Jobs of the Future
Are you ready to "Keep Pace"?

George Pace, MBA
www.keepppace.com
Breaking News (Jan 4th, 2017)
And this ISN’T FAKE

One Japanese insurance company, Fukoku Mutual Life Insurance, is reportedly replacing 34 human insurance claim workers with “IBM Watson Explorer,” starting by January 2017.

The AI will scan hospital records and other documents to determine insurance payouts, according to a company press release, factoring injuries, patient medical histories, and procedures administered. Automation of these research and data gathering tasks will help the remaining human workers process the final payout faster, the release says.

Fukoku Mutual will spend $1.7 million (200 million yen) to install the AI system, and $128,000 per year for maintenance, according to Japan’s The Mainichi. The company saves roughly $1.1 million per year on employee salaries by using the IBM software, meaning it hopes to see a return on the investment in less than two years.

Imagine this Scenario

1. An internet-connected sensor device on a construction site detects a critical support just shifted unexpectedly

2. The PM gets an alert that something is wrong

3. Using their smartphone they either create a new task using text / voice chat

4. The site foreman receives notification of this task and uses a mobile app to take a picture of a damaged support beam. The foreman adds the photo to the task and updates it with new information.

5. Looking at the updated task, the PM understands the issue and can take the appropriate action

6. Meanwhile, all this gets logged in the project management database: the alert, the task, the foreman’s follow up, and a picture of the situation.

7. The project manager can use this to decide what needs to be done next.

8. Later, when the project manager is planning their next project, a machine learning algorithm alerts them to where a similar issue is likely to arise in the new project, enabling the project manager to proactively address the issue.

http://3sharp.com/blog/ai-is-the-future-and-the-present-of-project-management/
About this Presentation
Today’s Presentation in ONE Slide

Opportunity
Skills
Awareness

What is influencing the “Jobs of the Future”?
Forbes Article

You are here!!

Organizational Change

Technological Change

Societal Change

Your Personal Career Strategies Must Adapt


April 18, 2017
It is harder to “Keep Pace” than ever before!
"The world is changing very fast. Big will not beat small anymore. It will be the fast beating the slow."

Rupert Murdoch

“Life moves pretty fast. If you don't stop and look around for a while, you could miss it.”

Ferris Bueller's Day Off
Example #1

Chart of the Week

THE LARGEST COMPANIES BY MARKET CAP
The oil barons have been replaced by the whiz kids of Silicon Valley

Top 5 Publicly Traded Companies (by Market Cap)

<table>
<thead>
<tr>
<th>Year</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
<th>#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>GE</td>
<td>Microsoft</td>
<td>EXON</td>
<td>Citi</td>
<td>Walmart</td>
</tr>
<tr>
<td></td>
<td>$406B</td>
<td>$365B</td>
<td>$272B</td>
<td>$261B</td>
<td>$260B</td>
</tr>
<tr>
<td>2006</td>
<td>EXON</td>
<td>GE</td>
<td>TOTAL</td>
<td>Microsoft</td>
<td>Citi</td>
</tr>
<tr>
<td></td>
<td>$446B</td>
<td>$383B</td>
<td>$327B</td>
<td>$293B</td>
<td>$273B</td>
</tr>
<tr>
<td>2011</td>
<td>EXON</td>
<td>Apple</td>
<td>PetroChina</td>
<td>Shell</td>
<td>ICBC</td>
</tr>
<tr>
<td></td>
<td>$406B</td>
<td>$376B</td>
<td>$277B</td>
<td>$237B</td>
<td>$228B</td>
</tr>
<tr>
<td>2016</td>
<td>Alphabet</td>
<td>Microsoft</td>
<td>Amazon</td>
<td>Facebook</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$582B</td>
<td>$556B</td>
<td>$364B</td>
<td>$359B</td>
<td></td>
</tr>
</tbody>
</table>
Example #2
What do these jobs have in common?

- Chief Listening Officer
- Uber Driver
- Driverless Car Engineer
- Elder Care Services Coordinator
- Drone Operators
- YouTube Content Creators

- Sustainability Manager
- Online Community Manager
- Telework Manager / Coordinator
- Millennial Generational Expert
- Cloud Computing Specialist
- Big Data Analyst / Scientist

Answer

None of these jobs existed 10 years ago
The Reality of “Jobs of the Future”

They are forming RIGHT NOW

How do you get there?

This is about THINKING DIFFERENTLY
The “Jobs of Future” - In Depth Analysis

Identify / Assess the Opportunity

<table>
<thead>
<tr>
<th>The Technology</th>
<th>“Investment”</th>
<th>What it Enables</th>
</tr>
</thead>
</table>

Your Career Curriculum

<table>
<thead>
<tr>
<th>Potential Skill Sets</th>
<th>Job Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Learning</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Following Examples are a taste of what is coming
## Evolving Technology - Cloud

### AWS – 11 Years ago (2006)

**What it Enables**

Compute on Demand (Commoditization of the Data Center)

<table>
<thead>
<tr>
<th>&quot;Investment&quot;</th>
<th>Skill Sets</th>
<th>Job Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gartner - $55 Billion IaaS</td>
<td>Creativity</td>
<td>Migration Specialists</td>
</tr>
<tr>
<td>Revenue by 2020</td>
<td>Problem Solving</td>
<td>Cloud Architects</td>
</tr>
<tr>
<td>AWS – $2.9B Revenue</td>
<td>Experimentation</td>
<td>Cloud Native Developers</td>
</tr>
<tr>
<td>1M+ Active Customers</td>
<td>Cloud ROI</td>
<td>Program Management</td>
</tr>
<tr>
<td>AWS - 1,000 New Functions in 2016</td>
<td></td>
<td>Project Management</td>
</tr>
</tbody>
</table>

**Where to Start Learning**

AWS Free Tier (1 Year)
Evolving Technology - Drones
DJI – 11 Years Ago (2006)

What it Enables
Aerial access to any location

<table>
<thead>
<tr>
<th>&quot;Investment&quot;</th>
<th>Skill Sets</th>
<th>Job Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAA Sales Estimate</td>
<td>Creativity</td>
<td>Construction</td>
</tr>
<tr>
<td>7M Unit Sales by 2020</td>
<td>Experimentation</td>
<td>Real Estate</td>
</tr>
<tr>
<td>University of Missouri Journalism</td>
<td>Problem Solving</td>
<td>Agriculture</td>
</tr>
<tr>
<td>(Reporting Course)</td>
<td>Data Collection / Analysis</td>
<td>Jail / Event Security</td>
</tr>
<tr>
<td>Amazon Drone Delivery</td>
<td>Aviation Skills</td>
<td>Package Delivery</td>
</tr>
<tr>
<td>Google / Facebook Internet Drones</td>
<td>Video Skills</td>
<td>News Reporting</td>
</tr>
</tbody>
</table>

Where to Start Learning
Buy a Drone ($100-$1,000)
Evolving Technology - BlockChain
Bitcoin – 8 Years ago (2009)

What it Enables
Trade anything with anyone around the world without dealing with an intermediary

<table>
<thead>
<tr>
<th>“Investment”</th>
<th>Skill Sets</th>
<th>Job Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>R3 Company – Corda Project (70 Financial Institutions)</td>
<td>Encryption</td>
<td>DISRUPTION</td>
</tr>
<tr>
<td>PwC – est 1.4 Billion invested in 2016</td>
<td>Identity Protection</td>
<td>Business Process Redesign</td>
</tr>
<tr>
<td>UBS / Deutsche Bank Santander / BNY Mellon (Industry Std to Clear/Settle Trades)</td>
<td>Problem Solving</td>
<td>Developers</td>
</tr>
<tr>
<td>HyperLedger Project</td>
<td>Creativity</td>
<td>Application Architects</td>
</tr>
<tr>
<td>Ethereum Project</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where to Start Learning
Join either the HyperLedger or Ethereum Projects

April 18, 2017
Evolving Technology - Artificial Intelligence

IBM Watson – 6 Years Ago (2011)

What it Enables

Machines that answer questions by processing vast amounts of data

<table>
<thead>
<tr>
<th>“Investment”</th>
<th>Skill Sets</th>
<th>Job Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amazon AI</td>
<td>Creativity</td>
<td>AI Governance / Legal</td>
</tr>
<tr>
<td>Microsoft Cortana</td>
<td>Problem Solving</td>
<td>AI “Testing”</td>
</tr>
<tr>
<td>Google Now</td>
<td>Experimentation</td>
<td>AI Enabled Management</td>
</tr>
<tr>
<td>IBM / Sloan Kettering</td>
<td>Data Collection</td>
<td></td>
</tr>
<tr>
<td>Samsung VIV Acquisition</td>
<td>“Business” Logic</td>
<td></td>
</tr>
</tbody>
</table>

Where to Start Learning

Amazon Echo / Google Home ($50-$200)
Evolving Technology – Internet Of Things
SmartThings – Years Ago (2012)

What it Enables
The ability to connect / exchange data across disparate devices

“Investment”
- 50 Billion Connected Devices
- $450 Billion in Sales by 2020

Skill Sets
- Hardware Design
- Machine Learning
- Security
- Big Data
- Experimentation

Job Opportunities
- IoT Security
- IoT Planners / Installers (Cities / Agriculture)
- Data Stewards
- Product Designers

Where to Start Learning
Purchase an IoT Hub
Explore IFTTT.COM
Explore www.postscapes.com
So many more change agents exist..

- Autonomous Vehicles
- Virtual / Augmented Reality
- Alternative Energy
- Gene Editing
- Robotics
## Indeed Web Site Search
### Jobs mentioning these Technologies

<table>
<thead>
<tr>
<th>Technology</th>
<th>URL</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud</td>
<td><a href="https://www.indeed.com/q-Cloud-jobs.html">https://www.indeed.com/q-Cloud-jobs.html</a></td>
<td>71,212</td>
</tr>
<tr>
<td>IoT</td>
<td><a href="https://www.indeed.com/q-Internet-of-Things-jobs.html">https://www.indeed.com/q-Internet-of-Things-jobs.html</a></td>
<td>12,642</td>
</tr>
<tr>
<td>AI</td>
<td><a href="https://www.indeed.com/q-Artificial-Intelligence-jobs.html">https://www.indeed.com/q-Artificial-Intelligence-jobs.html</a></td>
<td>2,146</td>
</tr>
<tr>
<td>Drones</td>
<td><a href="https://www.indeed.com/q-Uav-jobs.html">https://www.indeed.com/q-Uav-jobs.html</a></td>
<td>473</td>
</tr>
<tr>
<td>Blockchain</td>
<td><a href="https://www.indeed.com/q-Blockchain-jobs.html">https://www.indeed.com/q-Blockchain-jobs.html</a></td>
<td>329</td>
</tr>
</tbody>
</table>
Its all about perspective

TELL ME MORE ABOUT HOW YOU WANT 10 YEARS EXPERIENCE

WITH THAT 6 YEAR OLD TECHNOLOGY
Are YOU Ready for the “Job of the Future”?

Introducing
The “10 Steps” to Keep Pace
Step #1

ANYTHING that CAN be Disrupted

WILL BE DISRUPTED
Step #2

You can be become technically “old” VERY QUICKLY
Step #3

Move with the Market
Step #4

Vision First
Step #5

You are more than a tool
Step #6

Lose the Religion
Step #7

Embrace the inevitable
Step #8

Leverage the Strength
Exploit the Weakness
Step #9

Experimentation is the new normal
Step #10

There is no free lunch
The 10 Steps Summarized

If it were easy
Everyone would do it
What are the ACTIONABLE Steps to “Keep Pace”? 

- Finding the early Trends
- Assessing the Skills of tomorrow
- Sites describing “Jobs of the Future”
Early Trends Example
Gartner 2016 Hype Cycle for Emerging Technologies

Source: Gartner “News Room” - http://www.gartner.com/newsroom/id/3412017
Top 10 skills

<table>
<thead>
<tr>
<th>in 2020</th>
<th>in 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complex Problem Solving</td>
<td>1. Complex Problem Solving</td>
</tr>
<tr>
<td>2. Critical Thinking</td>
<td>2. Coordinating with Others</td>
</tr>
<tr>
<td>3. Creativity</td>
<td>3. People Management</td>
</tr>
<tr>
<td>4. People Management</td>
<td>4. Critical Thinking</td>
</tr>
<tr>
<td>5. Coordinating with Others</td>
<td>5. Negotiation</td>
</tr>
<tr>
<td>6. Emotional Intelligence</td>
<td>6. Quality Control</td>
</tr>
<tr>
<td>7. Judgment and Decision Making</td>
<td>7. Service Orientation</td>
</tr>
</tbody>
</table>

“Five years from now, over one-third of skills (35%) that are considered important in today’s workforce will have changed”.

Source: Future of Jobs Report, World Economic Forum

Source: https://www.weforum.org/agenda/2016/01/the-10-skills-you-need-to-thrive-in-the-fourth-industrial-revolution/
Management Skills

AI Reading Homework

The Skills Managers Say They Will Need to Succeed over the Next Five Years

They undervalue critical people skills.

PERCENTAGE OF RESPONDENTS WHO SELECTED THE GIVEN SKILL AMONG THEIR TOP THREE

<table>
<thead>
<tr>
<th>Skill</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital and technology</td>
<td>42%</td>
</tr>
<tr>
<td>Creative thinking and experimentation</td>
<td>33%</td>
</tr>
<tr>
<td>Data analysis and interpretation</td>
<td>31%</td>
</tr>
<tr>
<td>Strategy development</td>
<td>30%</td>
</tr>
<tr>
<td>Planning and administration</td>
<td>23%</td>
</tr>
<tr>
<td>Social networking</td>
<td>21%</td>
</tr>
<tr>
<td>People development and coaching</td>
<td>21%</td>
</tr>
<tr>
<td>Collaboration</td>
<td>20%</td>
</tr>
<tr>
<td>Quality management and standards</td>
<td>20%</td>
</tr>
<tr>
<td>Sharper skills within my current domain of expertise</td>
<td>20%</td>
</tr>
<tr>
<td>Performance management and reporting</td>
<td>17%</td>
</tr>
</tbody>
</table>

SOURCE: Accenture survey of 1,770 frontline, mid-level, and executive-level managers from 14 countries

# Jobs of the Future

## Site #1 - Jobs of 2030

**CST Careers 2030**

[View Jobs of 2030](http://careers2030.cst.org/jobs/)

---

<table>
<thead>
<tr>
<th>Jobs of 2030</th>
<th>Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>What's Changing?</td>
<td>About</td>
</tr>
</tbody>
</table>

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**Filter by Trend**

**Filter by Industry**

---

**Technology**
- Organic Voltaics Engineer
- Furniture Refurbishing Technician
- Recyclable Design Specialist
- Marketing eMediamaker
- Big Data Wrangler
- Agroecologist
- Multi-Marketer
- Purchase Prediction Analyst
- Wearable Technology Therapist
- Systems Tanglizer
- Integrated Roofing Systems Designer
- Firefighter
Jobs of the Future
Site #1- Jobs of 2030 - Details

Wearable Technology Therapist
Healthcare

In 2030, technology continues to get smaller and access to wireless signals is present in most places the average person finds themselves on any given day, whether that be at work, home or school, the above ground or below ground, in the city or out in the country, on the move or standing still. The options for integrating technology into just about everything continue unabated (such as fashion). This has made life much easier and more enjoyable for most people in general but especially for people with disabilities.

Wearable technology will help people with visually and hearing impairments "see", "hear" and otherwise perceive their environments in a way that greatly reduces the impact of these challenges on their daily lives. It is also likely that wearable technology will bring with it some new challenges because of the way it can impact the human body. Head gear, even of the fairly lightweight variety, can slowly strain the neck over time. Similarly, technology worn on the back can cause subtle changes in posture from our unconscious tendency to lean forward to compensate for any weight placed on our backs. Also, the various forms of wave radiation associated with using wearable technology may also have subtle impacts on our body chemistry over time that will require rebalancing through dietary supplements and other forms of therapeutic intervention.
The options for integrating technology into just about everything continue unabated.

The Wearable Technology Therapist will do work similar to what physiotherapists and nutritionists do today but with highly specialized training in the effects of wearable technology on the human body and how to compensate for those effects. Veterinary sub-specialities may also be exist for therapists who work with service animals (such as canine detectives and therapy or companion animals for people with special needs) who wear technology during the performance of their duties.

Job opportunities will also exist for Wearable Technology Therapy Assistants who will assist by talking to patients and preparing them for their consultation with the Wearable Technology Therapist, working through exercises with patients, monitoring the patients' general wellness indicators and use of supplements, and keep records of patients' progress.

**JOB REQUIREMENTS/SKILLS**

Accredited Wearable Technology Therapists will require a masters level education and a passing grade on a certification exam before being allowed to enter professional practice. Wearable Technology Therapy Assistants will complete a diploma before undertaking a certification exam.
Jobs of the Future
Site #2 – 162 Jobs that don’t exist yet

Seventy-five billion is the number of devices that Morgan Stanley has calculated will be connected to the Internet of Things by 2020. That's 9.4 devices for every one of the 8 billion people that will be on earth in only seven years. IBM even created a starter kit to help people get started.

66. Locationists – People who specialize in adding the relevance of "place" to our global online communities.

67. Lifestyle Auditors

68. Efficiency Consultants

69. Ownership Network Setup Specialists – Everything people own over a certain value can be tagged, tracked, and monitored.

70. Augmented Reality Architects – Much like the paint we put on houses and the flavorings we add to food, the future will seem boring if our reality hasn't been augmented in some way.

71. Avatar Relationship Managers – As the foibles of humanity enter the realm of autonomous, freethinking avatars, people will find it necessary to both manage and limit the often-dangerous relationships avatars get themselves into.

Jobs of the Future
Site #3 – Cool Future Jobs

Personal medical interpreter
With the advances made in genetic medicine, providers will increasingly be able to offer customized medicines and treatments to patients, Lebret says. Genetic counseling may evolve into genetic coaching. For example, futurist Madeline Ashby envisions super-specialized positions such as interpreter for a new gene-editing tool called CRISPR (clustered regularly-interspaced short palindromic repeats). Providers may evolve into individualized coaches or advocates who can inform patients about individualized medical treatments.

Want this job on the future? You’ll probably need experience as a genetic counselor today.

Human-technology integration specialist
These people would teach others how to leverage and use the vast array of technologies to improve the quality of their lives, says Charles Grantham, a teacher at the Community Design Institute. This is basically an IT specialist times 10. This person could take a holistic approach that examines all the different work and consumer technologies a person uses and streamline devices and platforms to get the most out of them.

Want this job in the future? You’ll probably need experience as an IT representative but you also might want to check out life coaching.

Wholeness mentor
With a greater emphasis on mindfulness and “time poverty”—which Ford Motor Company’s in-house futurist Sheryl Connelly defines as the fact that connectivity has actually made us feel more busy—in an increasingly chaotic world, the wholeness mentor may well be needed. This person would help others develop lifelong strategies to match their personal purposes with a hobby that provides them with fulfillment of physical needs, a social network and spiritual happiness, Grantham says.

Want this job in the future? You’ll probably need experience as a life coach and a health coach today.

End-of-life coach
With baby boomers approaching the end of their lives in the next 10 to 20 years, there’s likely to be a greater emphasis on how people want to spend their last days, Lebret says. An end-of-life coach can help individuals and families make better decisions on how to spend the last weeks and months of life. “Right now, there’s a lot of excessive treatment at the end of someone’s life,” Lebret says. “In the next few years, there will be a massive shift toward people wanting to add more life to their days, instead of days to their life.” These coaches will help people explore their personal values and medical options so they can create the kind of end of life they want.

http://www.monster.com/career-advice/article/cool-future-jobs
Presentation Summary
Just “One more thing”
Keep Pace Technology

YouTube LIVE
Video Series

www.youtube.com/keepppace
How to Keep Pace with Me!

www.keeppace.com

www.youtube.com/keeppace

www.twitter.com/keeppace

www.storify.com/keeppace

www.pinterest.com/keeppace
Technology moves FAST
You can move FASTER
If you KEEP PACE with Technology