Deloitte. Digital

Future of Customer Service

OUR PERSPECTIVE

WE WILL ELEVATE THE
human experience

- Because great experiences **build connections**

- Strong connections create **loyalty** and ultimately

- Loyalty drives **business results**.

FOR EVERYONE.

Our Point of View

Seamless integration of digital and cognitive technologies will transform the role of customer service and change the way brands/companies serve their customers in a meaningful and impactful way.

- Brands are continuously looking to differentiate themselves in order to drive profitability and lead the market. In doing so, they strive to delight customers and not be content with a one-time transactional engagement. We believe loyalty is the key ingredient that creates customer stickiness, improves recurring revenue, helps command higher margins and reduces the cost of customer acquisition.

- Technology is the primary driver of business transformation. Innovative technologies like cognitive digital capabilities, machine learning, artificial intelligence etc. are embedded into every aspect across the supply-chain to derive efficiencies and cater to evolving partnerships in the marketplace.

- Customer Service is oft spoken but seldom treated at the core of digital transformation vision and roadmap. It sits in a silo and not seamlessly integrated across all channels.

- Our perspective is aimed to present the case of what the future of customer service would look like, along with thought-provoking use cases to demonstrate how it can be accomplished.

Why should you care

The need to rethink customer service as a driver of a superior customer experience

The Market: On Customer Experience

Every two years, Deloitte Consulting performs a Contact Center Survey[1]. The following are some of the key findings for the 2017 edition

Channels

- In **2019, 47%** of inbound contacts will be via phone vs **64%** in **2017**
- **31%** of survey respondents plan to use video chat in the next 2 years and have it account for **8%** of all interactions
- **33%** of respondents plan to invest in Robotics and Automation in the next two years
- Social media will account for **9%** of all inbound contacts by 2019

Where to Focus

- **80%** of respondents say improving the customer experience is the number one strategic objective
- Accuracy and quality of information is ranked the most critical attribute in improving customer experience (**66%**)
- Ease of interaction is ranked a close second (**62%**)

Attributes of superior customer experience
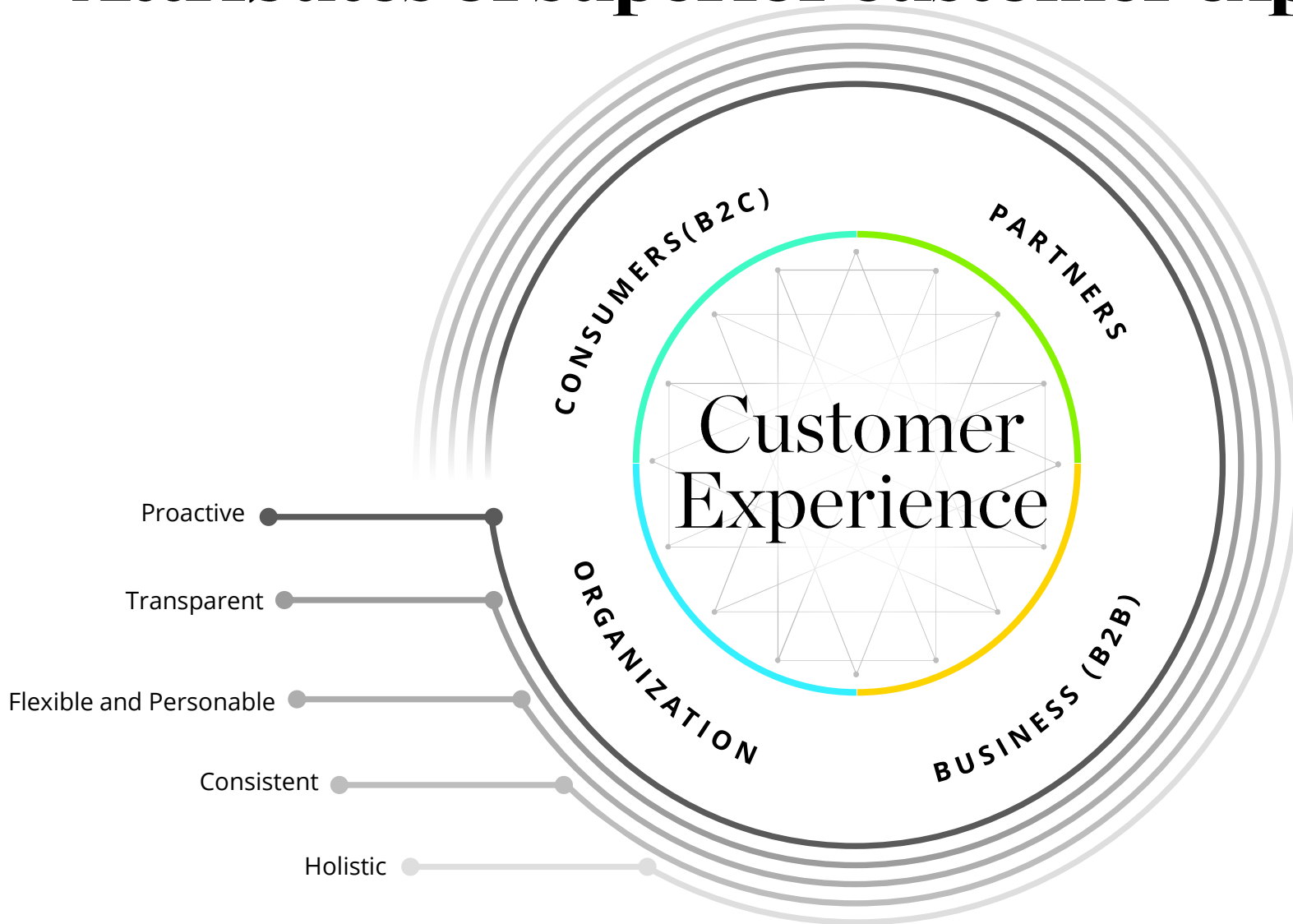
Superior customer experience drives customer satisfaction.

Which, in turn, drives loyalty.

Proactive

Transparent

Flexible and Personable

Consistent

Holistic

CONSUMERS(B2C)

PARTNERS

ORGANIZATION

BUSINESS (B2B)

Customer Experience

Why Be Loyal?

For customers, loyalty doesn't make sense.

Customers would be better served by always choosing products or services with the highest perceived value based on how their budget allows to spend, not by continually returning to the same corporation or brand out of loyalty.

The Logic of Loyalty

Loyalty isn't logical.

It isn't just driven by quality or cost savings.

It's driven by emotion.

EXPERIENCE

NEED

RESEARCH

SELECT

PURCHASE

VALUE

RECEIVE

USE

REORDER

RECOMMEND
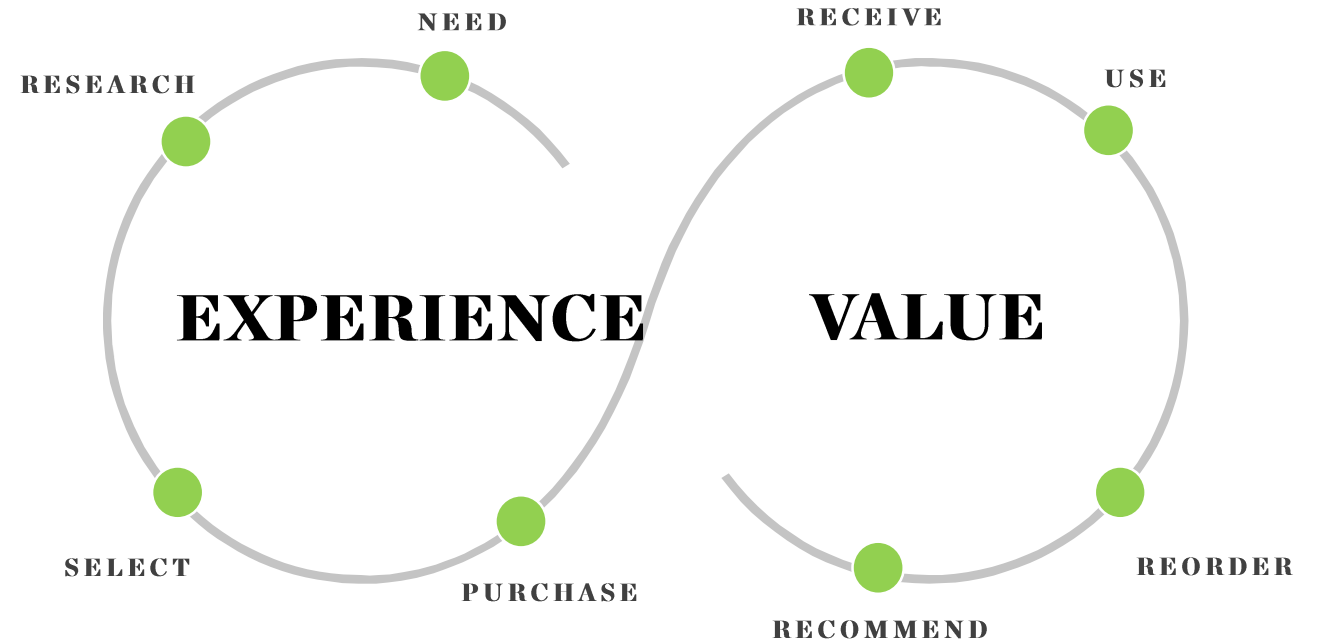
Creating Loyalty

Customer service is more than just addressing their current need.

It's about creating value…

…during the moments that matter most to customers along their unique journeys.
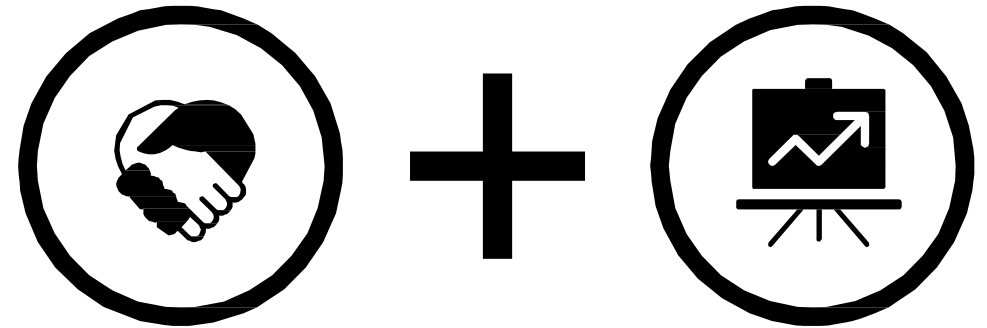
Incentives for Behavior + **Incentives for Business**

Tapping into emotion and behavior requires a contextual understanding of the individual and what they value.

What is the value of loyalty?

Spend

86%

of buyers will pay more[3] for a better customer experience, but only 1% of customers feel that vendors consistently meet their expectations

Cost To Serve

33%

Reduction of the cost to serve customers by delivering great experiences[4]

Tenure

24% of B2B buyers continue to seek out vendors for 2+ years after a good experience[3] while 66% of B2B buyers stopped buying after a single bad customer experience[4]

Promotion

Customers tend to mention a good brand experience to an average of nine people, but will talk about a bad one to

16 people[1]

and B2B conversion rates from referrals are 2 points higher that any other channel[2]

Forrester estimates investing in superior customer experience drives $6.8B[5] of additional profits across the US economy[1]

Source:

[1]Forrester, 2016
[2]Forrester, 2016
[3]Walker Info Differentiator, N/D
[4]Forrester, 2016
[5]Gartner Customer Experience, 2014
Unlocking the Customer's Experience Value (CX[V]), 2017

But it could be more than that...

And the path to differentiating your brand from your competitors

Our perspective on the future of Customer Service

The future of Customer Service will focus on personalized customer experiences throughout the user journey with consistency of brand and messaging across company's channels enabled by digital and cognitive capabilities.

Evolution of the Services Business Unit

Yesterday	Today
Inconsistent and **poor impersonal customer experiences** across customer channels	Consistent and personalized experiences including brand and messaging across channels i.e. Omni-channel
Reactive, responding to customer requests	Proactive, seeking out **insight-driven service** opportunities in every interaction
Loss of revenue upside due to **inability to cross-sell and up-sell** at key customer contact moments	Leveraging artificial intelligence to identify opportunities and experiences that are relevant for the customer
Disjointed technologies (marketing, CRM, service, etc.)	Cognitive and artificial intelligence capabilities seamlessly weaved into the customer and agent's experience
Poor employee/agent experience due to multiple technologies and fragmented customer data	Automated, proactive and predictive capabilities to increase customer loyalty and company brand
Numerous customer data sources resulting in lack of 360° view of customer	Running on agile, scalable systems purpose-built to support the go-to-market needs of services

Effective cloud solutions accelerate the capabilities of a Services Organization to run faster without impeding the continued operation of hardware-focused processes and systems

Customer Journey

Ensure the voice of the customer is periodically heard and acted upon. This will maintain reputation and customer loyalty.

Journey Mapping: Customer Experience Levers

Research has shown that an increase in **customer satisfaction, loyalty, and positive word of mouth** are correlated with improvements in five key user experience levers -

1. Environment
2. People and Tools
3. Education
4. Value
5. Trust

Environment
- Look & Feel
- Performance & Features

People and Tools
- Knowledgeable Sales People
- Friendly and Approachable

Education
- Marketing & Communications
- Digital Media Information Available

Value
- Value of Service Providers
- Value of Products
- Value of Digital Tools

Trust
- Deliver on What You Promise
- Information Accurate and Dependable
- **Rapid Return Solutions**

Make it part of every step of the Customer Journey

Customer Service will transform to play multiple roles along the customer journey

Partner/ Customer Action

...inquires about specific product/ capability/ feature	...wants to convert to a subscription but finds the process is not easy or transparent	..requires multiple meetings and discussions to convert ...gets live help while shopping	...is pleased with the solution advisor's expertise and is ready to buy	...gets personalized treatment during their checkout experience	..becomes frustrated with the complicated invoicing and billing schedule	...dedicated CSM is able to orchestrate the business and resolve the challenges in a timely manner	...is pleased with the timely resolution and promotes on social media
ATTRACT	**LEARN**	**DECIDE**	**BUY**	**EXPERIENCE**	**TROUBLESHOOT**	**ADD-ON**	**ADVOCATE**

Experience Value

Attract customer's attention based on product/ feature from previous history	Access to hyper relevant content	Support via online chat , content guides, videos, easy to use online tools	Offers click-and-collect during checkout based on predicted customer	On-time personalized delivery and automated updates across channel history	On-time help and knowledgeable rep with access to hyper intelligent tools with insights	Offers VIP loyalty program	Stays loyal and shares positive reviews with friends and family

Business Value

Visits website	Educates customer and decides on offer that best fits his/ her needs	Digital low cost process to manage customer issues increasing propensity to buy	Purchases higher priced offer and decides to use click-and-collect	Retained customer; consistent & responsive experience	Increase in upsell and customer retention/ loyalty	Enrolls in VIP loyalty program	Advocate for the company and chance for increase in market

● Lead Generation   ● Sales Conversion   ● Issue Resolution   ● Lifetime Value

Source: Unlocking the Customer's Experience Value (CX^V), 2017:

Where's my order?

Human

Machine

Michael calls ABC Inc.

"Hello Michael! I see you recently placed an order. Are you calling about the status of that order?"

Natural language automation, connected systems enable proactive service

"Yes!"

Cognitive understanding and speech-to-text conversion

"Your Order, #78291, on its way and will arrive at your downtown warehouse between 4:30 PM and 5 PM on Thursday, November 23rd. Please make sure that John Doe from your warehouse will be available to sign and receive the shipment at that time."

Combination of chat bot and text-to-speech conversion

"Would you like me to send a text message or an email to remind you on November 23rd?"

"Yes!" Michael receives a confirmation text that he will be notified upon his order.

"Anything else I can assist you with today?"

"No, thank you! This was incredibly helpful." Michael hangs up a very happy customer and is looking forward to receiving his shipment.

Are you ready to re-order?

Human

Machine

Natural language automation, connected systems enable proactive service

"Good evening, Shannon! You normally order Resin X every 6 months and it has been 5 months since your last order, would you like me to get an order going tonight so it will arrive to you by the 25th of November?"

Shannon calls ABC Inc.'s customer service line in between meetings on a busy day.

"Sure, that sounds great!"

"Would you like me to send a text message or an email to remind you on November 23rd?"

"Your Order, #78291 will be shipped first thing in the morning and will arrive at your Atlanta warehouse by 4:00 pm, November 25th. Sarah is the official signatory for all warehouse shipments from us, so please make sure that she is present to sign off on the delivery."

Uses text-to-speech automation to generate customer message

"An email would be great!" Shannon receives a confirmation email that she will be notified upon order delivery.

Is there anything else I can help you with before you enjoy the rest of your evening?

"No thanks, that's everything." Shannon hangs up with a smile and walks into her next meeting quicker than she ever has before having to make this call.

I see your Resin is getting low...

Human

Machine

Karen's company actively stores 10,000 liters of hydrocarbon resins onsite for day-to-day usage.

As the tank reaches 25% capacity, the sensor triggers a text outreach to Karen.

The company has IoT tank level sensors equipped at Karen's facility to monitor the quantity left in the tank in real-time.

Sensors are constantly monitoring the level of the MiniBulk tanks

Your IoT sensor has reported that your resin level is at 25% capacity, and your current usage rate dictates that you will be at critically low levels by May 25th. Respond "yes" to this message to place an order for more Hydrocarbon resins to be delivered May 20th to your New Alberta region plant. "

Karen misses the text, but is greeted by a banner in her community page after logging in. She clicks it, approves the reorder of hydrocarbon resin, and shares it with the rest of her team.

Karen responds, **"Yes"**, **"Would you like an email notification sent to your team informing them of the order and set an email remind for everyone on November 18th?"**

Karen responds **"Yes"** again and is included in the group email sent out to her team.

Karen then continues on with her work day with a spring in her step.

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How do you define customer value?

Begin by defining Customer Value

Connecting experiences to quantifiable business value amplifies bottom line return

Customer Value

How we measure

Experience Value
The value created for the partner and their end customers

Experience Value Measures

How Satisfied Are They?

Business Value
The value created for you

Business Value Measures

How Much Do They Promote Us?

How Much Do They Spend?

What Is Their Cost To Serve?

Partner Value
The value created for the partner and their end customers

Partner Value Measures

How Good Of A Partner Are They?

How Satisfied Are Their Customers

How Easy Is It To Work With Us

Are They Realizing Value

These measures all represent customer-specific data—the cornerstone of Customer Experience Value (CX^V)

Source: Unlocking the Customer's Experience Value (CX^V), 2017:

In closing...

Winners may not get it right, but will learn and improve. Watchers will fall behind and lose.
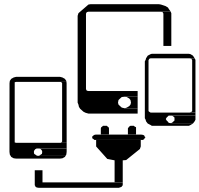
Build A Digital Ecosystem

Tailor the experience for customers as well as employees to promote understanding of customer's preferences and expectations by creating a single view of the customer.

This requires more than just a collection of systems; a streamlined ecosystem that is truly cross-channel.
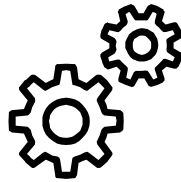
Establish A Customer Engagement Model

Even with a system in place, enriching customer experience requires enterprise level engagement model to orchestrate how people and systems are connected, interactions are managed, and how data is presented, maintained, and shared across the organization.
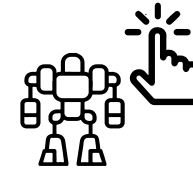
Lay The Foundation For Loyalty

To truly be a customer-first organization, a single view and rich view of customer's preferences, behaviors and most relevant transactions must be readily available to employees servicing customers.

To create loyalty, businesses must understand what drives their customers towards or away from them.

Keep Looking Forward

The "digital customer" has a new set of behaviors and expectations, shifting from "what I want to do" to "what I need to know".

Advanced cognitive operations involve a maturity runway. Today's investors in cognitive will reap first-mover advantages as machines learn and perform cognitively.

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Digital

Thank you.

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Appendix

Robotic & Cognitive Automation, Vendor Landscape, Major Tech Companies

Robotic & Cognitive Automation

Robotic process automation (RPA) vendor selection

AUTOMATION ANYWHERE — Greatest depth of implementation experience and quickest to create initial automation processes

blueprism — Most advanced robot control and best ability to scale with rapid robot creation and cost efficiency with no additional infrastructure costs

Pega — Best front office automation with Remote Desktop Assistant offering that works in parallel with the human

REDWOOD — Greatest SAP/Oracle expertise plus extensive pre-built functionality to automate Finance processes

UiPath — Most intuitive UI for business-led process creation and specialized Citrix compatibility
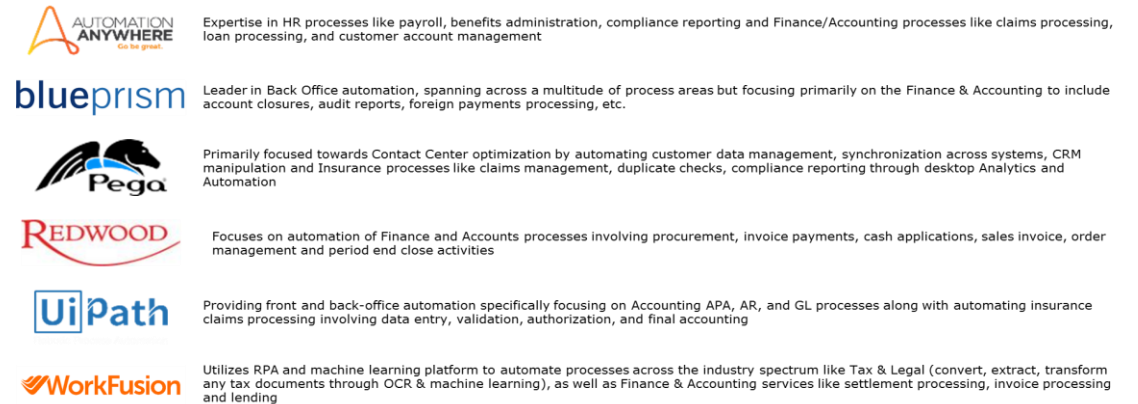
WorkFusion — Best ability to handle unstructured data and performs smart process automation with built-in mature machine learning
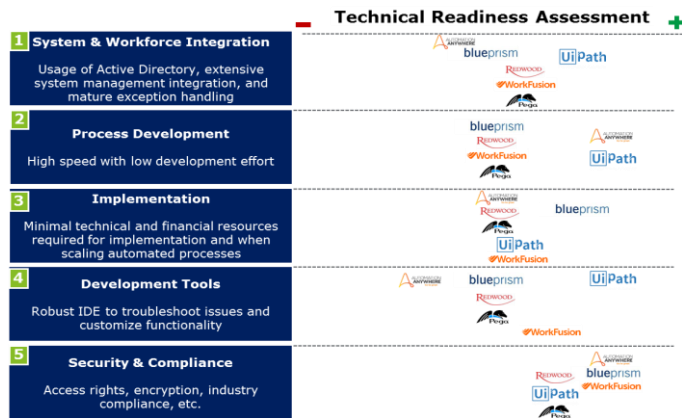
Industry Experience

Sector Installs by Vendor

	MFNG	Cons Prod	Retail & Dist	Trav, Hosp, Leis	Oil & Gas	Power & Utilities	Bnkg & Sec	Insurance	Inv Mgmt & RE	HTH Plans	Providers	Life Sci	Federal	State & Loc	Tech	Media&Ent	Telecom
Automation Anywhere	H	H	H	M	L	L	H	H	H	M	H	M	M	M	H	M	M
blueprism	M	L	L	N/A	L	L	H	H	N/A	L	M	N/A	L	L	M	N/A	L
Pega	L	N/A	L	N/A	N/A	N/A	H	M	N/A	L	N/A	N/A	N/A	N/A	N/A	N/A	M
Redwood							TBD										
UiPath	H	M	L	N/A	N/A	N/A	H	H	M	L	L	L	L	L	M	L	M
WorkFusion	L	N/A	L	N/A	N/A	N/A	H	H	N/A	N/A	N/A	L	N/A	N/A	N/A	N/A	L

Focus Area

Firm Revenue (Millions) — 0, 10, 20, 30

Functional Area

AUTOMATION ANYWHERE — Expertise in HR processes like payroll, benefits administration, compliance reporting and Finance/Accounting processes like claims processing, loan processing, and customer account management

blueprism — Leader in Back Office automation, spanning across a multitude of process areas but focusing primarily on the Finance & Accounting to include account closures, audit reports, foreign payments processing, etc.

Pega — Primarily focused towards Contact Center optimization by automating customer data management, synchronization across systems, CRM manipulation and Insurance processes like claims management, duplicate checks, compliance reporting through desktop Analytics and Automation

REDWOOD — Focuses on automation of Finance and Accounts processes involving procurement, invoice payments, cash applications, sales invoice, order management and period end close activities

UiPath — Providing front and back-office automation specifically focusing on Accounting APA, AR, and GL processes along with automating insurance claims processing involving data entry, validation, authorization, and final accounting

WorkFusion — Utilizes RPA and machine learning platform to automate processes across the industry spectrum like Tax & Legal (convert, extract, transform any tax documents through OCR & machine learning), as well as Finance & Accounting services like settlement processing, invoice processing and lending

Technical Readiness

Technical Readiness Assessment (− to +)

1. **System & Workforce Integration** — Usage of Active Directory, extensive system management integration, and mature exception handling
2. **Process Development** — High speed with low development effort
3. **Implementation** — Minimal technical and financial resources required for implementation and when scaling automated processes
4. **Development Tools** — Robust IDE to troubleshoot issues and customize functionality
5. **Security & Compliance** — Access rights, encryption, industry compliance, etc.

Product Maturity

Product Feature Maturity — LOW to HIGH

1. **Reusability** — Pre-defined packages, reusability of custom components, and easy leveraging within process creation
2. **Data Extraction** — Maturity of OCR/Screen Recorders to extract structured/unstructured data from multiple data sources
3. **Supported Technology** — Ability to handle CITRIX & Mainframe green screens, ERP, CRM, text, web, & other programs
4. **Robot Management** — Ability to assign tasks, prioritize, and monitor robots
5. **Reporting & Monitoring** — Audit Logging, SLA Compliance, KPI, Performance, and Customized Data Outputs

Deployment Considerations

	AUTOMATION ANYWHERE	blueprism	Pega	REDWOOD	UiPath	WorkFusion
1. **Hosting Reqs** — On-Premise, Cloud Deployments						
2. **Training & Support** — Strong change management through formal training, responsive support desk						
3. **Scalability** — Easy to expand from single desktop to client-server environment to multi-tenant						
4. **Technical Skill Reqs** — No requirement for extensive technical acumen and/or developer skills						
5. **Partnerships** — Strong strategic delivery and tech partnerships & alliances						

○ No fulfillment of ideal target state   ◐ Partial fulfillment of ideal target state   ● Full realization of ideal target state

Understanding the vendor landscape

Interaction Channels

General AI Agent Platforms

(Consumer)

Messaging Platforms

(Consumer)   *(Enterprise)*

ChatBot-in-a-Box

(Consumer & Enterprise)

Custom app channels or integration on websites /other messaging platforms

Simple   **Complex**

Bot Feature Providers and Capability Enablers

Messaging Platforms

with Simple Bots Included

Capability Enablers

NLP & AI-as-a-Service Platforms

Single Capability Enablers

Watson Conversation IBM

Microsoft

Kasisto

Maluuba
Microsoft

Google Cloud Platform

amazon alexa

Beyond Limits

AMELIA

InteliWISE

ARTIFICIAL SOLUTIONS

DigitalGenius

Bot Development Frameworks

Bot Framework & Deployment Platforms

with Simple Bots and Complex Capability Enablers Included

Wit.ai
Facebook

KORE

api.ai
Google

MindMeld

Microsoft Bot Development

BotKit
Howdy

Gupshup

Pandorabots

ORACLE

Chatfuel

CONVERSABLE

ask Nina

aspect

Have their own custom development frameworks which may lack the robustness of the Bot Development Platforms

Major tech companies are consolidating the ecosystem into four types of platforms with the goal of having a vertically-integrated technology & services stack…

General AI agents with platforms
Developer access available now or announced
- Siri — Apple
- Now — Google
- Alexa/Echo — Amazon
- Cortana — Microsoft
- Viv — Viv Labs

Messaging platforms
- iMessage — Apple
- Messenger — Facebook
- WhatsApp — Facebook
- Slack
- WeChat — Tencent
- Kik
- Allo — Google
- Telegram
- Twilio
- Line — Naver
- Skype — Microsoft

Generalized natural language and AI-as-a-service platforms
- Cloud Platform Speech & NL APIs — Google
- Watson Conversation — IBM
- Alexa Voice Service — Amazon
- LUIS — Microsoft
- Cognitive Services — Microsoft

Bot frameworks and deployment platforms
- Wit.ai — Facebook
- BotKit — Howdy
- Chatfuel
- Automat
- Bot Framework — Microsoft
- Api.ai — Google
- Pandorabots
- MindMeld
- Gupshup
- Kore

- **General AI agents with platforms** are currently targeted at developers focused on the consumer market and *are irrelevant for most enterprise use cases outside of that.*

- **Messaging platforms** also have tools for developers to build bots, with Slack and Skype being the primary enterprise channels, *but advanced NLP or AI capabilities are usually not available unless another vendor is used as a "capability enabler" via an API.*

- **Natural Language Processing (NLP) or AI-as-a-service platforms** can be used as a building block or "capability enabler" for a ChatBot agent, *but these vendors still require 1. a platform/framework for developing a ChatBot agent and 2. a messaging platform or interaction channel such as a webhook on a company's website*

- **Bot frameworks and deployment platforms** allow developers to build, test, train and manage *a large number of ChatBots that are then deployed on multiple messaging platforms or other interaction channels.* These can also interface with NLP or AI-as-a-service APIs to provide more robust capabilities.

https://www.oreilly.com/ideas/infographic-the-bot-platform-ecosystem

IBM Watson

Category	Company & Product overview
NLP/AI-as-a-service Platform	Watson combines a number of cognitive techniques to help you build and train a bot to automate conversation, all via simplified tooling that practically anyone can use. You can then deploy your Watson ChatBot via mobile device, messaging platform like Slack, or even through a physical robot

Key Offerings & Services

- Watson Conversation
- IBM Bluemix
- Watson Virtual Agent
- Watson Explorer
- Watson Analytics
- Watson Knowledge Studio

- Languages: English, Japanese

Strengths & Weakness

Strengths	• Machine learning component which allows users to correct responses and advanced NLP which can be accessed via API
Weakness	• Does not provide the full suite of tools for bot development • Can be expensive when used at scale ($.02 per API call)

Known Use Cases	• Deloitte UK firm uses IBM Watson for Service Desk queries • Royal Bank of Scotland (RBS) uses IBM Watson ChatBot "Luvo" to answer questions online for customers and direct them to right places • Travel operator Thompson has created a ChatBot using IBM Watson to provide holiday recommendations for customers

Channels

– Most Messaging and General AI Agent Platforms

Understanding Language & Context							Task Automation Capabilities							Enterprise Systems
Rule Based Keyword Triggers	Q&A Pair Scripts	Machine Learning	Natural Language Processing	Entity Recognition	Intent Recognition	Reinforced Learning	Dialogue Mgmt.	Alerting / Monitoring/ Scheduling	Incident Triage & Management	Search & Data Aggregation	Runbook Execution	Judgment	Creativity	• Many integrations will need custom development.

Bot Platform / Development Framework

Develop	Test	Discovery	Bots Mgmt.	Security	Publish	User Mgmt.	Audit Logs

Source	- Demos - http://www.ibm.com/watson/

Not available	Solution provider capability