CA Future of Work Commission

Wendy McCoy, Offering Leader IBM Cognitive Applications
“Companies are being massively disrupted by technology and they have a desperate need for their employees to reskill themselves for the digital age.”

Diane Gherson
Chief Human Resource Officer, IBM
Forbes, August 2018
Required 21st Century Skills

Foundational Literacies
Apply core skills to everyday tasks

1. Literacy
2. Numeracy
3. Scientific Literacy
4. Info. & Comm. Technologies (ICT) Literacy
5. Financial Literacy
6. Cultural & Civic Literacy

Competencies
Approach complex challenges

7. Critical Thinking/Problem-Solving
8. Creativity
9. Communication
10. Collaboration

Character Qualities
Approach a changing environment

11. Curiosity
12. Initiative
13. Persistence/Grit
14. Adaptability
15. Leadership
16. Social & Cultural Awareness

Augment intelligence with AI

Watson is built to *amplify human capabilities*, not to compete with them.

<table>
<thead>
<tr>
<th>Humans excel at</th>
<th>Systems excel at</th>
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<tbody>
<tr>
<td>Common sense</td>
<td>Locating knowledge</td>
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<tr>
<td>Morals</td>
<td>Pattern identification</td>
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<tr>
<td>Imagination</td>
<td>Natural language</td>
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<tr>
<td>Compass</td>
<td>Machine learning</td>
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<td>Abstraction</td>
<td>Eliminating bias</td>
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<tr>
<td>Dilemmas</td>
<td>Endless capacity</td>
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<tr>
<td>Dreaming</td>
<td>Text &amp; video analysis</td>
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<tr>
<td>Generalization</td>
<td></td>
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Human + Machine
The Missing Middle

Human-Only Activity
- Lead
- Improvise
- Create
- Judge

Machine-Only Activity
- Iterate
- Transact
- Predict
- Evolve

Human-Machine Collaboration

Humans **Empower** Machines
- Train
- Explain
- Sustain

Machines **Augment** Humans
- Amplify
- Interact
- Embody

Humans **Train** AI
- Smart Machines **Do Physical Work**
- Communicate with Humans

Humans **Explain** AI
- Machines **Augment** with Insight

Humans **Sustain** AI
- Machines **Communicate** with Humans

Source: Accenture AI and Safety: 6 rules for Reimaging Jobs in the Age of Smart Machines

IBM Watson Talent / © 2018 IBM Corporation
Applications for the internal workforce

- Provide exceptional candidate experience
- Reduce time to hire while increasing quality and managing budget
- Accelerate new hire time-to-productivity while reducing attrition
- Drive talent mobility
- Develop critical skills necessary for business transformation
- Reduce attrition of high potentials
- Reduce call center times and increase employee satisfaction

Consulting Offerings

**Talent Acquisition**

- Watson Candidate Assistant
- Talent Acquisition Suite
- IBM Employee Assessments
- Watson Recruitment

**Expertise Development**

- Personalized Learning
- Cognitive Content Collator
- IBM Talent Frameworks
- ACE Feedback
- Watson Career Coach

**Employee Care**

- Employee Chatbots
- Watson Virtual Agent for HR
- Watson-powered HCM
- Watson Career Coach
- Cognitive Agent Assist
- Optimized transactions

Augmented Intelligence Layer

Enterprise HR Systems

Cloud Infrastructure
Watson Assistant – Future of virtual agents

Today

- Industry Verticals
- Channel integrations – slack, facebook messenger
- Skill routing
- Sentiment analysis for human hand-off
- Feedback and interaction data
- Search skill finds answers in available documents
- Webhooks to call external APIs
- Train by using existing customer service logs*

The future

- Master Bot – a single agent persona that can orchestrate an experience across multiple trained agents within the environment
- Increased dialogue sophistication – context and the trouble with pronouns in multi-turn dialogue
- Linking predictive AI skills to agents
- Agents self-learning *
Demo
IBM Watson Career Coach

Drive engagement and internal mobility with a personal career GPS.

**Ask**
Employees can chat about career-related questions.

**Plan**
Help employees choose and follow the right career path.

**Prepare**
Provide personalized learning recommendations.

**Achieve**
Identify internal openings and allow them to apply.

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Reinvent HR with AI

IBM Watson Candidate Assistant

Deliver a **better candidate experience** that results in the right candidates applying to the right jobs.

- **Unique job match**—results in 64% of candidates more likely to get to face to face interview
- 86% of jobseekers opt to use Watson over keyword search
- Candidate analytics provide insight to recruiters
- Trained on over 65 common job seeker questions
- Fast deployment—in as little as three weeks
IBM Watson Recruitment

Drive *efficiency and effectiveness* in the hiring process.

- Prioritize job requisitions
- Score applicants based on predicted success
- Analyze for adverse impact
- Find the best match
- Gain real-time market insights