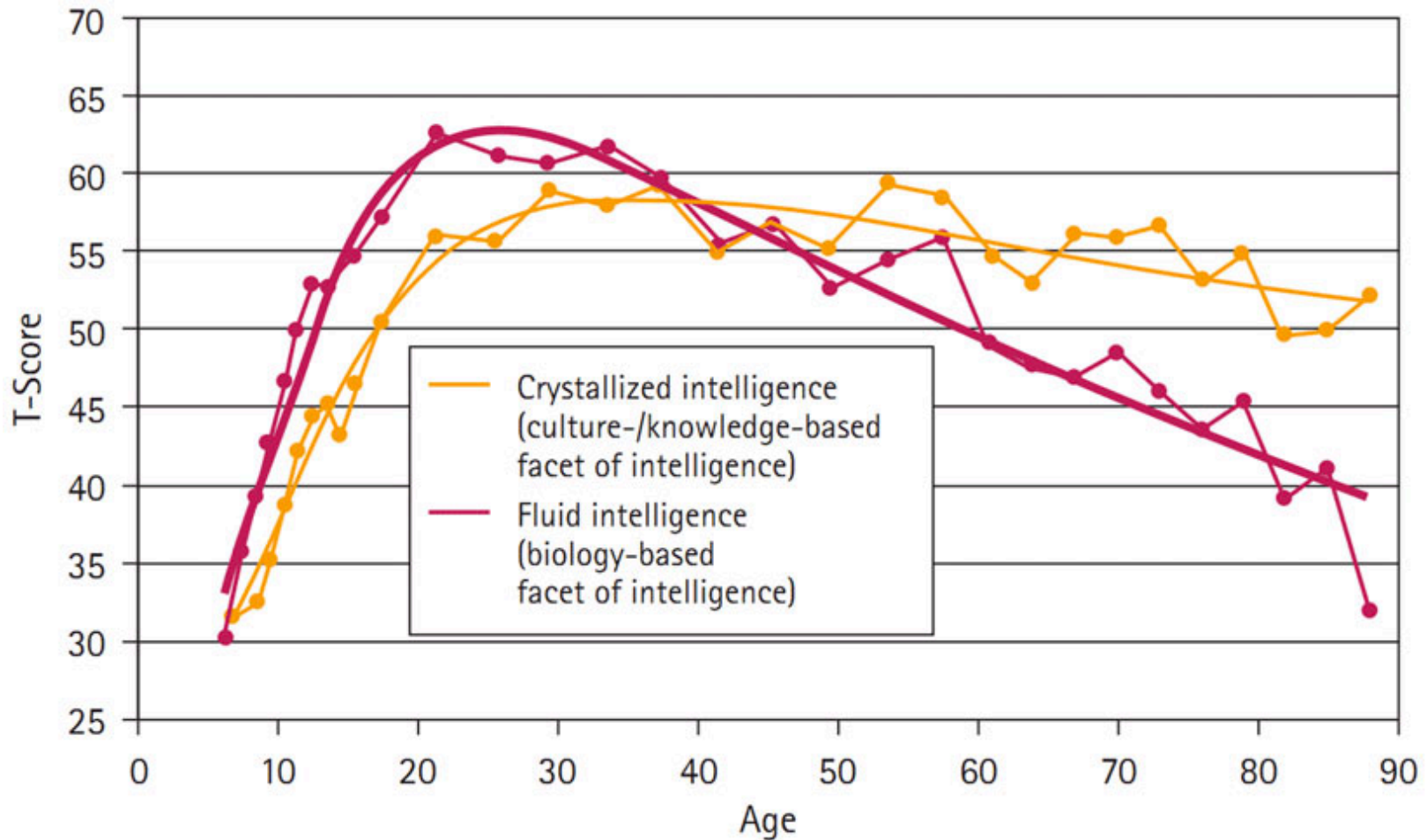


If work design is so important,  
what can we do about it?



How is work changing, and what  
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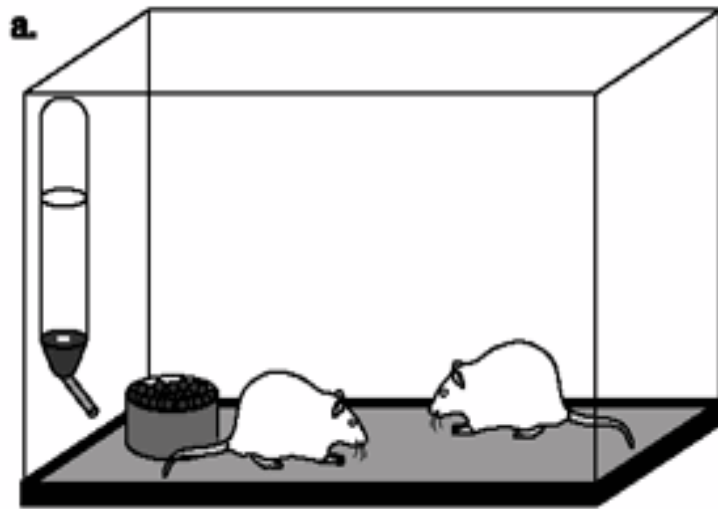
# The Bad News



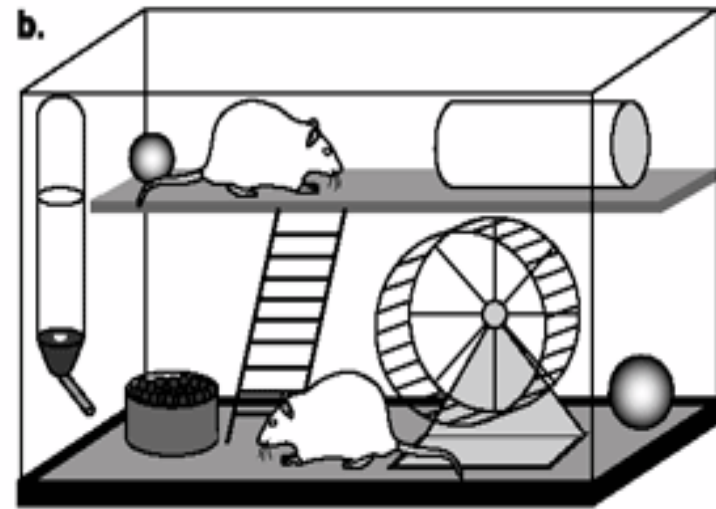
**Fluid intelligence eg memory, problem-solving ability, declines with age.**



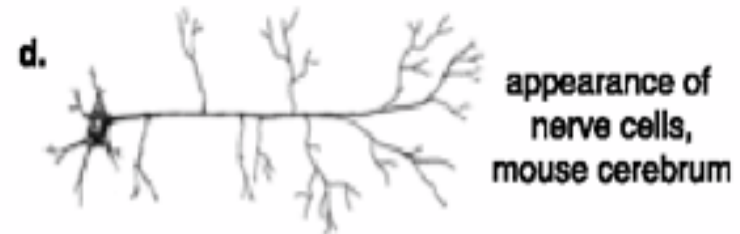
# The good news... brain plasticity



**standard cage**



**enriched cage**



# The role of work

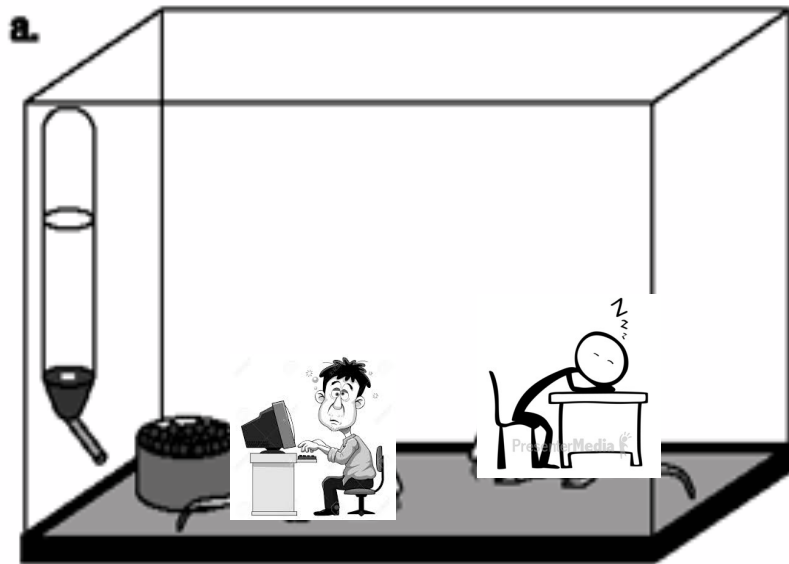


**Twin 1**  
No alzheimers  
Complex, challenging job



**Twin 2**  
Alzheimers  
Simple, routine job

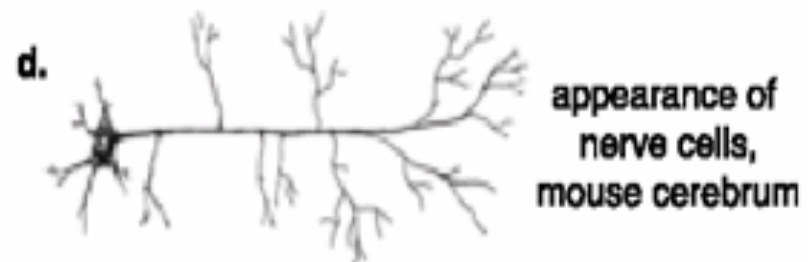
# Effect of good work design?



**standard** office



**enriched** office



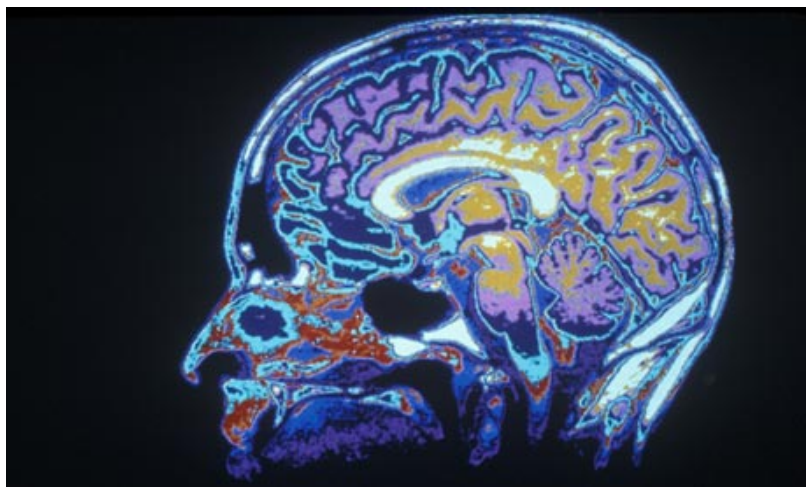
# **“Working Across the Life Span” (WALS) 20 year study**





# Key Message 2

Good work design - enriched with job resources – might help to keep us smart.



# Plan



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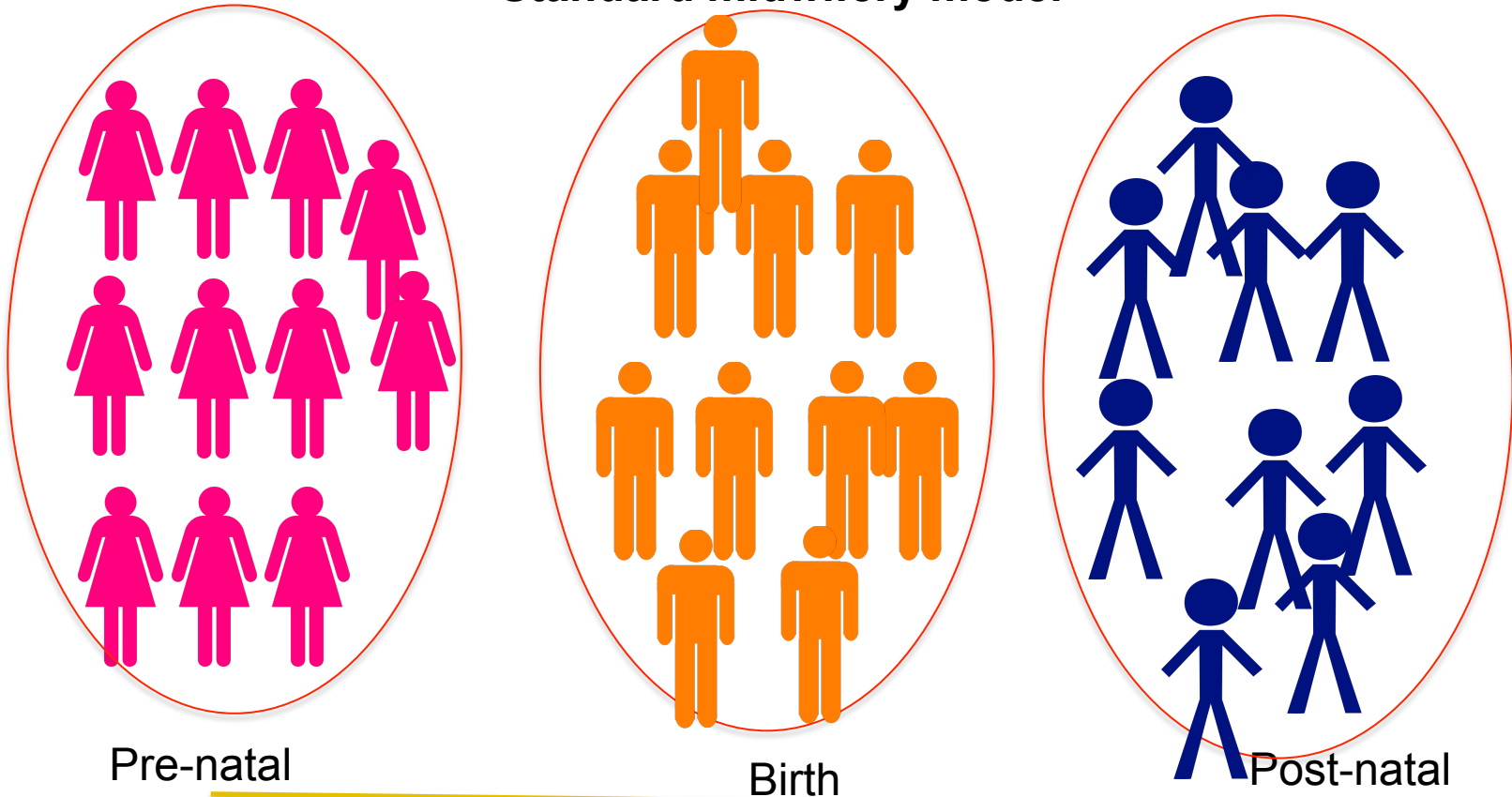
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# Example of work 'redesign'

## Standard midwifery model



Midwife A-C



Midwife D-G



Midwife H

# Example of work design

## Caseload midwifery model



Midwife A x multiple 'cases'

Pre-natal

Birth

Post-natal



Midwife B x multiple 'cases'

Pre-natal

Birth

Post-natal



Midwife C x multiple cases

Pre-natal

Birth

Post-natal

Midwife A



Midwife A



Midwife A





# Outcomes

## For patients and the hospital



1748 pregnant  
women

*Randomly  
assigned*

Standard  
work design  
(N= 877)

Caseload  
work design  
(N = 871)

- Caseload work design:
  - fewer elective cesarians;
  - more spontaneous births
  - less postpartum blood loss
  - faster discharges
  - more babies breastfed
  - \$556 cheaper per woman  
*[reported by Stacey et al.,  
2013, Lancet]*

## For midwives

(Johnson & **Parker**; same sample)

### Significantly better work design:

- More Job Resources
  - Greater skill variety
  - More task significance
  - More job autonomy (etc).

### Better outcomes

- Lower intention to quit
- Higher job satisfaction

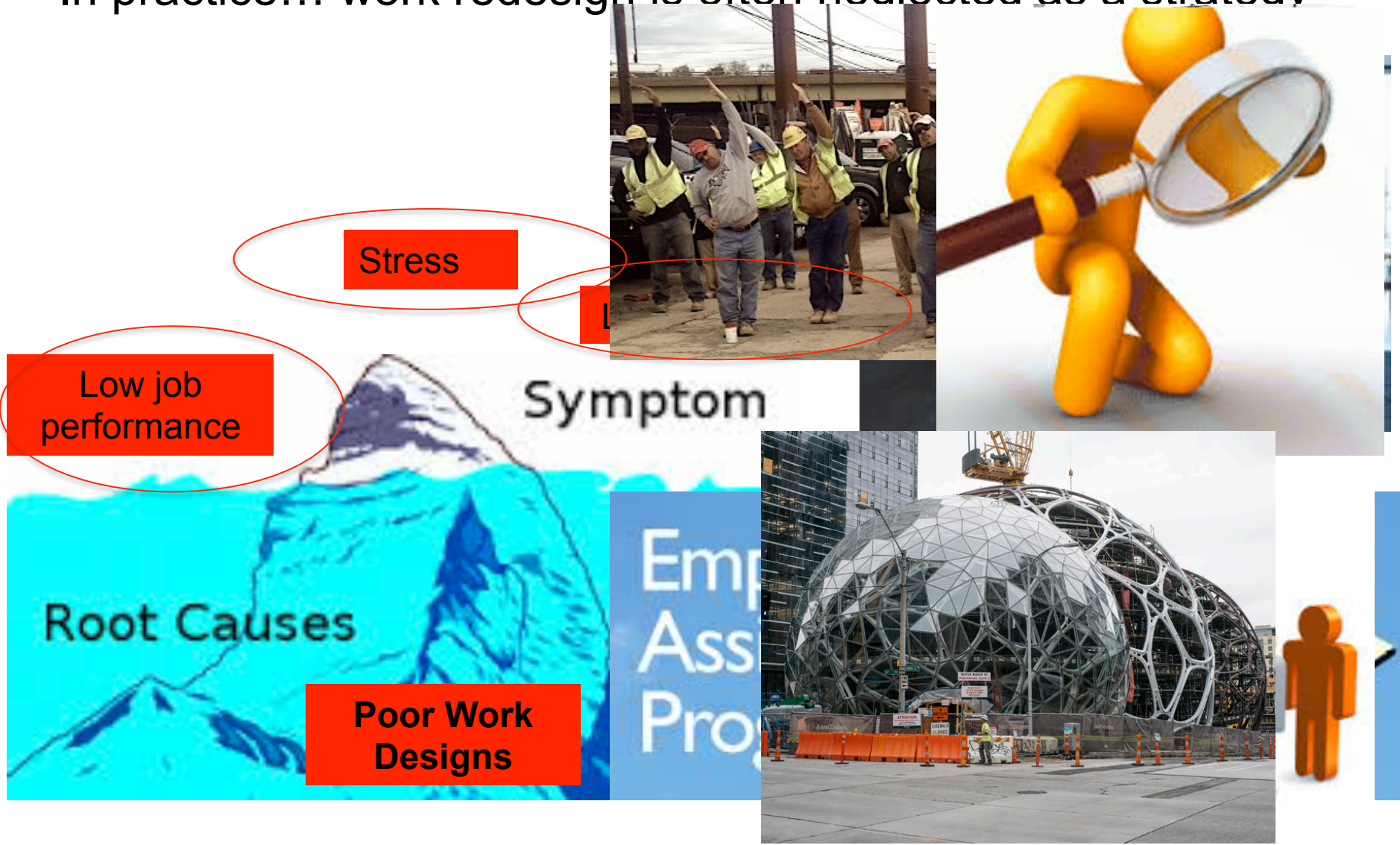


# Work Redesign Research

Change in Work Design	Example Outcomes	Occupations
Increased team autonomy	Better customer service; Increased job satisfaction	Insurance company Banks Manufacturing
Multiskilling/ increased task variety	Reduced musculoskeletal injuries	Production teams
Increased control over work hours	Lower turnover	Management consultants
Greater support	Enhanced quality of care	Trainee doctors
Autonomy over shifts	Reduced chance falling asleep, better blood pressure	Maintenance workers

# And yet...

In practice... work redesign is often neglected as a strategy



# Key Message 3

*Work can be “redesigned.”  
But we often get stuck above the  
iceberg, curing the symptoms and  
‘fixing’ the problem people.*

*Instead, improve the way that work  
is done to create better jobs & better  
outcomes.*

# Plan



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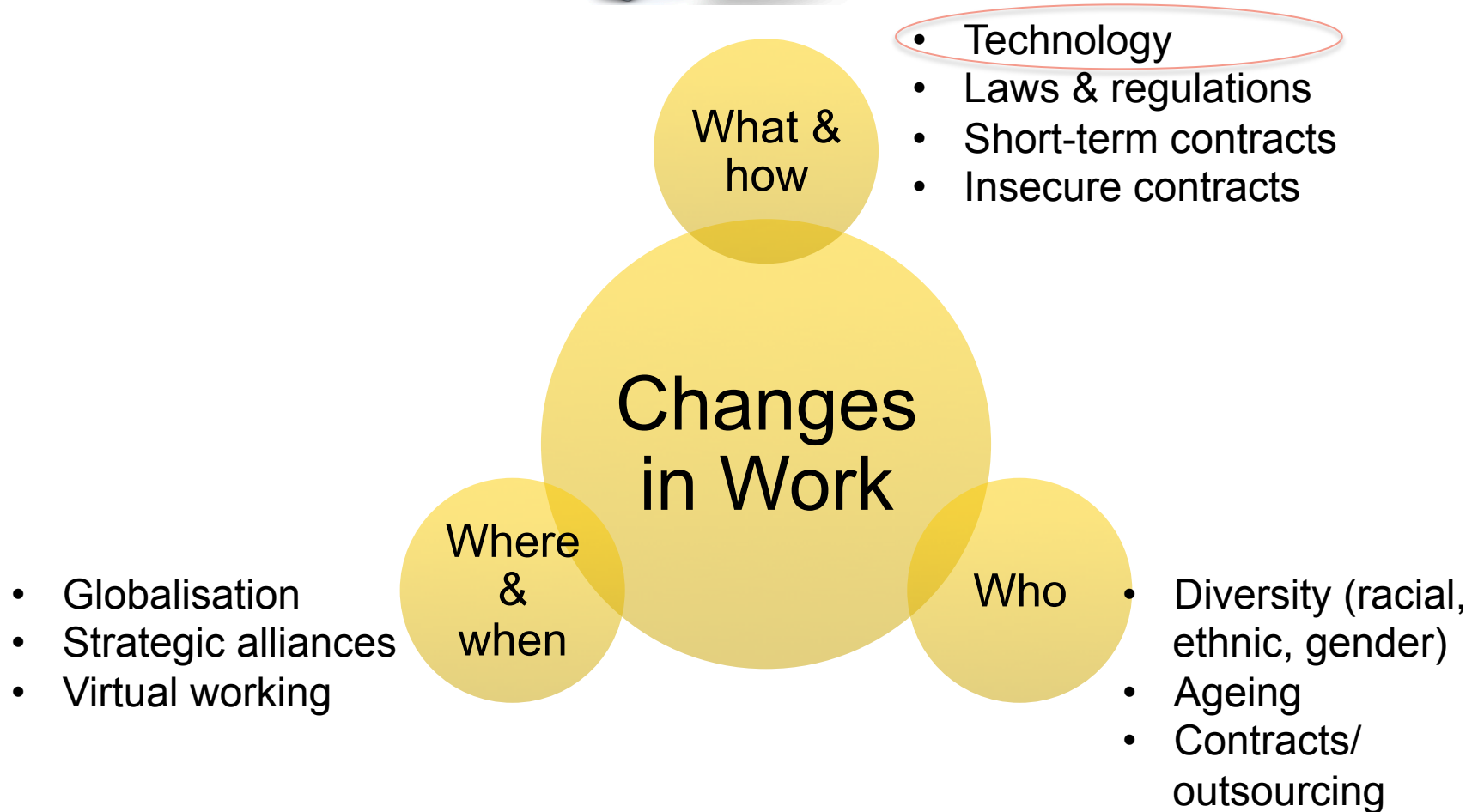


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# The “Second Machine” Age



**Autonomous  
harvester**

**“DRU”  
Domino’s Robotic Unit**



# EPS Estimates Down for J.M. Smucker Month



**Narrative Science,**

**FULL BIO** ✓

Opinions expressed by Forbes Contributors are their own.

Over the past three months, the consensus estimate has sagged from \$1.25. For the fiscal year, analysts are expecting earnings of \$5.75 per share. A year after being \$1.37 billion, analysts expect revenue to fall 1% year-over-year to \$1.35 billion for the quarter. For the year, revenue is expected to come in at \$5.93 billion.

A year-over-year drop in revenue in the fourth quarter broke a three-quarter streak of revenue increases.

The company has been profitable for the last eight quarters, and for the last four, profit has risen year-over-year by an average of 16%. The biggest boost for the company came in the third quarter, when profit jumped by 32%.

*Earnings estimates provided by Zacks.*

*Narrative Science, through its proprietary artificial intelligence platform, transforms data into stories and insights.*





**Paro the seal**

# Example: Health

## Possible illness?



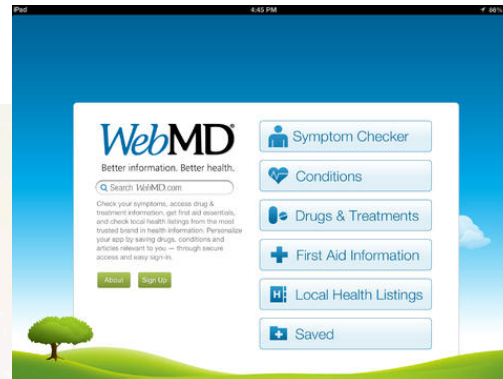
- Genomics
- Wearable devices
- Big data



## Book appointment Dr



- WebMD
- Online communities



## See the Dr



- Nurse + diagnostic tools/apps
- Telehealth



## Treatment



- Robotic medical dispensers
- Nanobots
- Crowdsourcing
- 3d printing of body parts

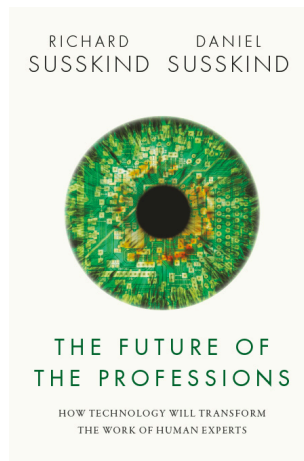




# Major Changes For Work

## Example

### Disaggregation of Professional Work



Computers & machines

On-line communities & crowdsourcing

Para-professionals (e.g., nurses)

Expert teams

Professional (different tasks)

## Work Design Decisions

*How do we choose who does which tasks?*

*And how do we design work so that computers/machines support & empower human workers?*

# “Glass cage” of Automation

## Example: Aviation



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

<http://www.faa.gov/otl>  
*A SAFO contains important  
information valuable to air carriers in  
interest. Besides the specific  
issue named in the SAFO.*

**Subject:** Manual Flight

**Purpose:** This SAFO

**Background:** A recent analysis of flight operations data (including normal flight operations, incidents, and accidents) identified an increase in manual handling errors. The Federal Aviation Administration (FAA) believes maintaining and improving the knowledge and skills for manual flight operations is necessary for safe flight operations.



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

### SAFO

Safety Alert for Operators

SAFO 13002  
DATE: 1/4/13

Flight Standards Service  
Washington, DC

*should be especially  
concerned of safety in the public  
re in addressing the safety*

on appropriate.

“We’re forgetting  
how to fly”



Overuse of automation:  
*“leads to a degradation of  
the pilot’s ability to quickly  
recover the aircraft from an  
undesired state”*

# Key Message 4

*In the future, we must actively design meaningful, “smart” jobs in the future in which technology empowers us rather than enslaves us.*

***The best way to predict the future is to create it.***

# Conclusion



Research

Practice

Policy



[www.transformativeworkdesign.com](http://www.transformativeworkdesign.com)

**Thank You  
for Your  
Attention**