# Forward

#### Meet your speaker



**Craig Le Clair** 

Vice President

**Forrester** 

#### FORRESTER®

## Making Work *Work* for Everyone in the Automation First Era

Craig Le Clair VP, Principal Analyst

#### **RPA Success Points**



Culture, Skills, & Leadership



Lower Total Cost Of Ownership



Human In The Loop



Automation Strike Teams



RPA Plus Al Orchestration



Desktop Analytics And Process

#### **But Here's The Big One**



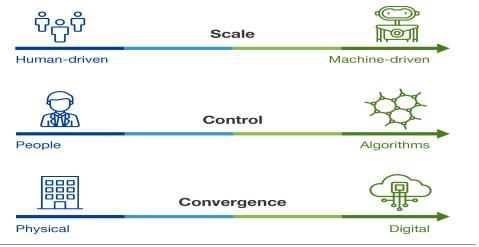
Future Of Work

#### **Automations Impact Is Profound**

#### FORRESTER RESEARCH

**Shifts In The Three Forces Of Automation Will Transform The Workplace** 

Reinventing Work In The Era Of Automation



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#### Employees aren't ready for the revolution

**Only 21%** 

I know when to question the results of an automated technology

**Only 18%** 

I have a sense of my career path in a world of automation

**Only 25%** 

Robotic technologies replacing some human activities will impact me positively

**51%** 

I fear losing my job due to automation at some point

**Base: Global Information Workers** 

## But also: <u>Organizations</u> aren't ready, either

**Only 19%** 

Someone at my company could complete analysis for the automation process

**Only 15%** 

We have an Automation Center of Excellence

**Base: Global Information Workers** 

#### And finally: <u>Leaders</u> aren't ready

**Only 20%** 

My company has clearly articulated how different automation technologies can help us reengineer our current business processes

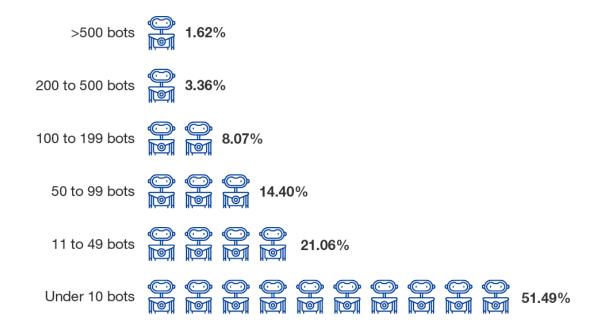
**Only 25%** 

My company's leaders communicate honestly and empathetically with employees

**Base: Global Information Workers** 

# Scale continues to be a major hurdle for over half of enterprise RPA programs

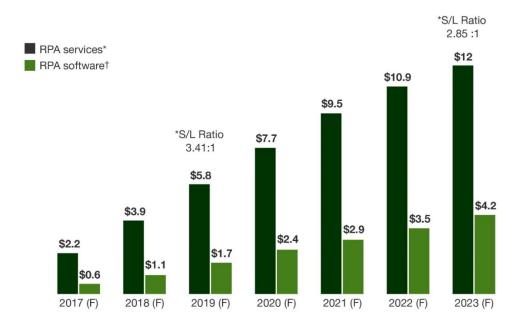
#### Bot distribution by clients



Source: Forrester's Q2 2019 Robotic Process Automation Services Forrester Wave™ Online Survey (Global)

Source: Forrester report, RPA Services Market To Reach \$12 Billion By 2023"

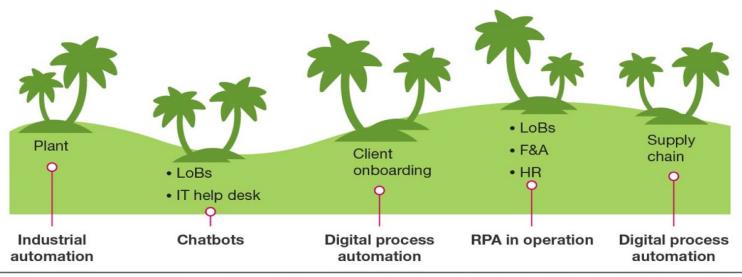
#### Task Automation Has Hit An Enterprise Gap



**RPA Software and Services Market Growth** 

Base: 5,800 customer deployments of 25 global robotic process automation service providers Source: Forrester's Q2 2019 and Q1 2017 Global RPA Services Forrester Wave™ Online Survey \*Services to licenses ratio

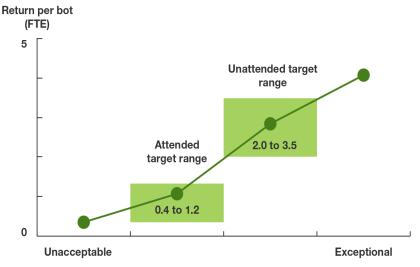
## RPA Plus Al Orchestration Will Manage Islands Of Automation



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#### For Many The Automation Journey Starts With Task Automation With RPA

Volume and simplicity drive the offset of full-time employees (FTEs)



Higher transaction volume and low complexity

- Attended RPA is defined as:
- "Automation that interacts in real time with humans who initiate and control robot tasks, often embedding functions within apps., generally associated with front-office, agentled activities."
- Unattended RPA is defined as:
- "Automation that replaces a complete human function in a 'lights-out' "batch-oriented" manner, creating a virtual workforce, generally associated with back-office activities."

#### Follow the "Rule of Five" for RPA Success



#### Knowledge and rules Relevant technology **Function** Chatbot Support • Extensive knowledge Machine Learning • Needs continual data feed Deep Learning • Exception Handling • Dynamic rules capability Conversational Intelligence Decision Management Thinking Stage 3 RPA as automation orchestrator Data Modeling • Invoice Management • OCR • Training Data Sets • E-mail Management Natural Language Static Rule Sets Document Handling understanding • Machine Learning & Rules Stage 2 RPA today : ----Enhanced digitization Unattended Automation Deterministic Surface Automation • Limited Rules Attended Automation Computer Vision Structured Data Central Orchestration • No Comprehension Desktop Analytics Stage 1 Acting "Rule Of Five"

### **Keep The Human In The Loop With The Progression Of Robot Sophistication**

Machine Intelligence

RPA

**Todays** 

#### **Machine Assist**

Human & Bot Collaborate, Bots Help Other Bots 2023 to 2025

#### **Digital Assistant**

Intent Resolution, Machine Sets Task Priority, Support Exceptions & Variation

#### **Unattended RPA**

**Unassisted Task Automation** 

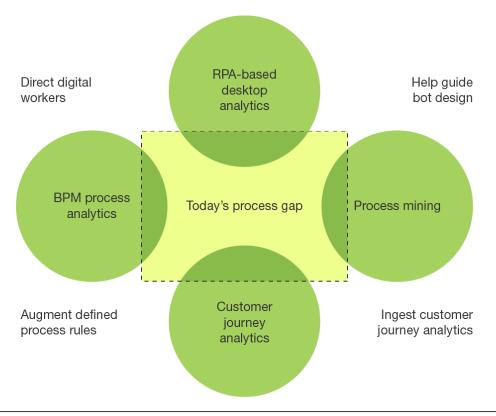
- 1.5 Year

#### **Attended RPA**

People Directing Bots, Citizen
Development, Embedded Task Builder

#### **Conversational Intelligence**

#### Better Process Understanding Is Required



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#### **Segments Of The Intelligent Process Automation Market**

#### TECH TIDE

Intelligent Process Automation
Q4 2019

High business value	INVEST  Attended mode RPA Digital process automation (wide) Process discovery Process mining Text analytics Unattended mode RPA	MAINTAIN  API management Core system automation Digital process automation (deep) Dynamic case management E-signature platforms	
Low business value	EXPERIMENT  Automation orchestration Al-based exception management Chatbot (employee & customer facing) Domain robots Self-service employee robot	DIVEST  Capture  Customer communication management  Stand-alone desktop automation	
	Low maturity	High maturity	

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#### Were Going To Talk About The Robots You Can't see

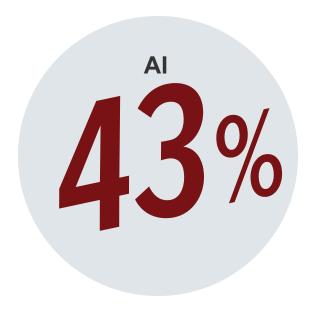




#### Not just physical robots

**Automation** 

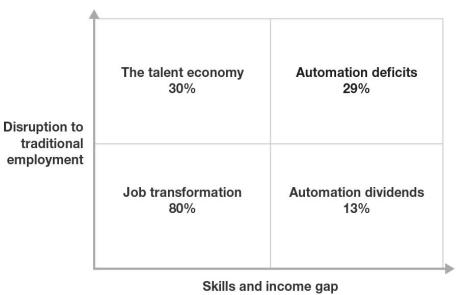
45%



Implementing or expanding Robotic Process Automation (RPA)

Implementing or expanding executable Al

## And Here's What We Think The future Of Work Looks Like In 2030

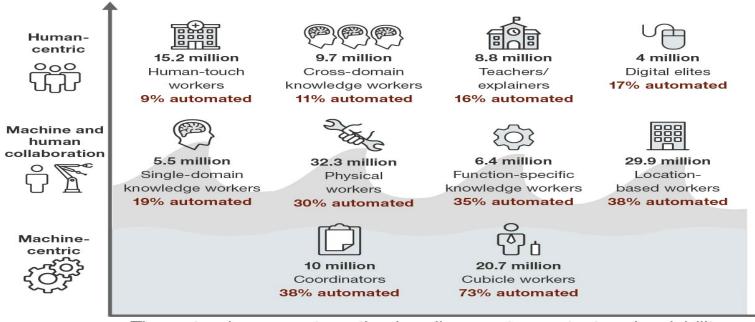


Source: Forrester forecasts

#### **Twelve Personas Can Describe The Workforce**

Trend	Number of Number of occupations US workers			Automation status
<b>↑</b>	Human-touch workers	76	15,196,250	Above the water line
<b>↑</b>	Cross-domain knowledge workers	92	9,668,290	Above the water line
<b>↑</b>	Teachers/explainers	64	8,844,680	Above the water line
<b>↑</b>	Digital elites	20	4,000,720	Above the water line
<b>1</b>	Single-domain knowledge workers	41	5,533,780	Water is creeping up
<b>1</b>	Physical workers	288	32,271,040	Water is creeping up
<b>1</b>	Function-specific knowledge workers	50	6,357,980	Water is creeping up
<b>1</b>	Location-based workers	70	29,937,620	Water is creeping up
<b>1</b>	Coordinators	36	9,997,250	Under water soon
<b>1</b>	Cubicle workers	72	20,676,290	Under water soon
<b>↑</b>	Mission-based workers*			Evacuees
<b>↑</b>	Digital outcasts*			Evacuees

#### Focus On The Invisible Robots That Are Transforming The Workplace

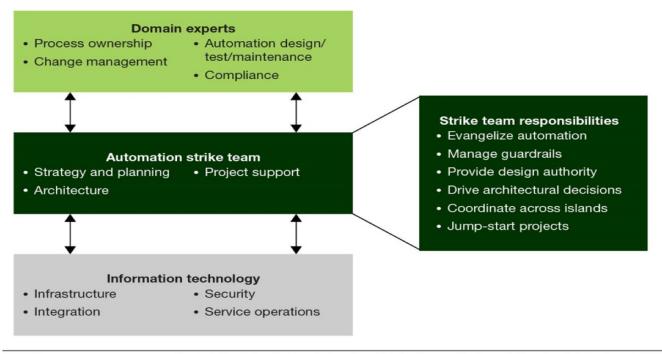


The water rises as automation handles greater context and variability

Note: Numbers of workers are totals for today's workforce. The percent automated includes the deficits or jobs removed from the workplace by 2030. Automation dividends will offset these percentages. Source: US Census Bureau annual projections for the US up to the year 2030 and US Congressional Budget Office labor-force participation-rate projections for the US up to the year 2030; automation percentages are Forrester forecasts.

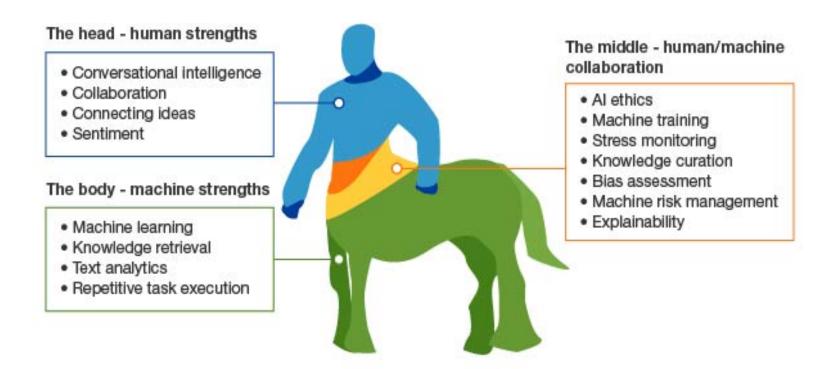
# And Here's What We Should Do About It.

#### **Build Your Automation Strike Teams**



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#### Let's Use Automation Where It Works Best



### New Formal Work Certifications Are Expected To Have The Greatest Beneficial Effect In Dealing With Automation Skills Gap And Anxiety

"Please rank the education approaches below in terms of how effective they are at dealing with previous workplace automation issues (i.e., skills gap, anxiety, technology refresh cycles.)"



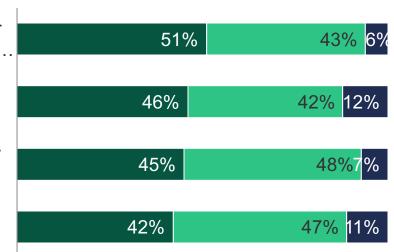
It will have some beneficial effects

New formal work certifications/vocations for different levels of automation aptitude with...

Traditional education (e.g. 2 year or 4 years on campus or online degree)

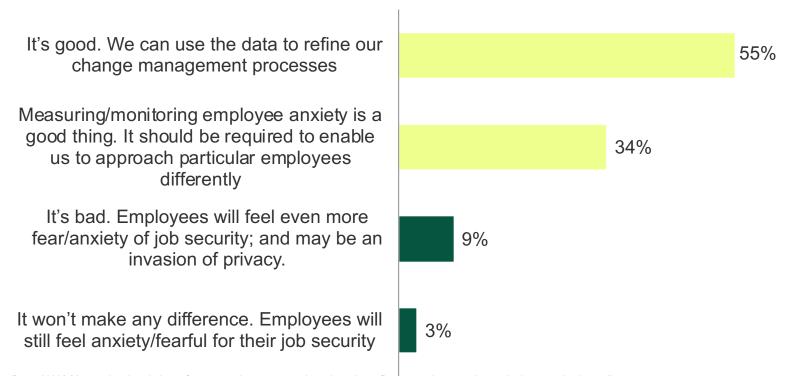
Certification programs provided by technology vendors with whom we're currently partnering

Subsidizing employees to take third-party online education



Base: N116 Manger level and above from operations groups, shared services, finance and accounting and other core business lines Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, October 2019

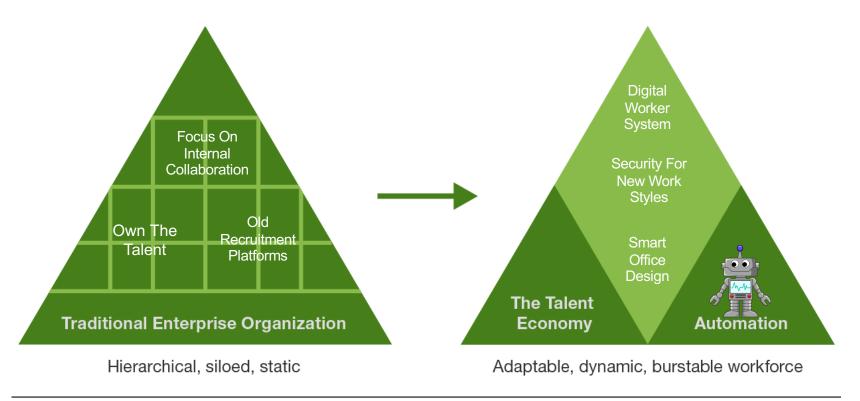
#### Enterprises Feel That Monitoring Employee Anxiety Is A Good Thing



Base: N116 Manger level and above from operations groups, shared services, finance and accounting and other core business lines Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, October 2019

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#### **Prepare For A More Adaptive Workforce**



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#### **Key Takeaways**

- Consider the Future of Work a strategic competency
- The future of work is something you and your leaders will create.
- There is opportunity and challenge associated with it, but it's ultimately valuable.
- You can change the way you serve customers for the better by investing in the future of work.
- You can also make your own jobs easier by dividing labor.
- Making humanness a strength is key. Employee experience is key.

#### FORRESTER®



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# INVISIBLE ROBOTS IN THE QUIET OF THE NIGHT

How AI and Automation Will Restructure the Workforce

# Thank you

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Craig Le Clair FORRESTER

# Forward