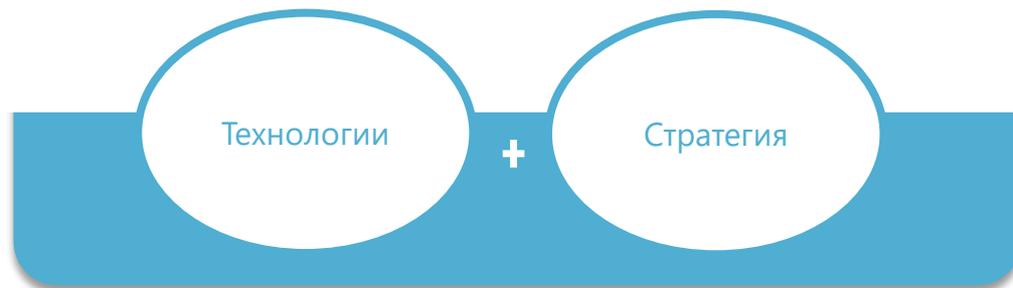


COVID19: сокращение затрат и роботы



Июль 2020
Олеся Шершень

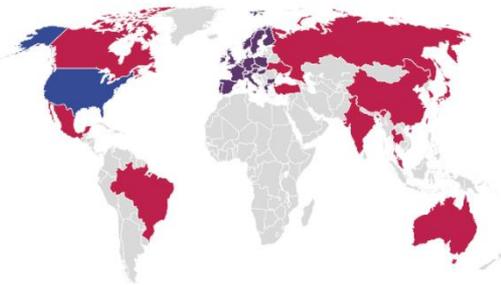


Inspired by **patients.**
Driven by **science.**

Обо мне и моей компании UCB BioPharma

Финансовые показатели 2019:

- REbitda **€4.56** миллиарда
- Около **7500** сотрудников
- Филиалы в **~40** странах
- Расходы на НИОКР: **23%** выручки
- В списке **Euronext**



cimzia[®]
(certolizumab pegol)

VIMPAT[®]
lacosamide

Neupro[®]
rotigotine transdermal patch

Keppra

Xyzal
LEVOCETIRIZINE HCl

Zyrtec[®]
Cetirizine dihydrochloride

Everything we do starts with a simple question:



"How will this make a difference to the lives of people living with severe diseases?"

Olesya Shershen

Global Finance Automation lead (Strategy and Technology)
Brussels Ixelles, Brussels Capital Region, Belgium ·
[500+ connections](#) · [Contact info](#)



Saint Petersburg State
University of Finance and...

About 

Passionate about technologies and the way they impact the value creation chain, I work together with my teams to help UCB stay sustainable on the market and develop better solutions for our end customers, patients.

Team lead, go life manager, consultant with 10+ years experience of digital transformation consulting, including ERP implementation, support, change management; RPA implementation experience; M&A transformation Hypercare.

Clients portfolio includes pharma, energy and utilities, oil and gas, consumer goods.

Speaker at "Digital..." conferences, publications of articles in niche media.

Published 4 books on Technologies.

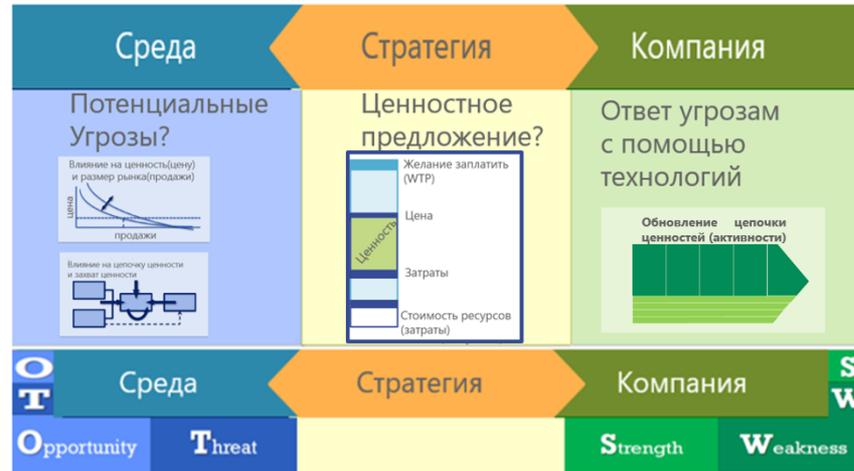
Содержание

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2. Сокращение затрат с технологиями роботикс
Определение технологии
3. Типичные кейсы использования технологии в условиях COVID19 для сокращения затрат и не только
4. Пример анализа бизнес процесса для автоматизации с роботикс

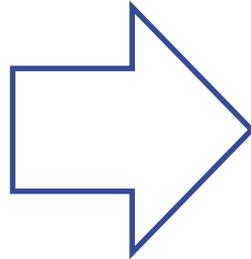
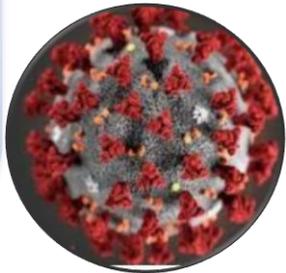
Определение угроз и рисков стабильности

Для идентификации угроз и рисков используются стандартные инструменты анализа:

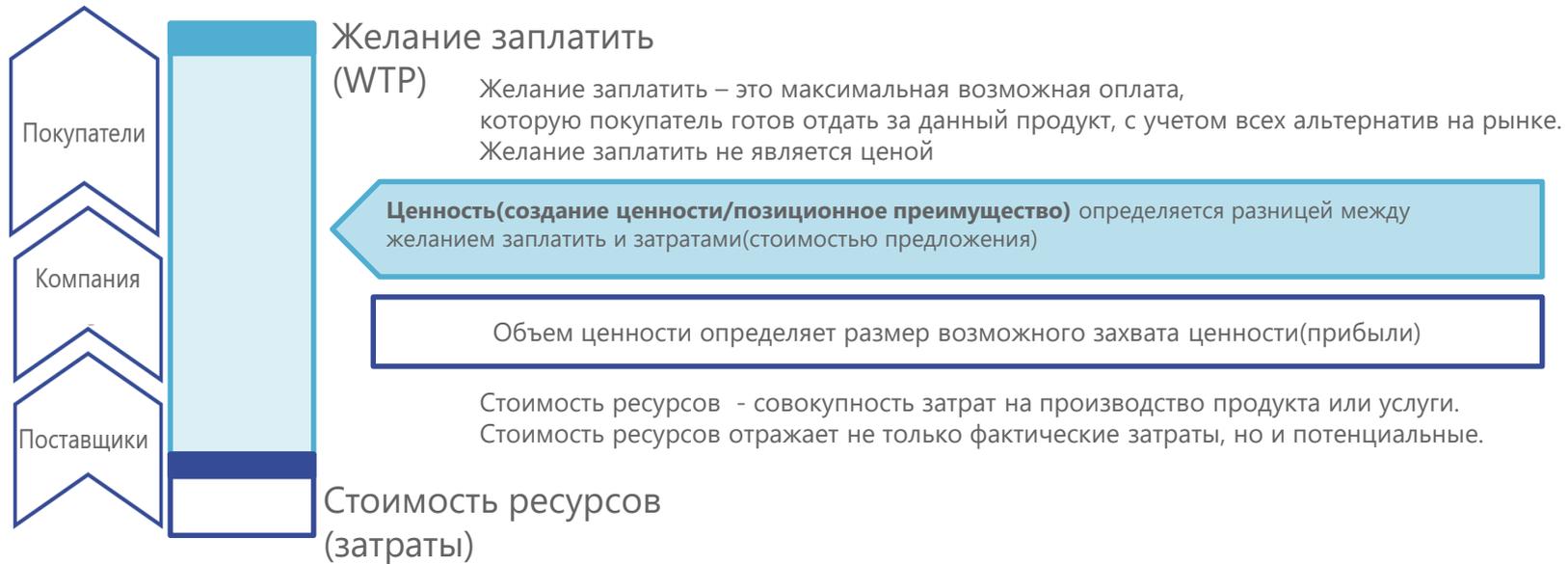
- ❖ SWOT анализ,
- ❖ Матрица ценности и затрат,
- ❖ Цепочка Портера



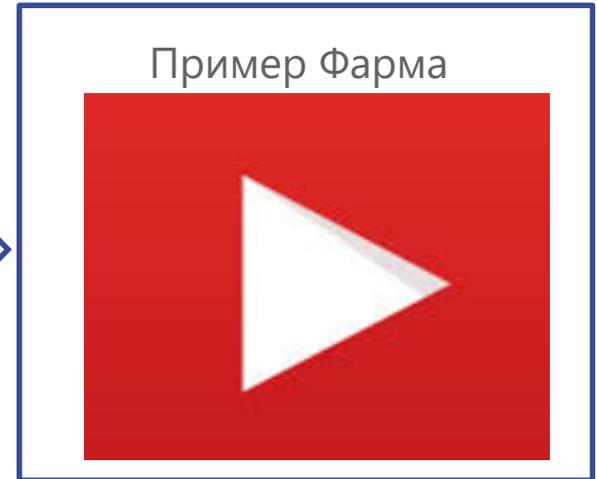
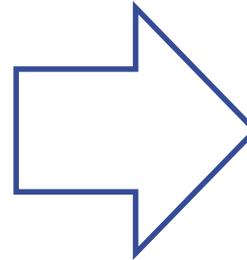
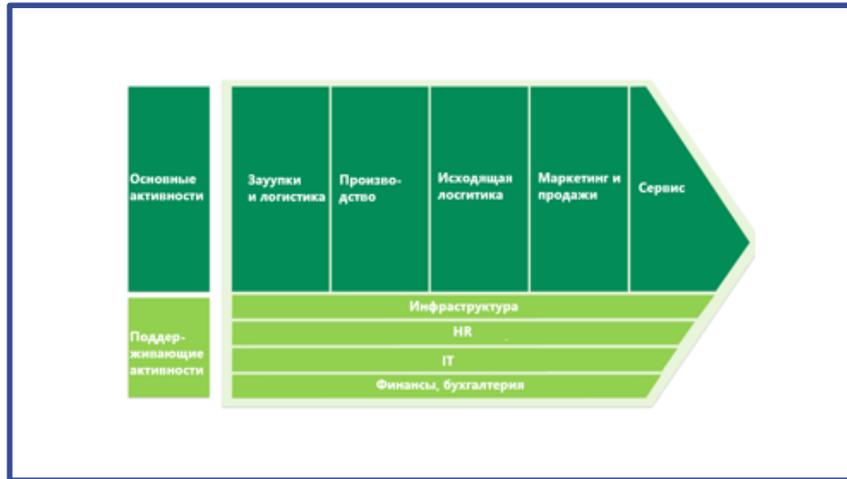
Стратегический анализ SWOT. Пример фарма



Стратегический анализ: Матрица ценностей и затрат



Стратегический анализ: Цепочка ценностей Портера



Стратегический анализ: Цепочка ценностей. Фарма

1. Идентификация рисков

2. Определение роботикс

3. Бизнес кейсы

4. Пример

Поддерживающие активности (операционные и функциональные)



Основные активности

Ценностно образующие активности

1. Отбор партнеров
2. Выбор материалов
3. Закупки

Аналитики

1. Производство медикаментов

Аналитики

1. Поставки потребителям
2. Выбор партнеров по поставке

Аналитики

1. НИОКР
2. Выбор партнеров

Аналитики

1. Анализ конкурентов
2. Анализ потребителей
3. Регуляторы(запуск)

Аналитики

1. Обратная связь с пациентами
2. Обратная связь с покупателями(аптеки, врачи)

Аналитики

Преимущества и особенности компании

1. «Как раз вовремя» модель(Just in time, DELL)
2. Стандартно для всех компаний холдинга(40 стран)
3. Автоматизация

1. Производство по заказу(Bill to order)
2. Стандарт ванно
3. Автомаизиро ванно
4. Частично на аутсорсе

1. Треугольная модель поставки
2. Логистика на аутсорсе

1. Инновации: VR, Analytics, RPA, NLP, quantum computing
2. Большие инвестиции
3. (26% of выручки)

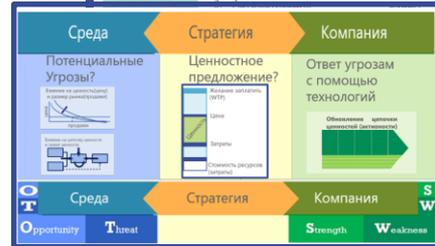
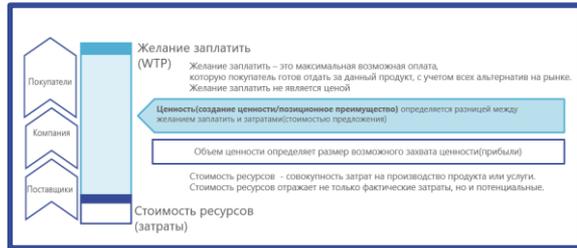
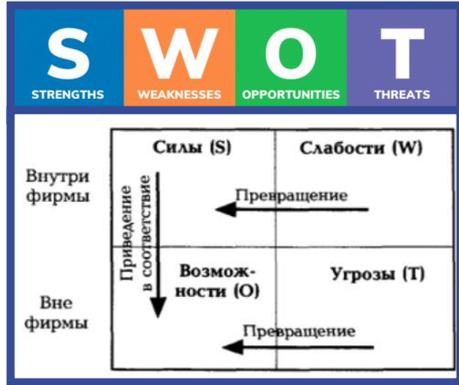
1. Инновации: advanced analytics, NLP
2. Партнерства
3. Узнаваемый бренд

1. Инновации(AA on claims system, NLP)
2. Совместные проекты с другими игроками рынка здравоохранения



Угрозы связанные с пандемией

Стратегический анализ рисков: пример фарма



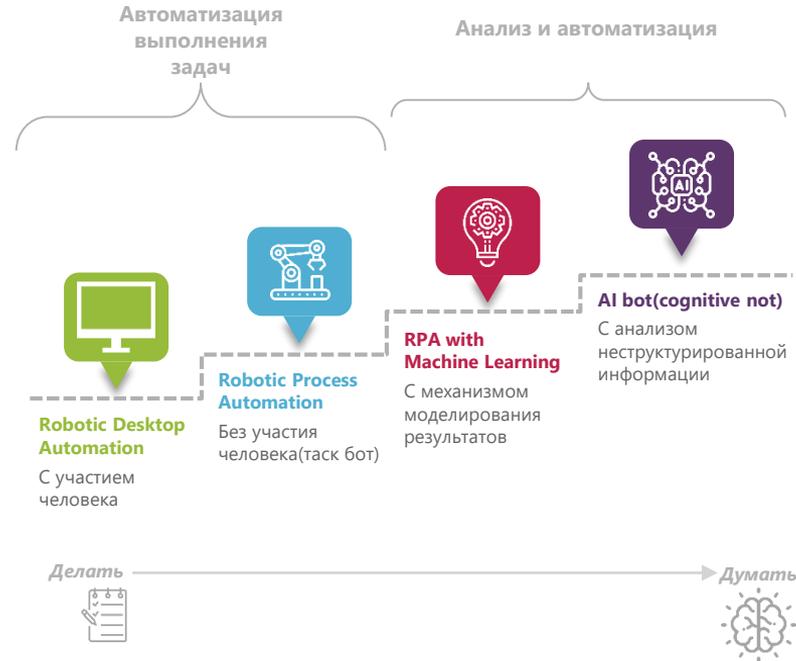
Определение угроз и рисков

Дополнительные стратегические рекомендации

1. Для разработки стратегии ответа и защиты от рисков:
 - ❖ Определите слабые и сильные элементы цепочки ценности компании,
 - ❖ Определите, какие из слабых элементов следует адаптировать и какие ресурсы для этого требуется привлечь(патнерства, технологии),
 - ❖ Определите, как можно максимально использовать сильные элементы цепочки ценности (конкурентные преимуществ) для обеспечения стабильности и устойчивости
2. Рассмотрите примеры ответа на риски компаний конкурентов
3. Смотрите на проблему глобально

Сокращение затрат с технологиями роботикс: Определение технологии

“**Robotic process automation** (или RPA) - это форма технологии автоматизации бизнес-процессов, основанная на метафорическом программном обеспечении роботов (ботов) или работников искусственного интеллекта.”



Сокращение затрат с технологиями роботикс: Определение технологии

Когда использовать технологию?

- ❖ Технология автоматизации бизнес процессов выполняемых в нескольких(более 3х) приложениях, повторение действий оператора, описанных с помощью алгоритма программы
- ❖ Используется как тактическое и стратегическое решение

Что требуется учесть?

- ❖ Требуется максимально детальное пошаговое описание процесса
- ❖ Критически подойти к выбору вендора

Каковы типичные примеры внедрения?

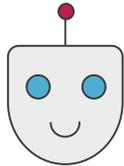
- ❖ Автоматизация бухгалтерии (проводки начислений, закрытие, создание контрагентов)
- ❖ Автоматизация HR
- ❖ Автоматизация цепочки производства



Сокращение затрат с технологиями роботикс: Пример Фарма



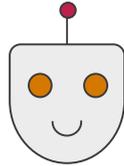
Jeri



Проводки начислений

Ежемесячно бот проводит более 3500 документов в SAP

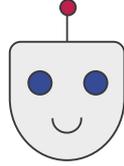
Fabricio
CMD



База клиентов

Ежедневно бот заводит в SAP основные записи клиентов

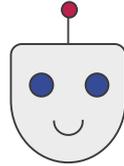
Frank
VMD



База вендоров

Ежедневно бот заводит в SAP основные данные поставщиков

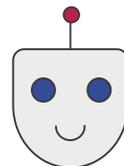
Vladimir
WBS



Проекты

Ежедневно бот заводит данные проектов в SAP

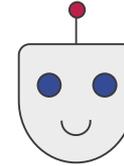
Fin
FP&A



Отчетность

По запросу бот готовит отчет о прибылях и убытках на основе данных SAP HANA

Lin



Специфика Китая

Бот выверяет инвойсы полученные по маркетинговым мероприятиям (распознавание фото и символов на китайском языке и перевод)

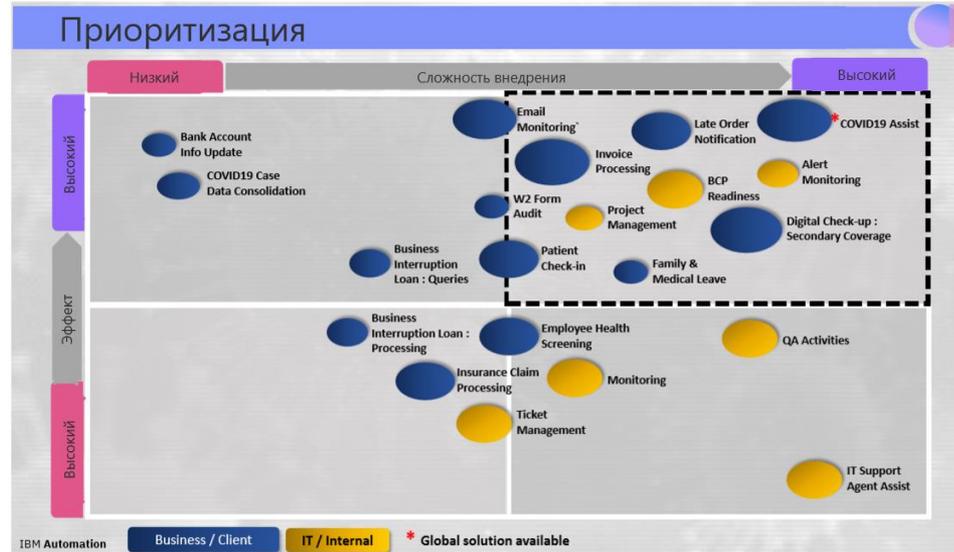
Типичные бизнес кейсы использования технологии для сокращения затрат в условиях COVID

Топ 5 кейсов

- Здравоохранение: проверка страховки пациентов перед госпитализацией(таск бот)
- Новостной бот: коллекционирование и рассылка статистики по заболевшим в регионе(когнитивный бот)
- HR из дома: учет больничных листов(таск бот, когнитивный бот, снижение затрат)
- Финансы из дома: распознавание счетов, отправленных по электронной почте (когнитивный бот, снижение затрат)
- ИТ из дома: мониторинг и дистрибуция кейсов поддержки(таск бот, снижение затрат), мониторинг систем обеспечения безопасности(таск бот, безопасность)

Типичные бизнес кейсы использования технологии для сокращения затрат в условиях COVID

Статистика и приоритизация



1.
Идентификация рисков

2.
Определены роботикс

3.
Бизнес кейсы

4.
Пример

Типичные бизнес кейсы использования технологии для сокращения затрат в условиях COVID

Другие примеры

SL No	Use Case	Problem Statement	Solution Description	Technology	Existing Solution	Industry	Internal/ External	Business Process / IT	Feasibility	Impact
1	Employee Health Screening	Keep tab on critical employees' health condition is difficult in remote working environment	Automated health survey sent periodically. Bot to consolidate response and publish to stakeholders (HR etc)	RPA	RPA	Cross-Industry	Both	Business Process	Medium	Medium
2	Data Consolidation for Gov Authorities	As number of COVID19 cases rise, it is becoming difficult to gather data form different sources to get consolidated view of cases, health conditions, number of tests etc, which is extremely important for tracking	Gather data from different sources with the help of unattended bot and prepare consolidated report, send to relevant stakeholders.	RPA	RPA	Health Care, Gov	External	Business Process	Low	High
3	Email Monitoring	Huge volume of emails are coming to health organizations, gov authorities, hospitals etc on COVID19 suspect cases. It is challenging to manually analyse those emails and respond	Cognitive helpdesk that can intercept emails, understand intent, classify them, determine actionables. Also provide a priority wise consolidated view to the health officials.	AI/ML	Intelligent Helpdesk (TechAssist)	Health Care, Gov	External	Business Process	Medium	High
4	COVID19 Assist	Numerous queries are pouring in from citizens about various aspect of the COVID19 pandemic and the disease. It is not humanly possible to answer all queries on time	Build a COVID19 assist using cognitive assist solution to provide information automatically. If the COVID19 Assist can not answer, then route to human agents.	AI/ML	Cognitive Assist	Health Care, Gov	Both	Business Process	High	High
5	Patient Check-in : Accelerate COVID19 Testing reducing wait time	While the number of COVID19 testing increases, the wait time will also keep increasing for the patients as there is protocol to follow, such as patient registration, reporting back to ICMR. The longer the wait time, higher the chances of community spread of the virus.	Initial screening through questionnaire, registration, insurance coverage eligibility check and patient check-in can happen automatically using RPA on self-help mode even before the patient lands in the hospital / test centres. Test results can also be sent to patient and reported to ICMR using unattended bot.	RPA	Patient Check-in & Insurance Eligibility check - CCAD	Health Care	External	Business Process	Medium	Medium
6	Digital Check up via Extending Secondary Coverage	With the outbreak of the COVID-19, hospitals are increasingly turning to digital visits (tele consult & video consult) as a way to safely treat their patients and contain the spread of the infection at the hospital and the community	Under this circumstance governments of many countries decided to support the hospital by paying for the digital patient checkups. For this they are adding a secondary coverage to the existing patient which will be only for a single checkup. RPA scope here is to add the secondary coverage in the patient Administration system(EPIC) for the scheduled digital visits	RPA	New CCAD Use Case	Health Care	External	Business Process	Medium	High



* Данные IBM Europe, AUTOMATION USE CASES –COVID19

Типичные бизнес кейсы использования технологии для сокращения затрат в условиях COVID

Другие примеры

SL No	Use Case	Problem Statement	Solution Description	Technology	Existing Solution	Industry	Internal/ External	Business Process / IT	Feasibility	Impact
7	Insurance Claim Processing	The volume of health insurance claim processing would be very high for the insurance companies due to COVID19 pandemic. Managing the sudden spike manually will not be feasible. At the same time, timely claims processing would be extremely critical for the patients	Automated health insurance claim processing system, that can read images of the claim forms, convert them to digital format and process them in the claim management system automatically.	OCR, AI/ML, RPA	Cognitive Claim Management, RPA	Healthcare Insurance	External	Business Process	Medium	Medium
8	Supply Chain : Invoice Processing	Due to panic buying, there is huge demand in certain product categories and SKUs. The retailers have to replenish stocks much more frequently. As a result the volume of invoices to be processed has gone up many fold.	Automated reading of physical invoice, convert them into digitized format and process them enterprise ERP system.	ICR, AI/ML, RPA	Cognitive Invoice processing, RPA	Cross-Industry	External	Business Process	Medium	High
9	Resolving Customer Queries : Business Interruption Loan Schemes	Due to coronavirus, British government has come up with several financial schemes for small and medium enterprise. Government are running these schemes through 40 shortlisted banks in UK. Customers have to reach out to their respective banks and find out what are the schemes they are eligible for and what they can apply. Customers are confused and for which they are using customer care , but customer care lines are choked because of the huge volume and they have min. 1- 2 hrs of waiting time	A quick chat bot solution which can quickly create a corpus of questions and answers pair and integrate with the banks business applications will be able to resolve this problem of high volume and long waiting times. It will also reduce the cost of operations while providing timely service to the aggrieved customers	AI/ML	Cognitive Assist / RPA	Banking	External	Business Process	Medium	Medium

Типичные бизнес кейсы использования технологии для сокращения затрат в условиях COVID

Другие примеры

SL No	Use Case	Problem Statement	Solution Description	Technology	Existing Solution	Industry	Internal/ External	Business Process / IT	Feasibility	Impact
10	Loan Processing : Business Interruption Loan Schemes	Banks are receiving huge volume of loan requests from the impacted small and medium businesses. Because of limiting processing capacity , there is a huge back log of requests and banks are taking at least a week of time to just get back to the customers	An intelligent automation solution using Intelligent Helpdesk and RPA's can help in processing these request faster resulting in reducing the backlog and increasing the turn around time. The Intelligent Helpdesk integrate with front end system , make a decision by calling the bots which gets data from the back end systems, and then relaying the decision back to the customer. Also the loan origination process can be automated for approved loans using RPA.	AI/ML/RPA	Intelligent Helpdesk (TechAssist) / RPA	Banking	External	Business Process	Medium	Medium
11	Bank Account Information Updateation	The massive spread of the COVID-19 virus has reduced the number of people making physical contact with bank agents. Banks now have to adopt more digital services and solutions to continue serving their customers.	When a customer sends the bank their identity Document, the automation uses a combination of OCR, NLP, and RPA to process the email, read the Identity Document regardless of format, and checks for differences with existing information stored in the CRM.	OCR/AL/ML/RPA	OCR/AL/ML/RPA	Banking	External	Business Process	Low	High
12	Payroll: W2 Form Audit (North America)	Large number of North American companies rely on third party payroll service provider like ADP. Federal compliance for all the organization to ensure data accuracy and timely distribution of the W2 TAX form to the employees. Covid-19 may have significant impact on turn around time due to lock-down.	RPA Solution implemented to automate the process based on pre defined rules. Payroll specialists can focus on only exceptions.	RPA	RPA	Cross-industry	External	Business Process	Medium	High
13	Family and Medical Leave Historical Adjustments	Due to Covid-19 situation, Employees across the globe facing several unique challenges and may have to take time off to support the self and family. HR systems may receive excessive request for medical or family leave	Processing of Medical and Family leaves between multiple systems (incl third party systems) can be automated using RPA	RPA	RPA	Cross-industry	External	Business Process	Medium	High

Типичные бизнес кейсы использования технологии для сокращения затрат в условиях COVID

Другие примеры

SL No	Use Case	Problem Statement	Solution Description	Technology	Existing Solution	Industry	Internal/ External	Business Process / IT	Feasibility	Impact
14	Supply Chain : Late order notification automation	Due to Covid-19 situation, organizations are operating with limited set of employees, however to ensure production lines are running uninterrupted, one of the Key ask is to check on the Pending/ late procurement orders	On predefined frequency, a late order report can be run in SAP to identify suppliers whose items have not been received in systems and are considered late. Post appropriate manipulation of the report email reminders can be sent to suppliers using a template with a request to reply with the status of late order item.	RPA	RPA	Cross-Industry	Both	Business Process	Medium	High
15	BCP Readiness & Control	Under the lock down, almost all the employees in IT industry are working from home under the Business Continuity Plan. Its extremely important to check the readiness of the IT systems to cope with that. Manually it is not possible to execute such large scale validation.	RPA bot can automatically perform all the of these checks : Environment Availability, User id usage review, Password verifications and mandatory compliance requirement, System configuration settings, System usage monitoring , Reconciliation report to monitor users and privileges	RPA	RPA	Cross-Industry	Internal	IT	Medium	High
16	Project Management Activities	In the COVID19 situation where almost 100% of the workforce is working from home, due to eminent distractions in this work environment, these tasks are likely to get delayed. In some third world countries (which act as the back offices, customer care centres for most of the corporates in US and Europe), there could be potential connectivity issues due to bad infrastructure (low/no internet bandwidth, frequent power cuts)	Automation of different PMO activities using Digital PMO - Status reporting, utilization forecasting, SLA & KPI dashboarding, Financial reporting, Resource on-boarding and Off-boarding etc.	RPA/AL/ML/EC A (Scripts)	Digital Worker - PMO	Cross-Industry	Both	IT	Medium	High

Типичные бизнес кейсы использования технологии для сокращения затрат в условиях COVID

Другие примеры

Sl No	Use Case	Problem Statement	Solution Description	Technology	Existing Solution	Industry	Internal/ External	Business Process / IT	Feasibility	Impact
17	Ticket Management (SRs and Incidents)	In the COVID19 situation where almost 100% of the workforce is working from home, due to eminent distractions in this work environment, these tasks are likely to get delayed. There could be potential connectivity issues due to bad infrastructure (low/no internet bandwidth, frequent power cuts) because of which ITSM systems may not be accessible properly or Service agents may not be available.	Monitor Incidents and Service Requests, triaging, auto assignment, remediation through automated runbook	RPA/AL/ML/EC A (Scripts)	Digital Worker - Ticket Manager	Cross-Industry	Both	IT	Medium	Medium
18	Functional Monitoring, Technical Monitoring, Job Monitoring	In the COVID19 situation where almost 100% of the workforce is working from home, due to eminent distractions in this work environment. Access to the Operations Command Centre may be limited. There could be connectivity issues from home to access the OCCs	Monitoring job status, failure remediation, or sending alert to service agents for interventions etc	RPA/AL/ML/EC A (Scripts)	Digital Worker - Monitoring	Cross-Industry	Both	IT	Medium	Medium
19	QA activities	In the COVID19 situation where almost 100% of the workforce is working from home, due to eminent distractions in this work environment. There could be connectivity issues from home to carry out health check different sorts of activities	Application URL Status Check, Application Functional Flow Check, Application Server & Database Health Check, Application Log Check etc	RPA/AL/ML/EC A (Scripts)	Digital Worker - QA	Cross-Industry	Both	IT	High	Medium

Типичные бизнес кейсы использования технологии для сокращения затрат в условиях COVID

Другие примеры

SL No	Use Case	Problem Statement	Solution Description	Technology	Existing Solution	Industry	Internal/ External	Business Process / IT	Feasibility	Impact
20	Support IT Service Desk Agents with procedural guidance	In remote working environment, service agents are working discreetly from home. They have limited opportunities to discuss with other colleagues, mentors and seek help.	Agent Assist solution to help service agents resolve their queries on procedure for resolving different IT related issues	AI/ML	Cognitive Assistant	Cross-Industry	Internal	IT	High	Low
21	Alert Monitoring	Under the lock down, almost all the employees in IT industry are working from home under the Business Continuity Plan. Its difficult for them to remotely monitor all system alerts on continuous basis and coordinate with each other and remediate those alerts	RPA and third-party technology can be used to monitor system alerts and contact service agents automatically over phone or SMS where their attention is needed	RPA/Plivo	RPA/Plivo / ECA	Cross-Industry	Internal	IT	Medium	High

1.
Идентификация рисков

2.
Определение роботикс

3.
Бизнес кейсы

4.
Пример

Пример анализа процесса для автоматизации Роботикс Фарма. Клинические исследования: счета



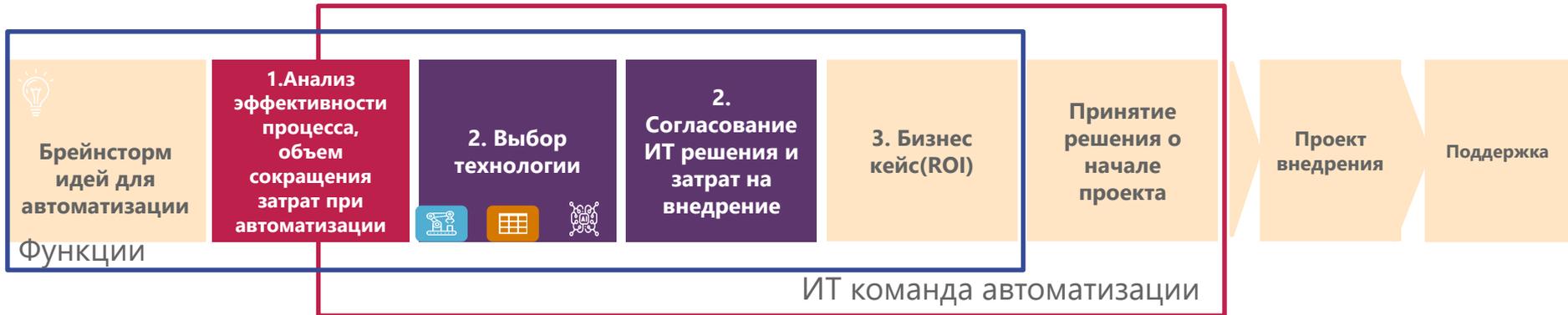
4000 счетов
Копирование цифр из Excel
6 дней в месяц

Пример анализа процесса для автоматизации Роботикс Фарма. Клинические исследования: счета

Портфолио

Проект

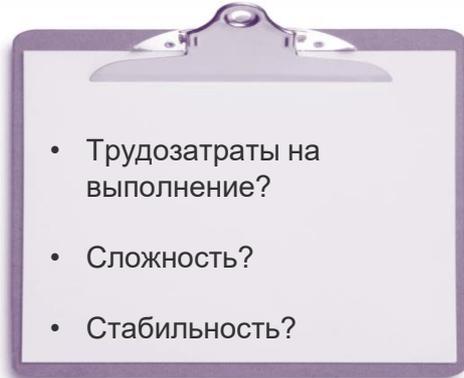
Поддержка



Карта автоматизации – инструмент менеджмента портфолио проектов автоматизации, включает в себя детальное обследование зрелости бизнес процессов, внедрение оптимального ИТ решения на основе бизнес кейсов, модель поддержки.

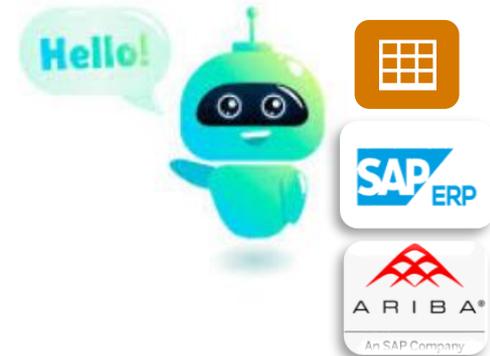
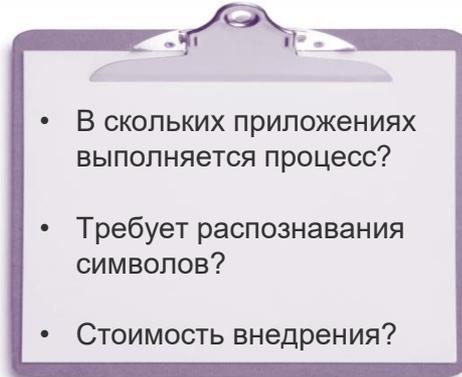


Пример анализа процесса для атвоматизации Роботикс Фарма. Клинические исследования: счета



Human Factor		Comment
Repetitive	H	4000 invoices per year
Workload	H	5- 6MD a month
Error Prone	H	Manually copy from Invoice easy to make a mistake
Complexity		
Rules Based	M	We have invoices from different CRO's Process is different Per CRO
Number of Steps	L	Limited number of steps
Stability		
Functioning	M	Currently allready done by Genpact
Stable	L	Some changes in process still expected

Пример анализа процесса для атвоматизации Роботикс Фарма. Клинические исследования: счета



Пример анализа процесса для атвоматизации Роботикс Фарма. Клинические исследования: счета



В данном случае коэффициент ROI равен 120% за первый год.

Стоимость внедрения технологии(учитывая лицензии) ниже стоимости трудозатрат(внешнего вендора) на выполнение процесса.

С внедрением автоматизированного решения затраты на услуги внешних вендоров снизятся.

В данном случае решение было внедрено.



На последок

1.
Идентификация рисков

2.
Определение роботикс

3.
Бизнес кейсы

4.
Пример



1.
Идентификация рисков

2.
Определение роботикс

3.
Бизнес кейсы

4.
Пример

Спасибо!

Вопросы?

