

eBay Inc: Reducing Global Injury Risk with Web-based Ergonomics

Jim Fussell

Sr. Manager, Global EH&S
eBay Inc.

Anna Siebelink

Global Ergonomics Consultant/
Physical Therapist
Balanced Image

Applied Ergonomics Conference

Orlando, Florida
March 13, 2008

Agenda

- About eBay Inc.
- Situation
- Driving Needs
- Approach
- Measuring Success
- Rollout Lessons
- Q&A

About eBay Inc.

- Founded in 1995
- HQ in San Jose, California
- $\approx 15\text{K}+$ employees
- 68 offices in 26 countries
- Operate in multiple languages



- Global online marketplace where practically anyone can trade anything
- Global presence in 39 markets
- 276M registered users worldwide
- No. 1 eCommerce brand with a 15% share of global eCommerce¹
- \$2,039 worth of goods traded every second
- Total gross merchandise volume was \$59B in 2007
- At any given time, there are 113 million listings worldwide and 6.7 listings added per day.
- Users trade in more than 50,000 categories.
- 1.3 million people around the world make all or part of their living by selling on eBay²



- Leading global online payment company
- Available in 190 markets
- 141 million total accounts
- Supports payments in 17 currencies
- 8% share of global ecommerce
- \$1,806 in total payments transacted every second
- Net total payment volume, the total value of transactions, was \$47B in 2007



- Leading global internet communications company
- In Q4-07, Skype added 30M users – for a total of 276M users.
- Available in over 28 languages and is used in almost every country around the world.
- 4.4% of world's long distance minutes³
- 11 million concurrent users at peak times
- Milestone: Recently celebrated 100 billion minutes worth Skype-to-Skype calls

¹ Source: comScore, Media Metrix, Dec 2006, company estimates

² Source: ACNielsen International Research, June 2006

³ Source: TeleGeography, Dec. 2006

Situation

- Ergonomic risks are one of the most far reaching occupational risks employees faced at eBay Inc., worldwide
- Rapidly expanding business operations
- Growing global workforce
- Limited ability to track and measure results
- Reactive when employees experience pain or discomfort
- Prohibitive to scale across enterprise
- Wanted to maintain consistent safety programs, and measure the effectiveness of those programs

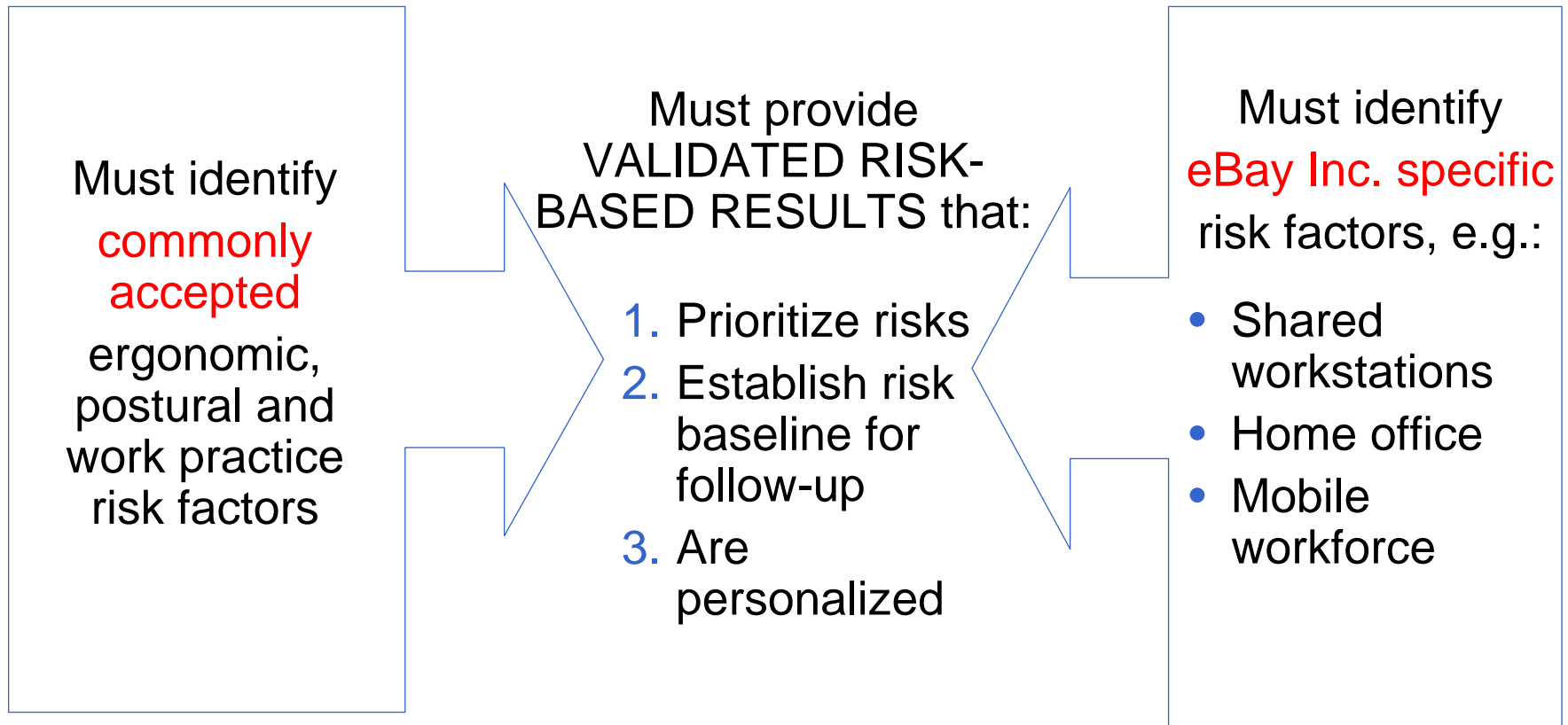
Business Needs: Overall

- EH&S Policy: Commitment to a safe workplace, employee training and safe work practices
- Cost-effective method that “moves” employee ergonomic issues through a four phase strategy:

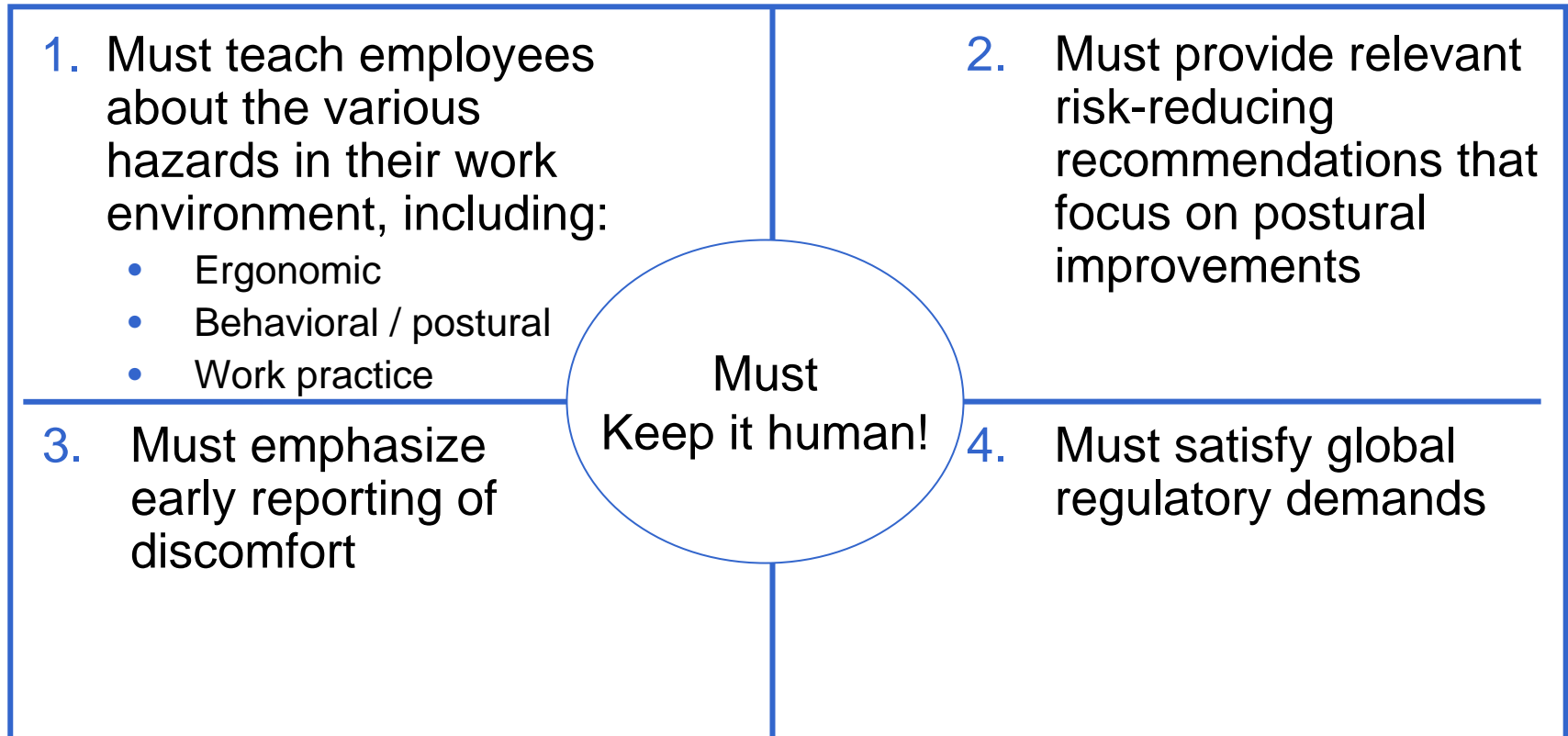


- Reduce the cost of office ergonomic program development and delivery
- Centralize method for verification of:
 - Domestic and international regulations
 - Global ergonomic metrics

Business Needs: Risk Assessment



Business Needs: Training



Requirement: 24/7 - Deskside

Business Needs: Automated Follow-up

- Must focus on **high and moderate risk** employees
- Must be **personalized**
- Must **prioritize** ergonomic, postural and work practice recommendations
- Must automatically **notify appropriate support personnel** when employee is in need of one-on-one assistance and method for employee to request assistance

“Moderate” to “high” risk defined as constant or frequent pain and/or observable risk factors.

Approach

- Implement a system that can scale across the enterprise while reducing costs associated with injuries
- Increase percentage of employees completing ergonomics training and assessment while reducing the need for costly hands-on treatment
- Standardize ergonomic training and risk assessment
- Establish measurable performance objectives and provide a system to measure against such objectives
- Identify and reduce ergonomic risks
- Collaborate with claims management process and return-to-work programs
- Improve ergonomic issue tracking and resolution

Approach (cont'd)

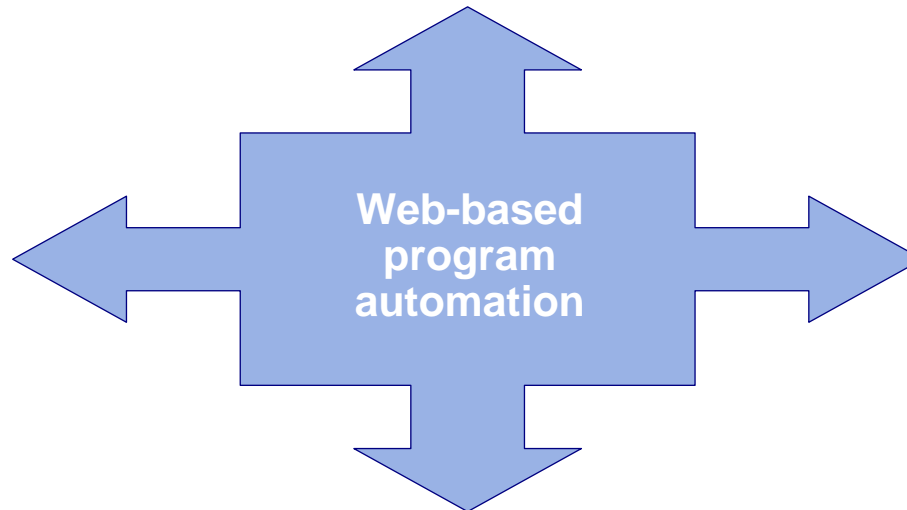
- Establish reporting tools to measure progress for defined groups and individuals at pre-determined stages
- Central repository to track recommendations to closure
- Real-time data to direct proactive policies
- Measure employees' current risk and track progress in lowering that risk over time
- Make accessible to employees globally 24x7x365
- Streamline ergonomic assessment process by eliminating logistical and geographical hurdles
- Achieve and/or exceed regulatory compliance
- Promote blended approach to ergonomics by integrating with existing team of Physical Therapists, ergonomists, etc.

Solution Options

In order to satisfy our business needs and deliver an 80% solution, available 24/7 in multiple languages, we identified an interactive web-based solution

Significantly reduce EH&S resources and administration devoted to delivering office ergonomics training and assessment

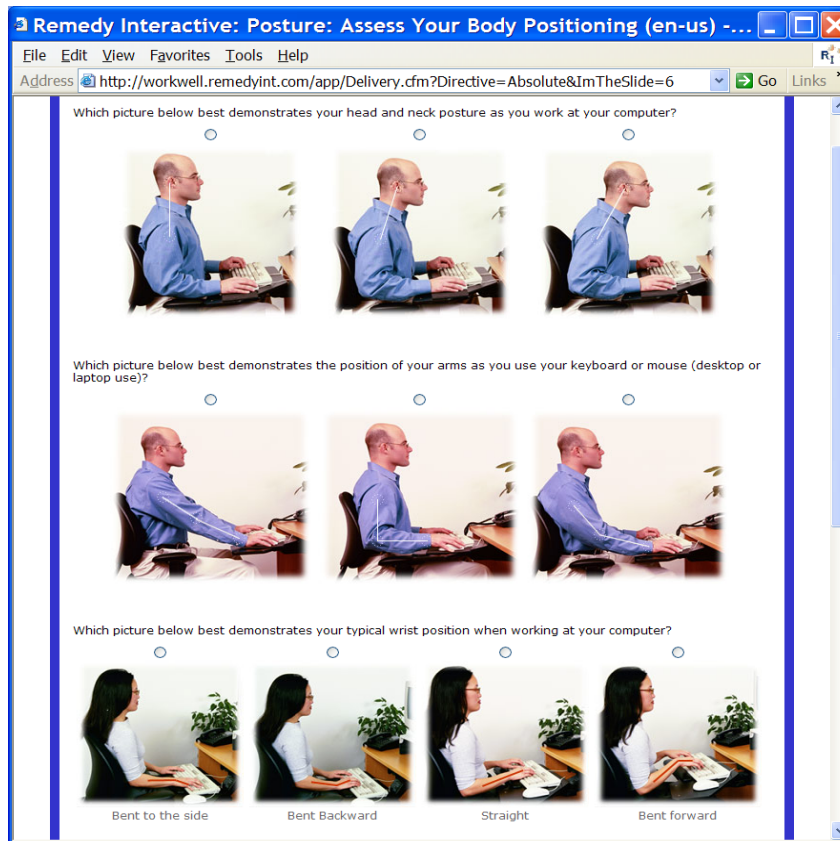
Make available to employees anytime, anywhere, in multiple languages



Document ongoing risk reduction of high-risk employees

Achieve regulatory compliance worldwide

Risk Assessment: Rapid Upper Limb Assessment (RULA) Validation Process



Risk Categories Assessed:

1. Ergonomic
2. Behavioral/Postural
3. Work Practice
4. eBay Inc. Custom

Training: Personalized, Multi-track

Training:

1. “Assessment dependent” content
2. OS and bandwidth accommodating versions
3. Graphics intensive and interactive
4. Available in multiple languages

The image displays three overlapping screenshots of the Remy Interactive training application, demonstrating its multi-track and personalized nature.

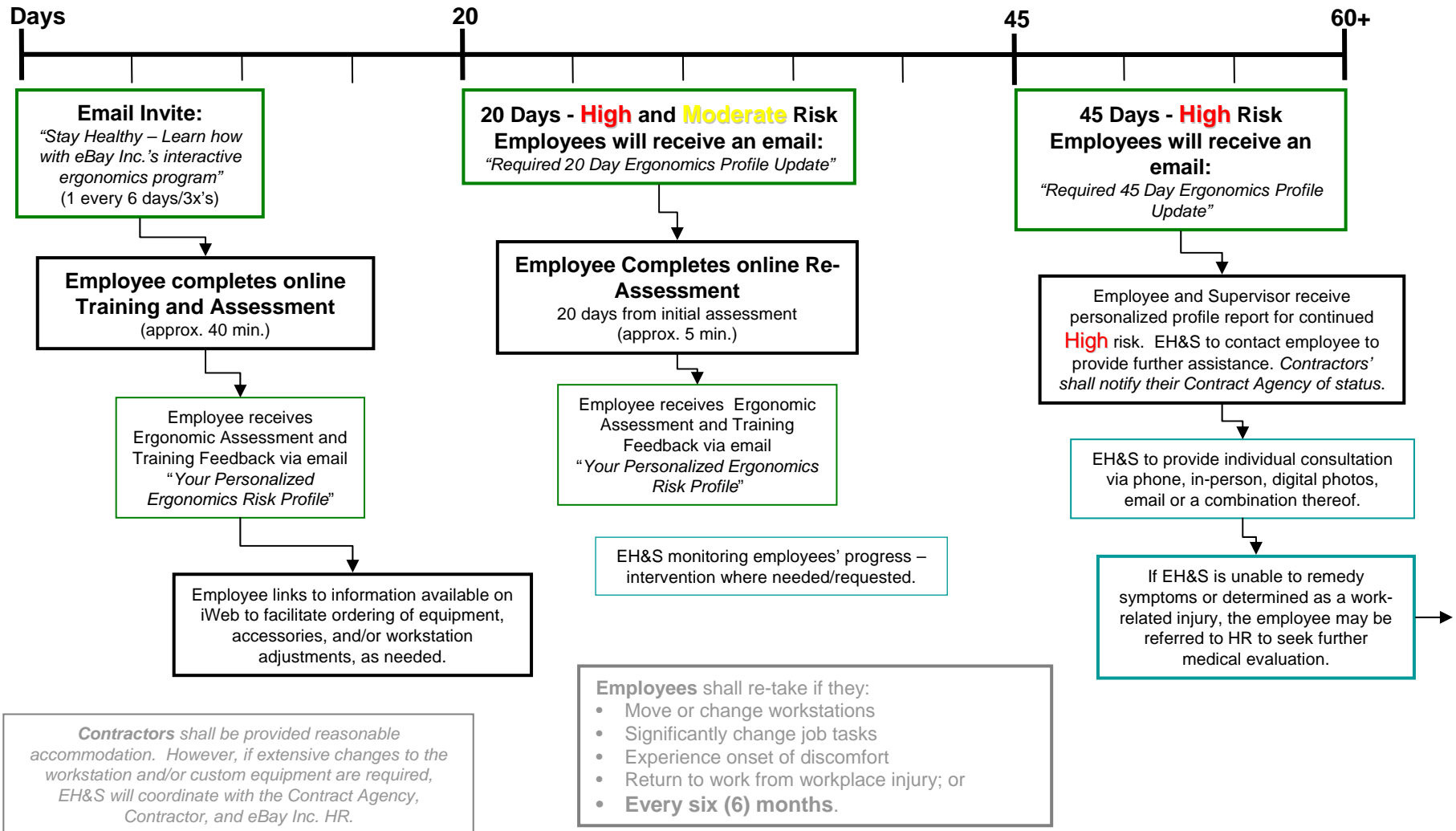
Top Window: Remy Interactive: Body Positioning: Neck & Upper Back (en-u...)
This window shows the "Risky Positions" section. It features a diagram of the human neck and upper back, highlighting the spine and muscles. A photograph of a person sitting at a desk with their head tilted back is also visible.

Middle Window: Remy Interactive: Workstation Setup (en-us) - Microsoft Internet Explorer ...
This window shows the "Monitor Positioning" section. It includes a diagram of a person sitting at a desk with a monitor, illustrating the correct monitor height and position. A "click to play" button is visible.

Bottom Window: Remy Interactive: Micro-Break Stretching (en-us) - Microsoft I...
This window shows the "Micro-Break Stretching" section. It features a video of a person performing a "Wrist Flexor" stretch. The text describes the steps: "STEP 1) Straighten your left arm out in front of you. STEP 2) Bend your wrist backwards, and point your fingers upwards. STEP 3) Use your right hand to mildly stretch the bending wrist further. A mild, comfortable stretch should be felt through the bottom of your forearm. STEP 4) Hold 10 seconds. STEP 5) Switch sides." A "Go to next page" button is also present.

Applied Ergonomics Conference
Practitioners talking with

Ergonomic Lifecycle



Practitioners talking with practitioners

Personalized Follow-up

Employee personal profile is highlighted

Personalized recommendations, including targeted stretches, are offered

Interactive Links

The screenshot shows a web browser window with the address bar displaying `http://workwell.remedyint.com/app/admin/User_StandardFeedbackSend.cfm`. The page content is organized into sections:

- YOUR PROFILE**
 - Your personal RSI risk was estimated during the WorkWell training as **high**.
 - The following issues were identified during your ergonomic self-assessment:
 - Uses laptop w/o external keyboard/input device 10-20 hrs/wk
 - Takes breaks once every 2 hours
 - Moderate forward head posture
 - Seat pan too small
 - Hands and wrists rest on hard surface
 - Please note: The Recommendations below are grouped into categories for ease of reading and, therefore, are not necessarily in an order that correlates with the issue list above.
- YOUR RECOMMENDATIONS**
 - The following recommendations are based on your profile:
 - POSTURAL CONSIDERATIONS**
 - Wrists**
 - [Click to view and perform the recommended stretch for your wrists.](#)
 - Shoulder and Arms**
 - [Click to view and perform the recommended stretch for your shoulders and arms.](#)
 - Head and Neck**
 - Ensure that your ears, shoulders and hips are aligned.
 - WORKSTATION CONSIDERATIONS**
 - Accessories**
 - You may want to consider use of a wrist rest (also called a palm rest). It should only be used for resting your palms at times when you are NOT typing or mousing.
 - Adjust Your Monitor**
 - Your monitor should be 18-24 inches (45-60 centimeters) away (about an arm's length).
 - The top of your monitor's viewing screen should be approximately at eye level.

Reporting Capability: Detailed Employee Data

- HR Profile
- Issues & Facts
- Activity Log
- Email Log
- Email Employee
- Notes Log

Employee Status Summary

My Recent Items

- Alex Boothroyd
- David Jesse
- Diana Liska
- Donald Muger

Key Activities Completed

Find a Person

First Name:

Last Name:

Email Address:

Employee ID:

Track Intervention

Communications Records

Fussell, James: Summary

RISK SUMMARY

Overall Risk low

[»» View Issues & Facts](#)

KEY ACTIVITIES COMPLETED

Most recent OES activities (excluding logins)

-- gotten past the initial assessment	13-Sep-06
completed a Risk Profile Update (full assessment)	13-Sep-06
gotten past initial assessment (1st part of on-line program)	13-Sep-06

[»» View Activity Log](#)

RECENT NOTES

Most recent notes left by administrators

<u>NOTED BY</u>	<u>SUBJECT</u>	
Anna Siebelink	Note Regarding "Seat pan too small"	16-May-06
Anna Siebelink	Note Regarding "Seat pan too small"	16-May-06

[»» View / Add To Notes Log](#)

RECENT EMAIL

<u>AUTHOR</u>	<u>SUBJECT</u>	<u>STATUS</u>	<u>DATE</u>
The Oes System	6 Month Profile Update Feedback	sent	13 Sep '06
Anna Siebelink	OES test email	sent	18 Aug '06

OES ACCESS

- LOGINS OK
- **AUTOMATED INVITES OFF**
due to security policies associated with HR information

[»» View HR Profile](#)

HR PROFILE

Data provided by your HR system (and/or verified by employees)

Email Address	jfussell@ebay.com
Employee ID	Q00009599
Language Preference	US English

Organizational Assignments:

Company	• eBay, Inc.
Cost Center	• SJ WORKPLACE RESOURCES (1105999860)
Personnel Area	• eBay San Jose
Sub-Area	• Finance
Position Type	• Manager, Global EH&S
Supervisor	• Hull, David
Country	• USA
City	• San Jose

Access Policy Key:

- blocking policy (strongest)
- allowing policy
- no policy (weakest)

Issue Tracking and Resolution

Reporting Capability: Risk Factor Trends

ERGONOMIC ISSUES & FACTS:	ISSUES EXISTING (PPL)	ISSUES IMPROVED (PPL)	ISSUES RESOLVED (PPL) (%)		ISSUES EVER IDENTIFIED
USES MULTIPLE MONITORS	369	0	0	0%	369
ARMRESTS TOO HIGH	162	26	87	32%	275
FEET DO NOT REST COMFORTABLY ON FLOOR OR FOOTREST	160	0	48	23%	208
COMMONLY VIEWS DOCUMENTS LYING FLAT ON DESK	138	0	47	25%	185
CHAIR TOO HIGH	120	0	113	48%	233
DO NOT USE MULTIPLE MONITORS	119	0	0	0%	119
DO NOT REST ON HARD SURFACE	119	0	42	26%	161
SEAT PAN TOO BIG	96	0	44	31%	140
SEAT PAN TOO SMALL	93	0	101	52%	194
USES LAPTOP W/O EXTERNAL MONITOR OR KEYBOARD/INPUT DEVICE 1-10 HRS/WK	92	0	9	9%	101
BACKREST TOO HIGH	80	0	57	42%	137
BACKREST TOO LOW	70	0	53	43%	123
MONITOR TOO LOW	59	0	77	57%	136
MODERATE MONITOR GLARE	50	0	39	44%	89
MONITOR MODERATELY OFF CENTER	48	0	46	49%	94
POINTING DEVICE DOES NOT FIT COMFORTABLY IN HAND	48	0	19	28%	67
KEYBOARD TOO HIGH	45	0	45	50%	90
EQUIPMENT AND/OR ACCESSORIES NOT WORKING PROPERLY	43	0	20	32%	63
BACKREST COMMONLY RECLINED	38	0	42	53%	80
KEYBOARD TOO LOW	28	0	15	35%	43
MONITOR TOO LOW	25	0	39	61%	64
MOUSE AND MOUSE CANNOT BE PLACED IN PROXIMITY OF USER	25	0	10	29%	35
SEVERE MONITOR GLARE	24	4	6	18%	34
MONITOR SEVERELY OFF CENTER	20	9	22	43%	51
USES LAPTOP W/O EXTERNAL MONITOR OR KEYBOARD/INPUT DEVICE 10-20 HRS/WK	20	3	0	0%	23
NO BACKREST SUPPORT	16	0	10	38%	26
MONITOR TOO HIGH	15	0	38	72%	53
DO NOT USE EXTERNAL MONITOR OR KEYBOARD/INPUT DEVICE	13	3	1	6%	17

Risk Factors Identified

High Impact Issues Identified

Resolution Percentages

Reporting Capability: Aggregate Summary Data

Benchmark:

- % high risk
- Issue resolution rate

Baselines For Comparison

	RISK LEVEL HIGH MEDIUM LOW			PEOPLE INCLUDED IN CHART	% PEOPLE INCLUDED IN CHART <i>-info-</i> (% of COMPARISON POPULATION)	% ISS. RES.
ENTIRE ORGANIZATION	12%	22%	65%	11668	99%	38%
COMPARISON POPULATION: 11775 » Number of all active people within organization.						
ALL RESULTS (BELOW) COMBINED	12%	22%	66%	9747	98%	39%
COMPARISON POPULATION: 9911 » Number of active people for all displayed						
than: <input type="text" value="100"/> <input type="button" value="GO"/>						

Determine:

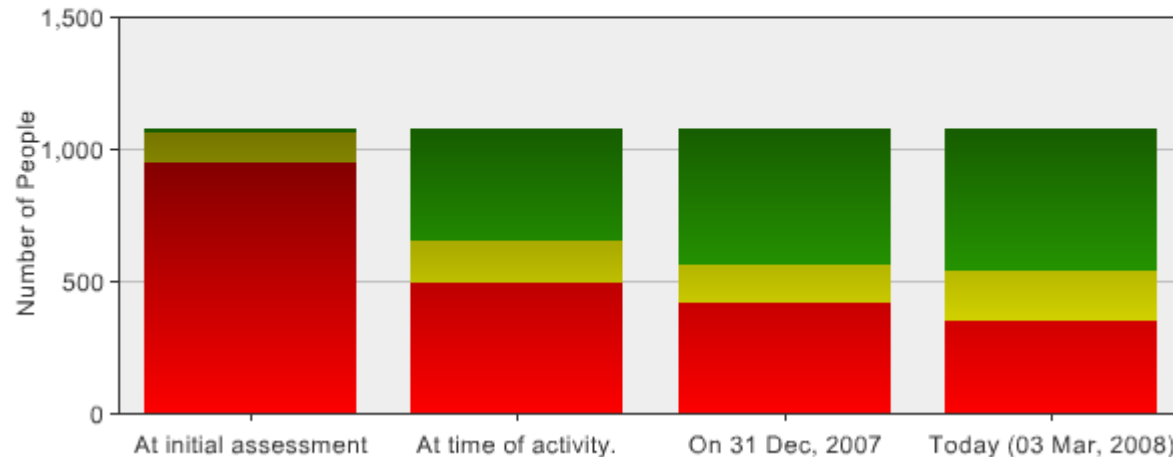
- Which are highest risk depts, locations, etc.?
- Which are successful (or not) at resolving problems?

DIVISION	COMPARISON POPULATION <i>-info-</i> (size of active population)	<i>-Who's included in the charts?-</i>			PEOPLE MEETING CRITERIA <i>-info-</i> (people included in chart)	% PEOPLE MEETING CRITERIA <i>-info-</i> (% of COMPARISON POPULATION)	% ISS. RES. <i>-info-</i> (for PPL MEETING CRITERIA)
HR	(196)	20%	27%	54%	192	98%	40%
CCS	(209)	19%	32%	49%	203	97%	36%
I	(335)	20%	27%	55%	324	97%	31%
CCN	(542)	17%	25%	59%	535	99%	38%
IM	(199)	16%	26%	59%	196	98%	37%
ISR	(340)	16%	24%	60%	332	98%	33%
CFO	(243)	15%	25%	60%	241	99%	37%
P	(304)	15%	19%	66%	303	100%	36%
EES	(279)	14%	21%	65%	276	99%	40%
NMT	(553)	13%	21%	65%	536	97%	34%
PM	(131)	12%	28%	60%	126	96%	40%
N	(329)	12%	26%	62%	329	100%	37%
LANSC	(252)	12%	25%	63%	243	96%	36%
ESA	(655)	12%	21%	67%	647	99%	38%
D	(263)	11%	28%	62%	263	100%	47%
OTHER	(789)	11%	24%	65%	773	98%	42%
FWO	(586)	11%	22%	67%	576	98%	41%
BRES	(402)	11%	21%	69%	397	99%	42%
X	(303)	11%	19%	70%	301	99%	36%
DX	(452)	11%	16%	73%	446	99%	39%
SUP	(359)	10%	21%	69%	351	98%	44%
S	(237)	9%	18%	74%	233	98%	38%
B	(212)	8%	22%	70%	210	99%	33%
C	(415)	8%	22%	70%	413	100%	37%
HSR	(450)	7%	16%	78%	442	98%	41%
MST	(426)	6%	21%	73%	418	98%	37%

Reporting Capability: Risk Reduction Over Time

Aggregate Risk Data Over Time

Based on 1080 people Chart Date: 03 Mar, 2008
Includes people who completed the activity: "completed an email-initiated Instant Reassessment (Office)" between
Dec 31 2006 and Dec 31 2007.

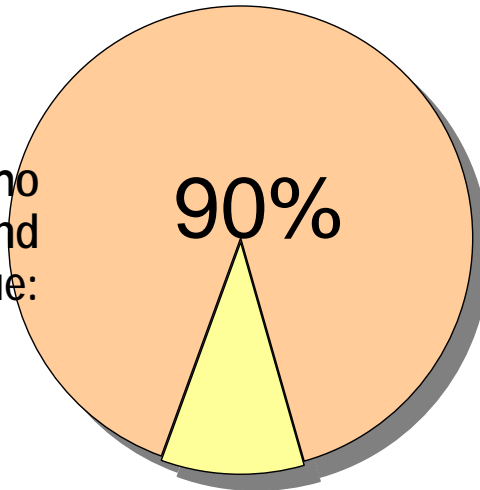


Measuring Success

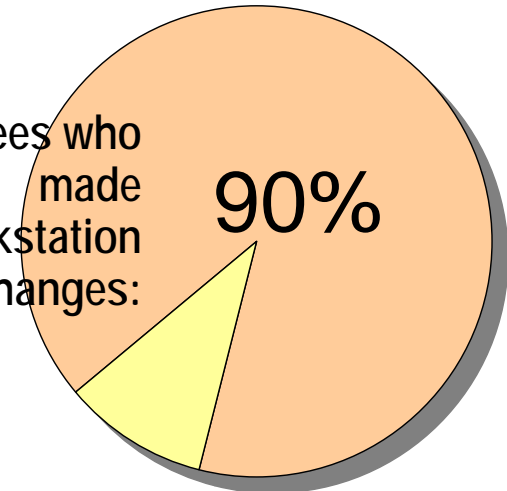
- Participation
- Percentage of population at risk
- Risk reduction
- Percentage of issue resolution
- Employee comfort
- User satisfaction
- Lost workdays
- Workers' compensation cost
- OSHA recordable cases

Measuring Success

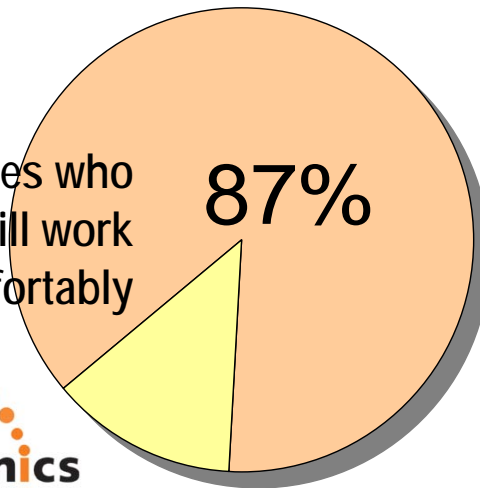
Employees who
would recommend
to a colleague:



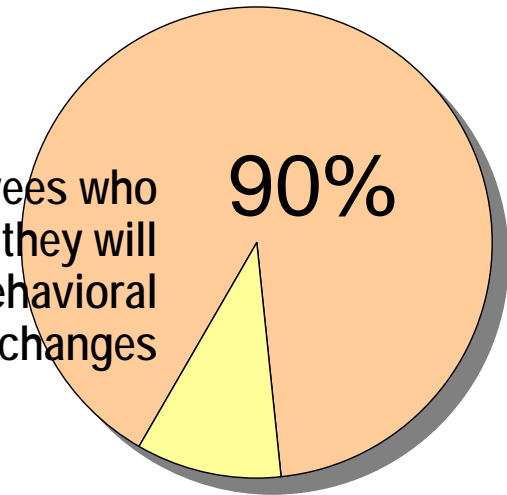
Employees who
made
workstation
changes:



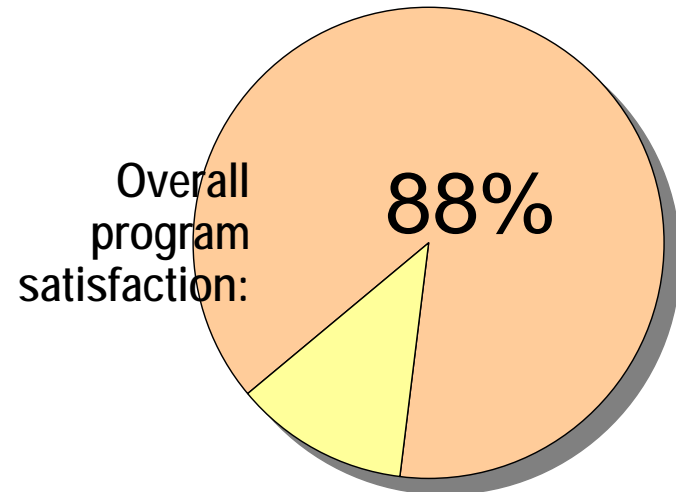
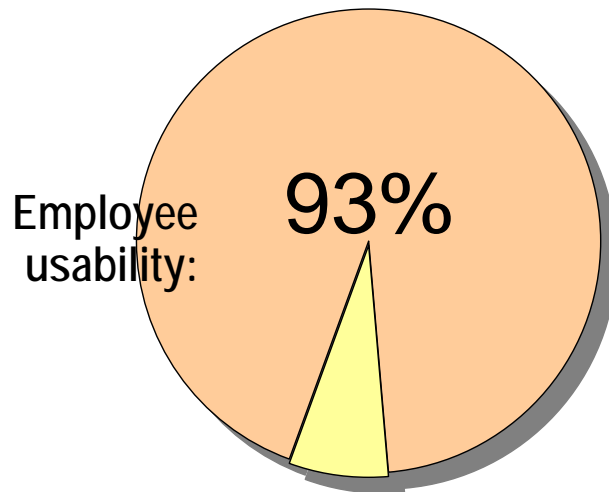
Employees who
believe they will work
more comfortably



Employees who
believe they will
make behavioral
changes



Measuring Success



Measuring Success

“Everything is great. I really appreciate everything you did and how fast you did it in! I’m very happy! 😊”

“You wouldn’t believe how much difference your suggestions made in my life. I no longer have back pains (actually let’s say less pain) and my wrist is much better.”

Rollout Lessons

- Support/push by local management
- Beyond compliance
- Multi-tiered communication
- Keep people engaged in the process
- Integration with procurement of equipment/furniture
- Follow-up with management – share success/areas to improve
- Keep it human!



Questions?



eBay Inc.

2145 Hamilton Avenue
San Jose, CA 95125

Phone: 408-376-8488

Fax: 408-376-5945

jfussell@ebay.com

www.ebay.com

Jim Fussell

Sr. Manager, Global Environmental,
Health, and Safety



Balanced Image

P.O. Box 324
Palo Alto, CA 94302

Phone: 650-938-1087

Fax: 650-938-10875

anna@balancedimage.com

www.balancedimage.com

Anna Siebelink

Licensed Physical Therapist