

## "KNOWLEDGE SHARING"

In growing team
From Confluence to Neo4j





### I am Alexander Polomodov

I am head of software development at acquisition dep of Tinkoff.

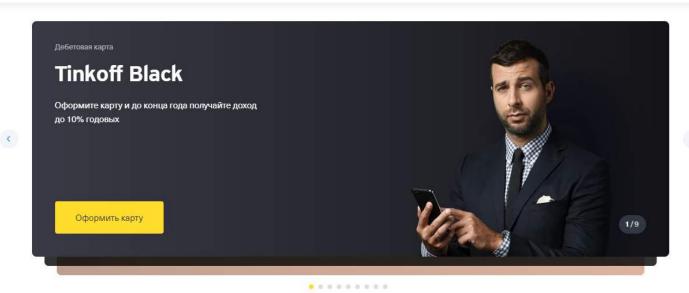
Previously I was developer, teamlead, project manager ... You can find me at fb.com/alexander.polomodov





Unauthorized web of tinkoff.ru, tinkoffinsurance.ru

Дебетовые карты Кредит наличными Рефинансирование Автокредит Вклады





В кино дешевле с Тинькофф

Кэшбэк 15% при покупке билетов



Кредит наличными

До 15 млн рублей. Деньги на следующий день. Ставка от 9% годовых.



#### Тинькофф Мобайл

Попробуйте бесплатно: безлимитные соцсети, видео, музыка, пакет интернета и звонки



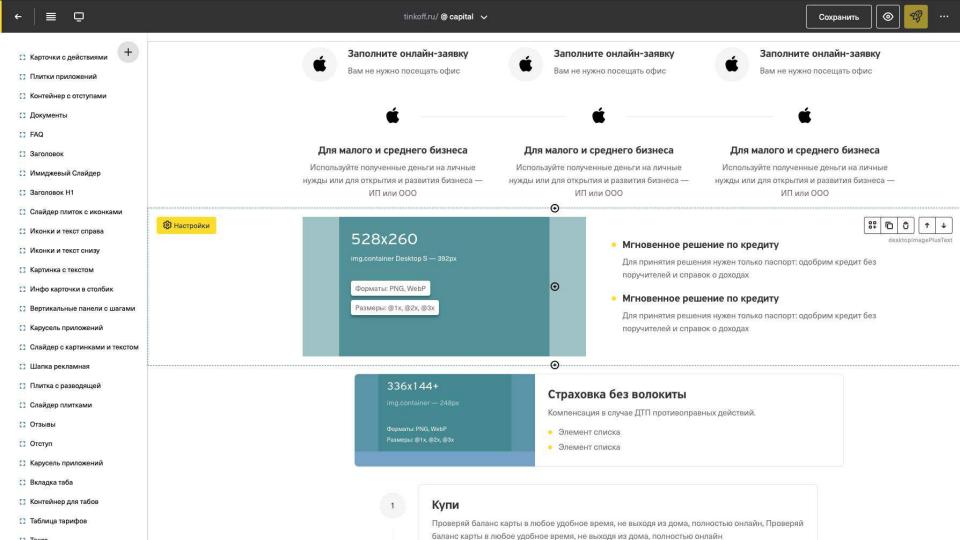
Tinkoff Junior

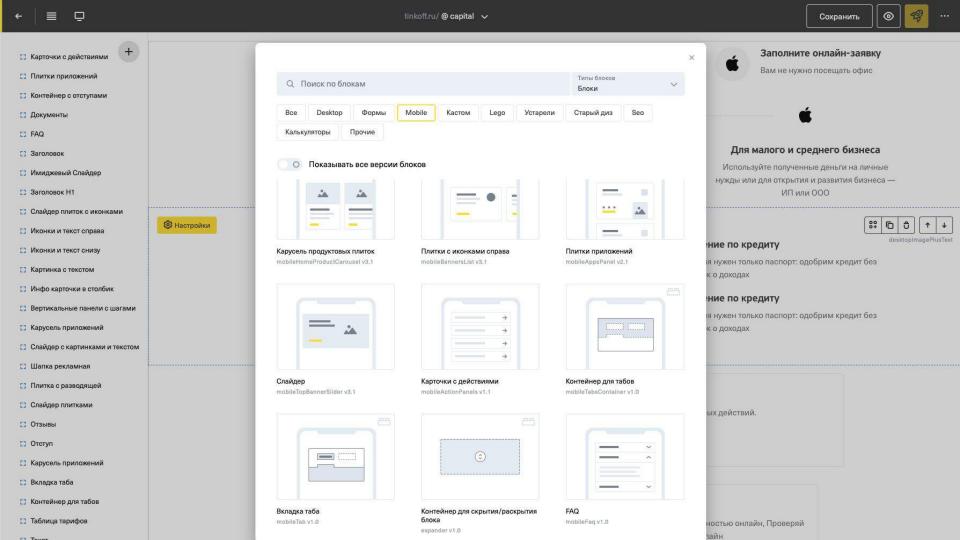
Бонусы за покупки, крутое приложение и финансовая грамотность с детства

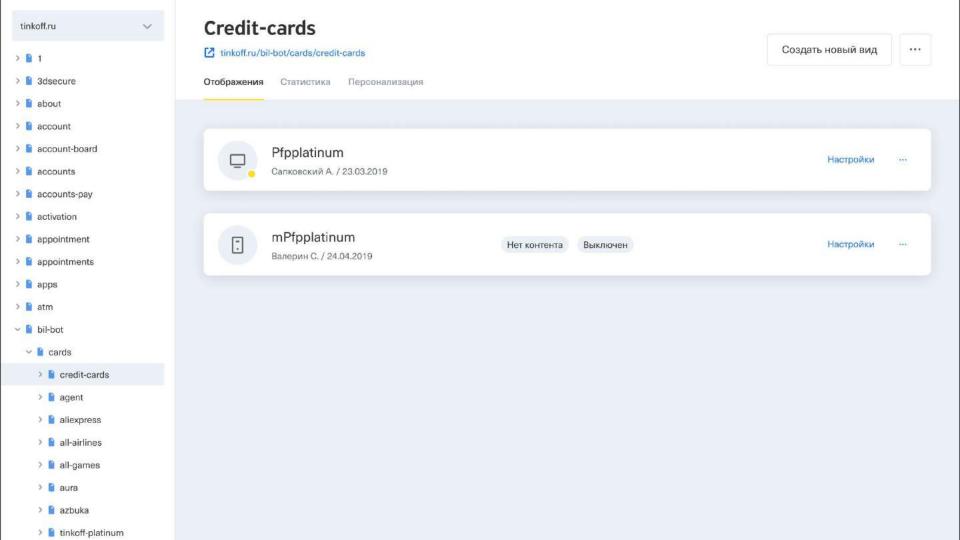




- □ Unauthorized web of tinkoff.ru, tinkoffinsurance.ru
- ☐ Content management system for web and mobile





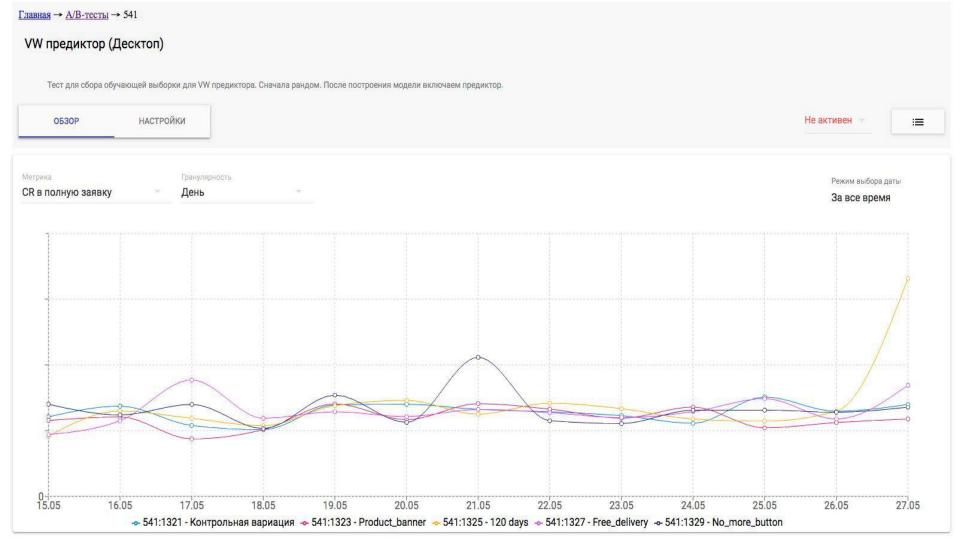






- ☐ Unauthorized web of tinkoff.ru, tinkoffinsurance.ru
- Content management system for web and mobile
- $\square$  System for a/b tests and personalization

	Статус	Тип	Название	Приоритет	Создано	Сегмент	Размещение
	Активен	А/В-тест	<u>Страховая, Тест разводящей</u> id: 853		29/08/19 10:28	Always true	tinkoff.ru/insurance
	Активен	А/В-тест	Главная. Удаление продукта клиенты без поведения id: 851		28/08/19 18:28	segment vova	tinkoff.ru
	Активен	А/В-тест	<u>Фильтры на разводящей дебетовок</u> id: 847		28/08/19 18:01	Always true	tinkoff.ru/cards/debit-cards
	Активен	Персонализация	[KNA] Personalization kna_form_opened_conditions id: 846		28/08/19 17:37	[KNA] Personalization kna_form_opened_condition §	tinkoff.ru/loans/cash-loan/auto
	Активен	Персонализация	КАСКО. Персонализация калькулятора. id: 842		27/08/19 16:27	КАСКО. Персонализация под калькулятор	tinkoff.ru/insurance/kasko/form
	Активен	Персонализация	[KNA] Personalization kna_form id: 841		27/08/19 14:48	[KNA] Personalization kna_form	tinkoff.ru/loans/cash-loan/auto
	Активен	А/В-тест	[TP] <u>Без рабочего адреса /form</u> id: 840		26/08/19 12:25	utm_source exists & dco_param != restaurant	tinkoff.ru/cards/credit-cards/tinkoff-platinum/form
	Активен	Сплит-тест	Tect tramvai (Mobile) id: 836		21/08/19 12:03	Мобилка без партнеров	tinkoff.ru/cards/credit-cards/tinkoff-platinum/form
	Активен	Сплит-тест	<u>Tecт tramvai (Десктоп)</u> id: 835		21/08/19 12:02	Десктоп без партнеров	tinkoff.ru/cards/credit-cards/tinkoff-platinum/form
	Активен	Персонализация	[ТВ] Склейка /tinkoff-black/form/ c /tinkoff-black/id: 834		20/08/19 18:27	[ТВ] Склейка /tinkoff-black/form/ c /tinkoff-black/	tinkoff.ru/cards/debit-cards/tinkoff-black
	Активен	Сплит-тест	[ТВ] Склейка /tinkoff-black/form/ с /tinkoff-black/ id: 833		20/08/19 18:25	Исключить тест	tinkoff.ru/cards/debit-cards/tinkoff-black/form
	Активен	Смешанный тест	[auto-loan] Склейка /auto-loan/form c /auto-loan id: 824		14/08/19 15:45	Исключить тест	tinkoff.ru/loans/auto-loan
	Активен	Персонализация	<u>Мах СТР. Клиенты</u> id: 812		12/08/19 11:54	<u>Клиенты</u>	tinkoff.ru
	Активен	А/В-тест	OCAГО. Тинькоффиншуранс редизайн версия 3 id: 803		07/08/19 12:28	Always true	tinkoff.ru/ins/osago-product
	Активен	А/В-тест	<u>Главная, Random Клиенты</u> id: 801		05/08/19 19:51	Клиенты	tinkoff.ru
П	Активен	Смешанный тест	[OSAGO] Склейка /insurance/osago/form/calc/ c /insurance/osago/		24/07/19 14:23	Исключить тест	tinkoff.ru/insurance/osago
						Строк на странице: 25 ₩	1-25 из 68   < 1 2 3 > >







- Unauthorized web of tinkoff.ru, tinkoffinsurance.ru
- Content management system for web and mobile
- $\square$  System for a/b tests and personalization
- $\square$  System for acquisition channel automation (context, social, media ...)





# WHY WE NEED KNOWLEDGE SHARING

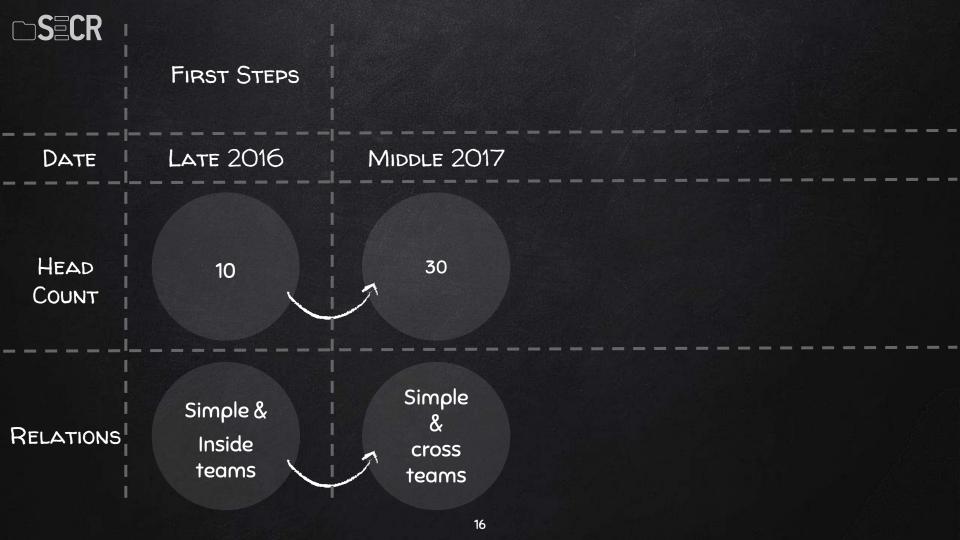


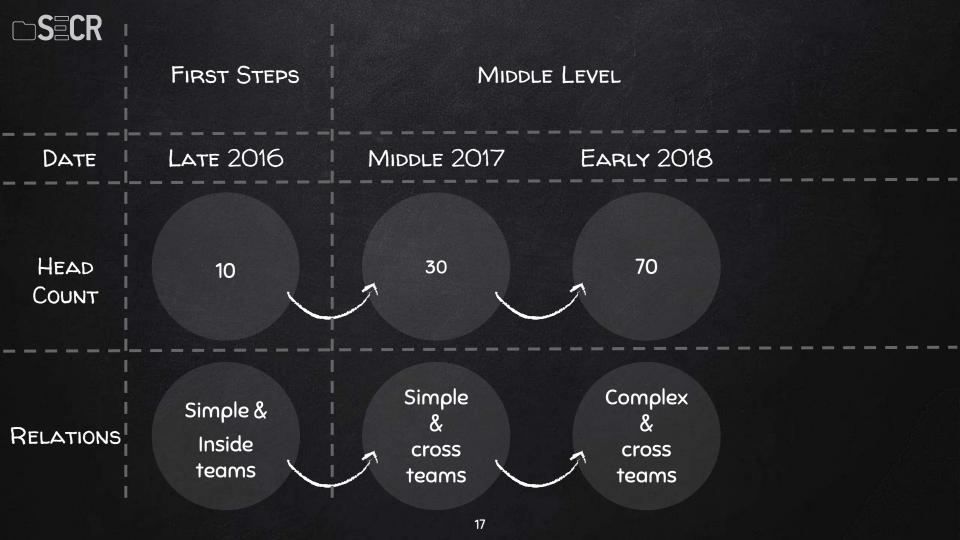
DATE

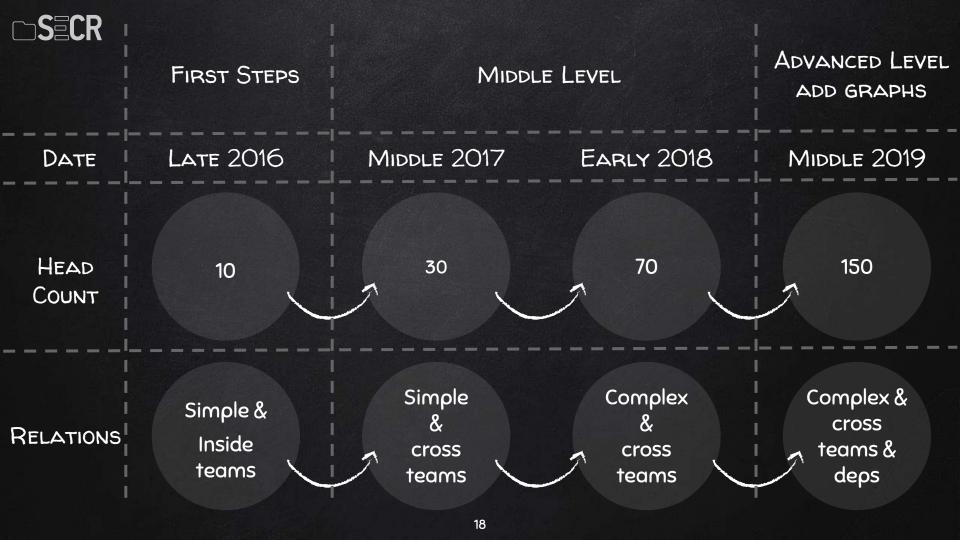
HEAD COUNT

RELATIONS





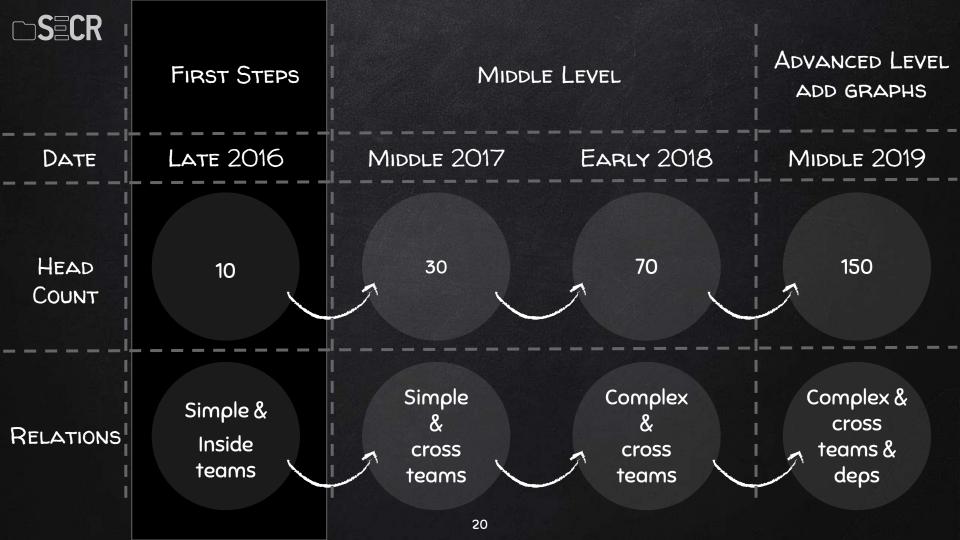








LET'S GO







☐ Jira as issue tracker





- ☐ Jira as issue tracker
- ☐ Confluence as wiki system for documentation





- $\square$  Jira as issue tracker
- Confluence as wiki system for documentation
- ☐ Git as vcs and Bitbucket for hosting code





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- ☐ Git as vcs and Bitbucket for hosting code
- ☐ Single jira project for all frontend teams, and jira projects
- Our confluence space mostly for business needs





☐ Create separate jira project for each product (front, back, highload)





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  - Teams structure



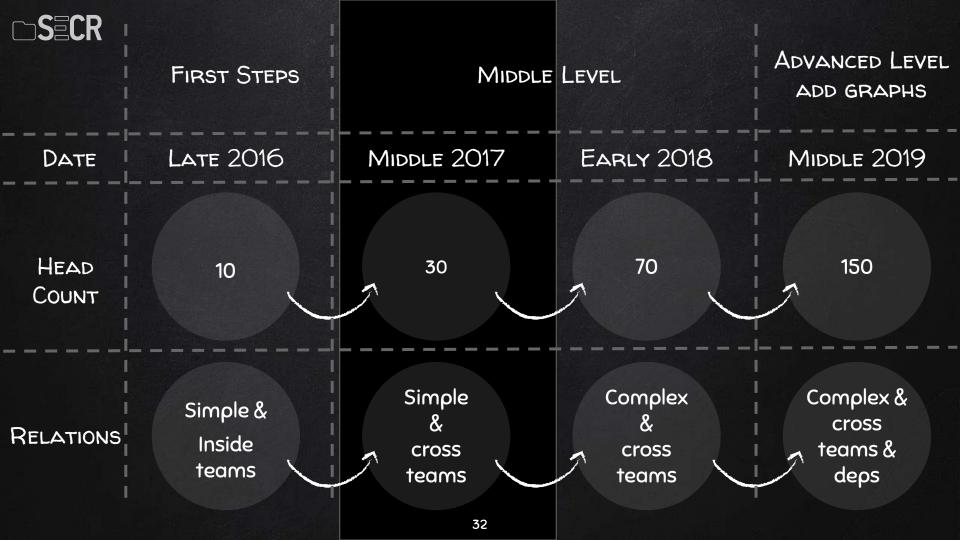


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  - Tech documentation (faqs, instructions)
  - Processes documentation







 $\square$  We hire people in all teams





#### WHAT WE HAD (MIDDLE 2017)

- $\square$  We hire people in all teams
- We have opaque hiring process (strange mailing lists, unmanageable interview results for customers, ...)





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- $\square$  We hire people in all teams
- We have opaque hiring process (strange mailing lists, unmanageable interview results for customers, ...)
- ☐ We get many newcomers
- $\square$  We need onboarding for them





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  - First day instruction





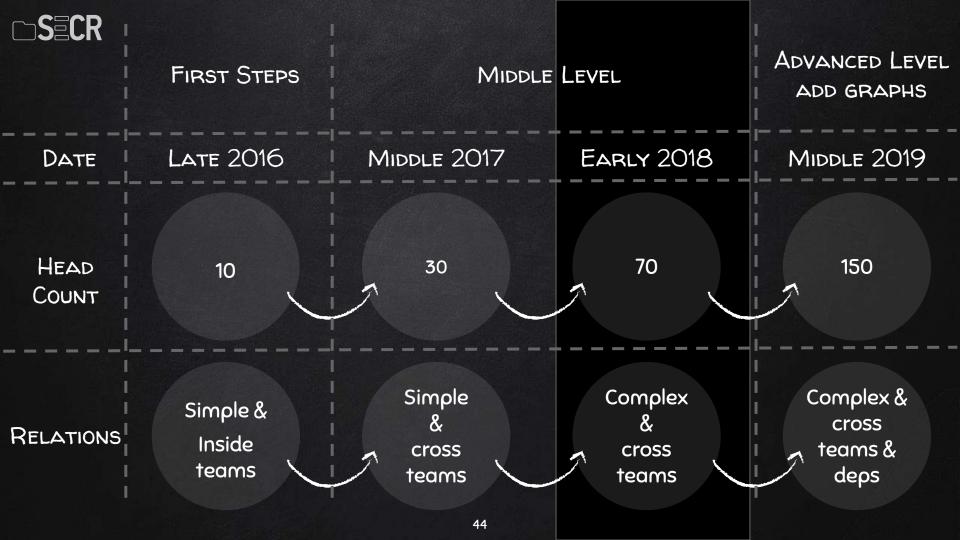
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  - Add tech roadmaps for products
  - Improve processes and its documentation







 $\Box$  We are large (70+ people)





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- ☐ We split large teams into small



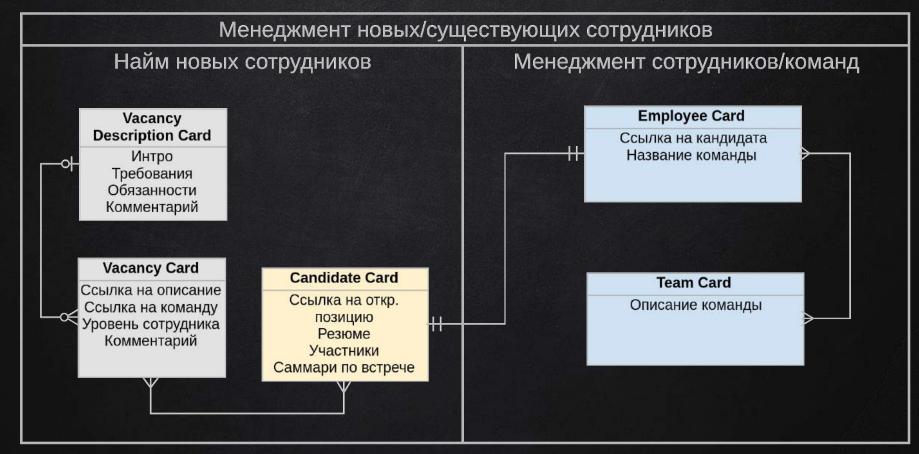


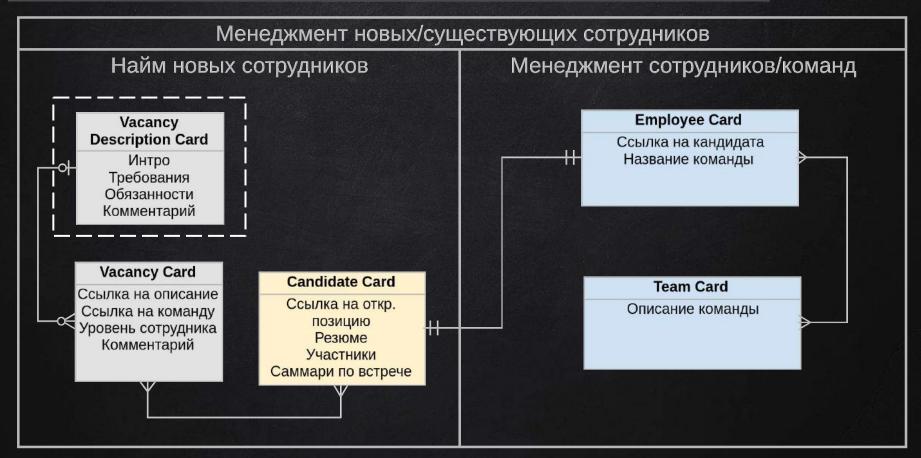
- $\square$  We are large (70+ people)
- $\square$  We are hiring but smarter with head count quotas
- $\square$  We need to improve onboarding
- ☐ We split large teams into small
- $\square$  We need to share our processes and tech products





 $\square$  Create separate hr section (in our wiki)







## Карточка с описанием вакансии

### Интро

Мотивирующий текст о том, какая вакансия расчудесная и замечательная. Должна продавать вакансию всем, кто увидит этот текст:)

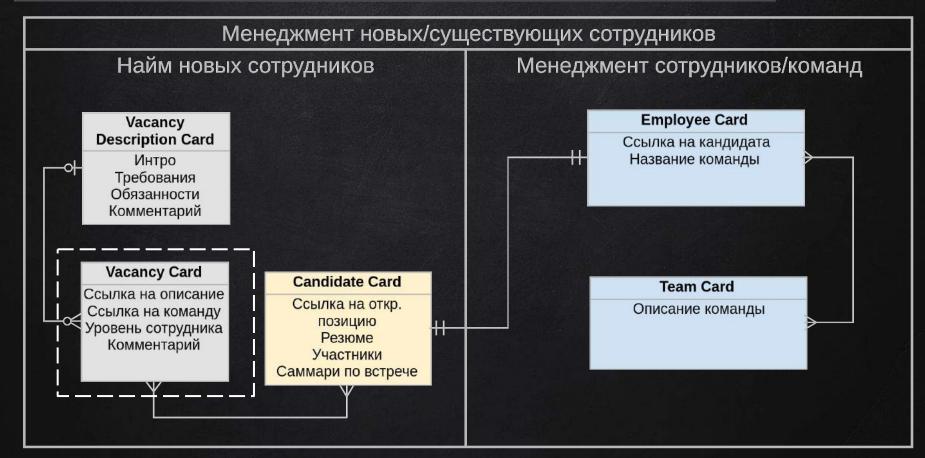
#### Обязанности

Какие обязанности будет исполнять новый сотрудник

### Требования

Какие требования мы предъявляем для кандидатов на эту вакансию

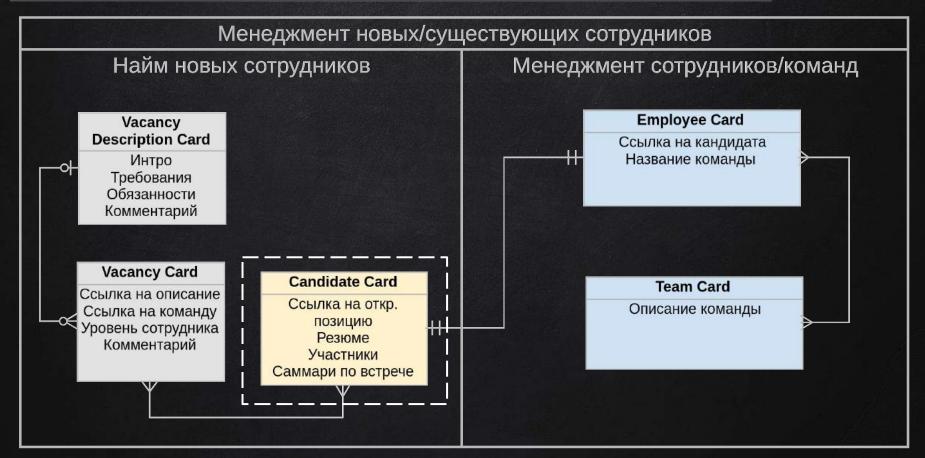




### Открытая позиция

Page properties | id = vacancy-card

position	название позиции, наприимер python developer	
level	уровень позиции, например middle/senior	
priority	приоритет среди позиций с таким же описанием	
product	название продукта/проекта, например <u>PFA/PFP</u>	
comment	комментарий	
status	new/replacement - новая ли вакансия или замена	
reason	Если замена, то надо залинковать страницу сотрудника, которого планируем заменить	
employment	inhouse/outstaff	
placement	Москва/ТЦР СПб/out	
description	ссылка на карточку с описанием	
task	ссылка на задачу в пространстве HRS	





#### Резюме

Приложенное резюме кандидата

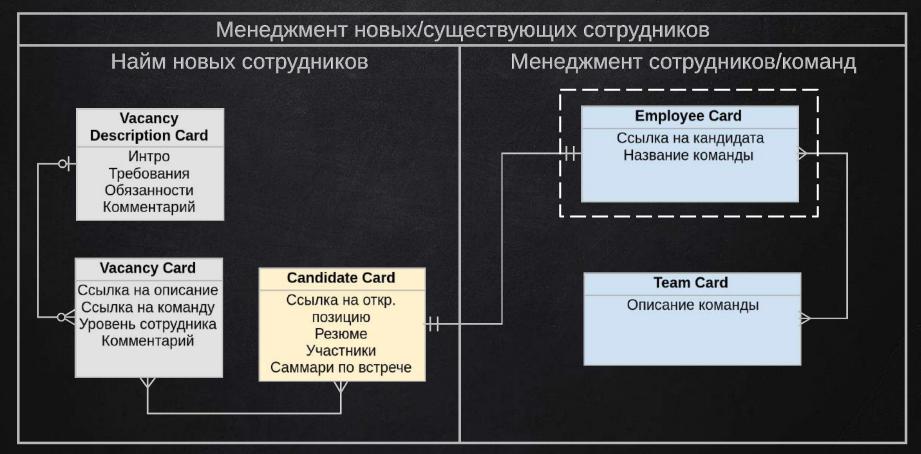
#### Состав участников

- Кандидат
- Участник 1
- Участник 2

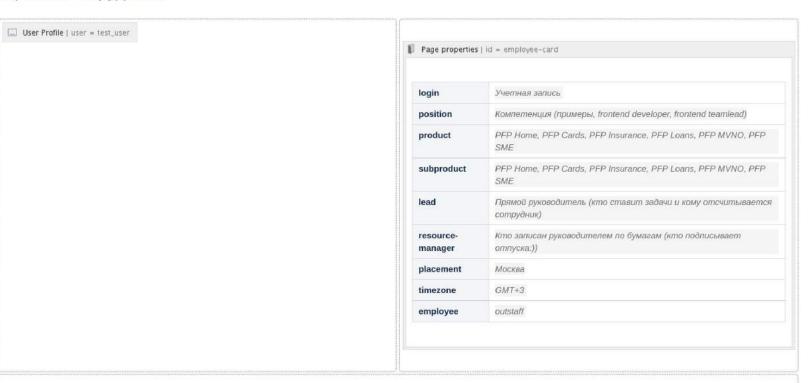


#### Summary

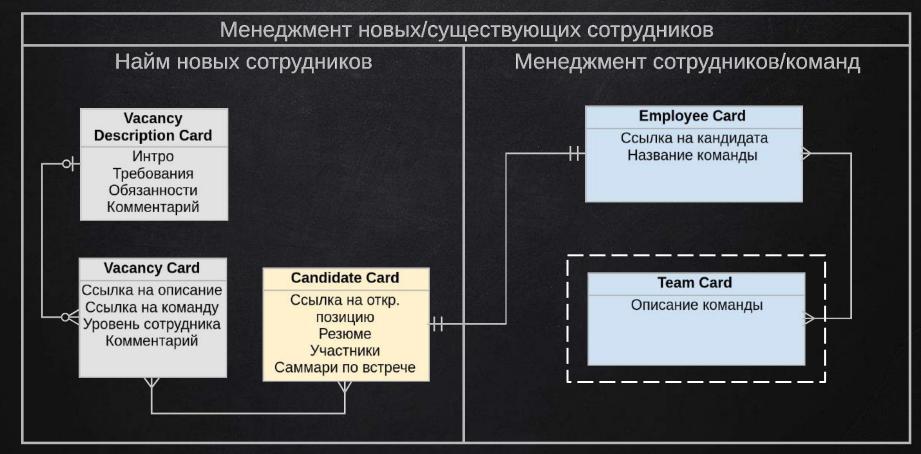
Основное содержание отчета, в котором описывается как прошло собеседование и к какому решению пришли.



#### Карточка сотрудника



•	Tabs Container   direction = horizontal	
1	🔁 Tabs Page   title = План развития	
	Первый день	
	□ Получить доменный пароль для входа во все сервисы Тинькофф □ Проверить, что хватает всех доступов	



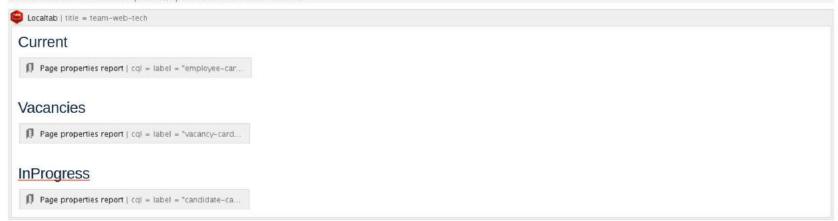
#### Шаблон страницы команды

#### Интро

Описание команды. Что она делает и какие задачи решает. Команды бывают продуктовые и функциональные. Например: 1) PFP Insurance - страница продуктовой команды, 2) Команда обеспечения качества продукта - страница функциональной команды

#### Состав команды

У команды должен быть свой label, который используется для прометки карточек сотрудников, карточек открытых позиций, карточек собеседований Например, label может быть team-webtech. Отчеты ниже надо подправить, проставив label новой команды.









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- Create performance review process (see link in sources)





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- Create postmortem process and postmortem templates (see link in sources)





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- Create postmortem process and postmortem templates (see link in sources)
- □ ...



## ADD SOME CONFLUENCE MAGIC







## How it works in Confluence

DATA AND REPORTS

- ☐ Page Properties
- Page Properties Report
- Pivot Table
- □ Table Filter

view(s)

Created by

last modified on Jul 24, 2019

### Данные сотрудника

login	@ Gri	
position	frontend teamlead	
product	PFP Cards	
subproduct		
lead	@ Fir	
resource-manager	@ ls	
placement	ТЦР СПБ	
timezone	GMT+3	
employee	inhouse	

### Результаты Performance Review

[Performance review][201

Like

likes this

employee-card team-development product-team-pfp developer-frontend developer-javascript product-team-cards employment-inhouse

**Ø** Edit

☆ Save for later

Watching

≪ Share

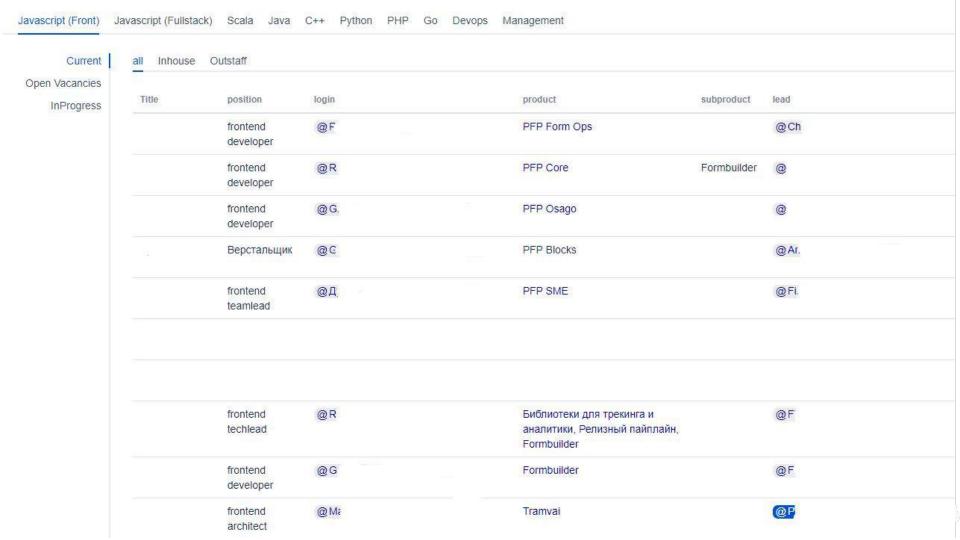


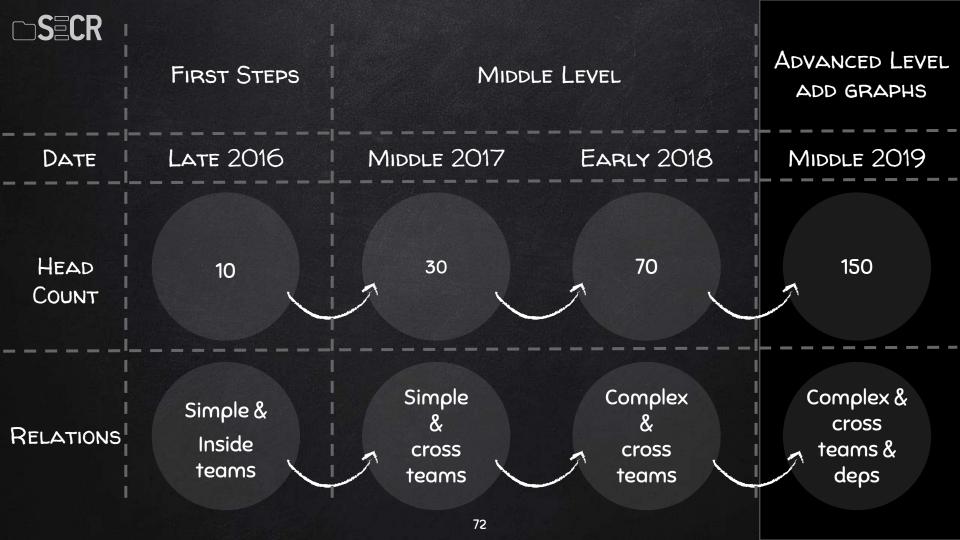


## How it works in Confluence

NAVIGATION

- ☐ Tabs Container
- □ Tabs
- □ Localtab Group
- □ Localtab
- ☐ Horizontal Navigation Bar
- ☐ Horizontal Navigation Bar Page
- ☐ Multiexcept









# WHAT WE HAD (MIDDLE 2019)

 $\square$  We are even larger (150 people)





# WHAT WE HAD (MIDDLE 2019)

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- We need tools for analyzing links between teams, employees, projects, vacancies, etc





## WHAT WE HAD (MIDDLE 2019)

- $\square$  We are even larger (150 people)
- We need tools for analyzing links between teams, employees, projects, vacancies, etc
- ☐ We need tools for visualization of team health and disorders





## WHAT WE DID (MIDDLE 2019)

 $\square$  We decided to use graph database (i.e. Neo4j)







## WHAT WE DID (MIDDLE 2019)

- ☐ We decided to use graph database (i.e. Neo4j)
- ☐ Entities became Nodes









Vacancy





## WHAT WE DID (MIDDLE 2019)

- ☐ We decided to use graph database (i.e. Neo4j)
- Entities became Nodes
- $\square$  Links became Edges



**TEAMLEAD** 



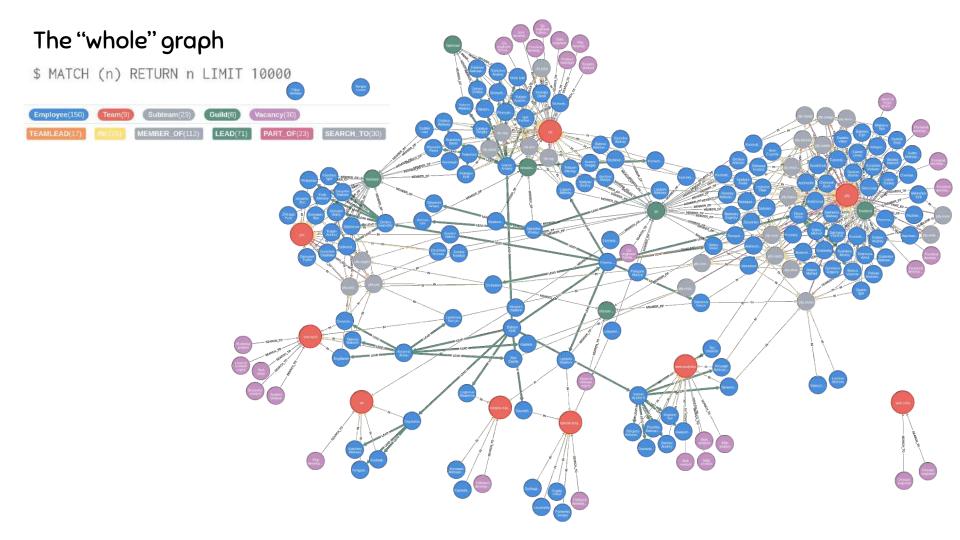


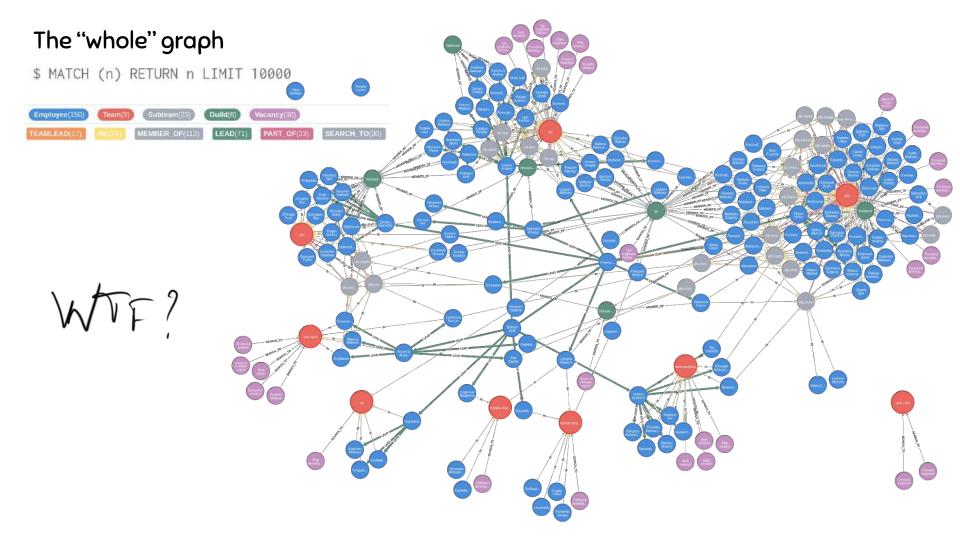


LEAD

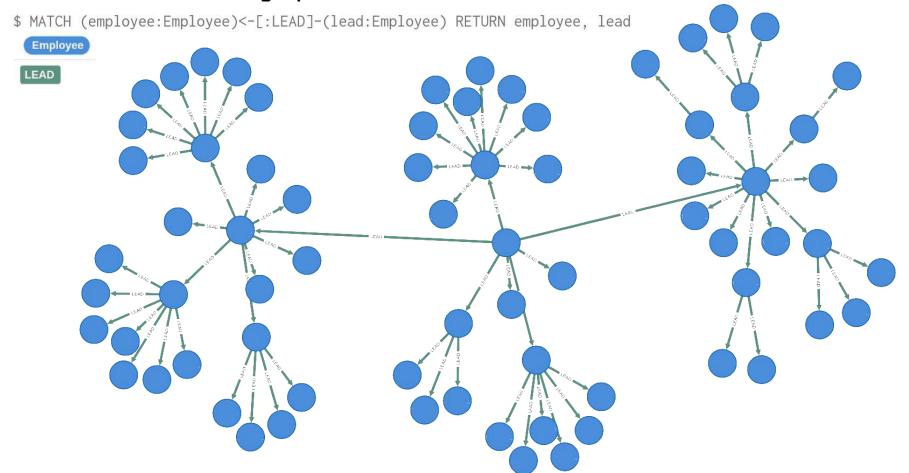


PART OF SEARCH TO



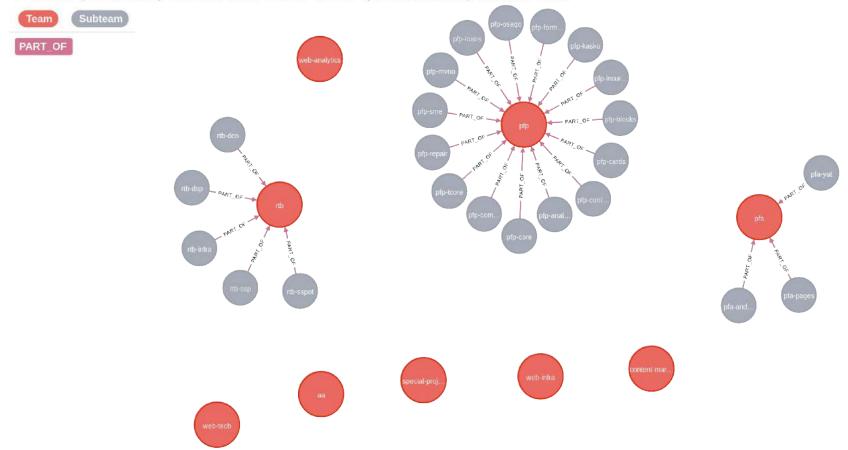


#### "Leader – subordinate" graph



#### "Teams - subteams" graph

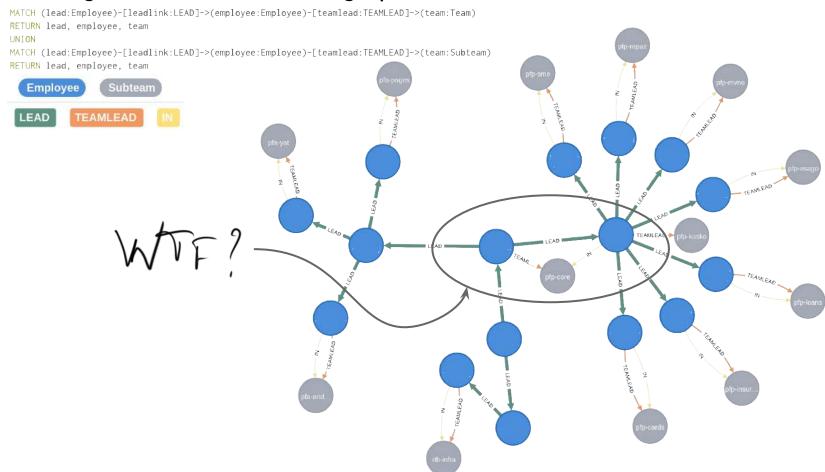
\$ MATCH (team:Team) RETURN team UNION MATCH (team:Subteam) RETURN team



#### "Manager-TeamLeader-team" graph

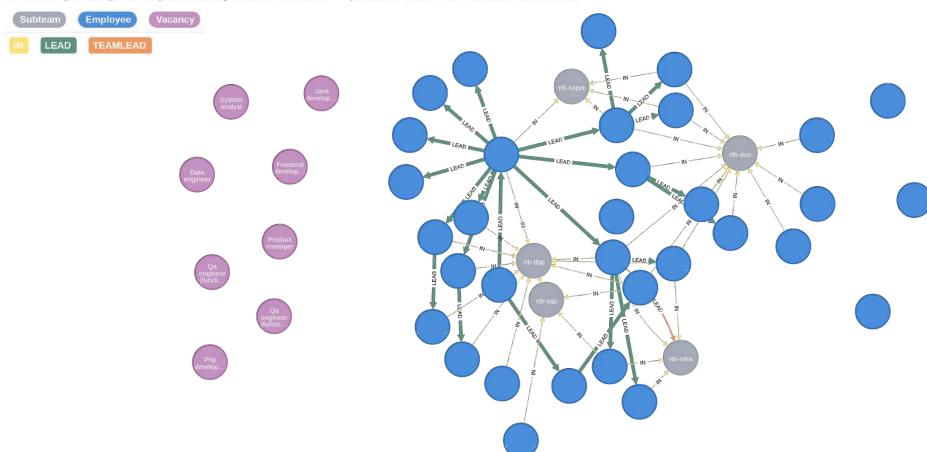
MATCH (lead:Employee)-[leadlink:LEAD]->(employee:Employee)-[teamlead:TEAMLEAD]->(team:Team) RETURN lead, employee, team UNION MATCH (lead:Employee)-[leadlink:LEAD]->(employee:Employee)-[teamlead:TEAMLEAD]->(team:Subteam) RETURN lead, employee, team **Employee** 

#### "Manager-TeamLeader-team" graph



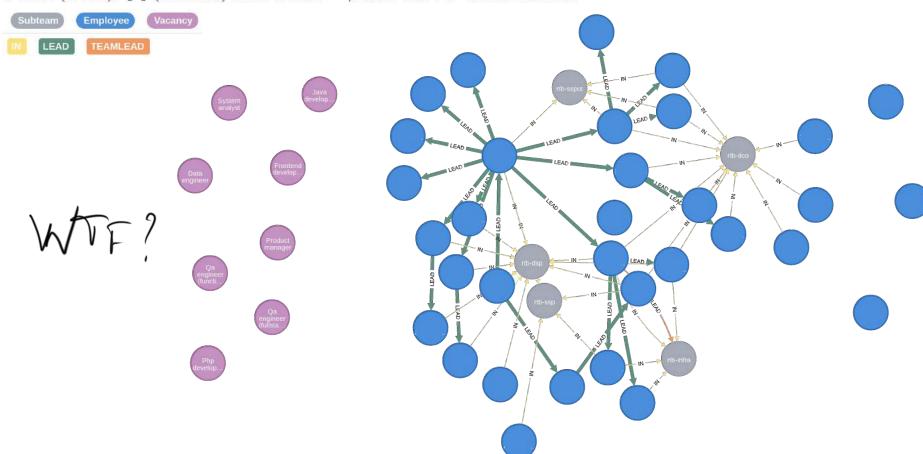
#### "Inner structure of one team" graph

\$ MATCH (n:Team)<-[\*]-(connected) WHERE n.label = 'product-team-rtb' RETURN connected</pre>

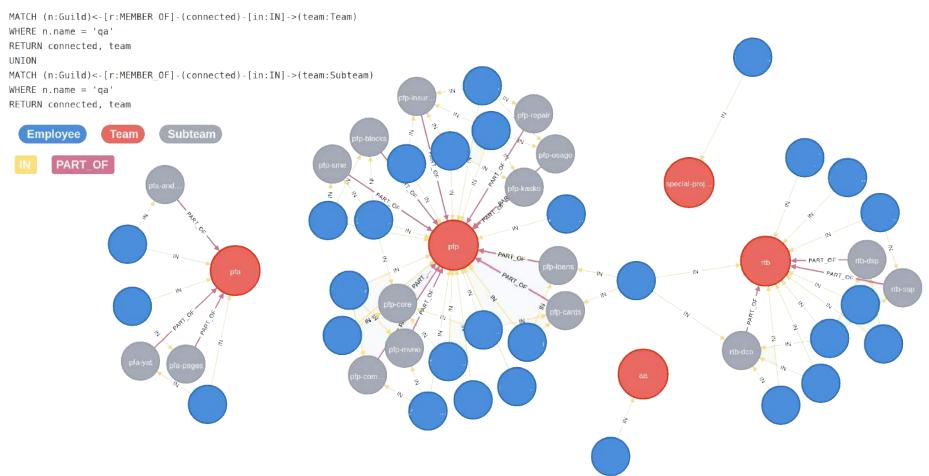


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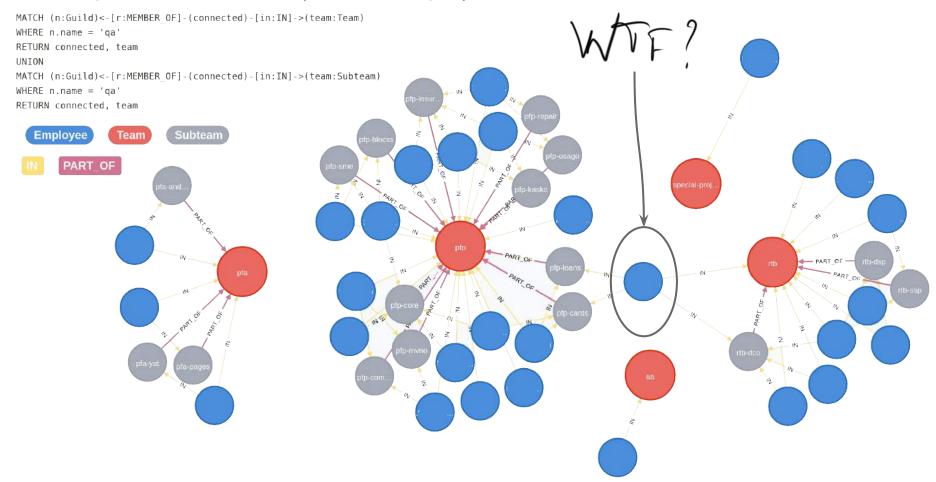
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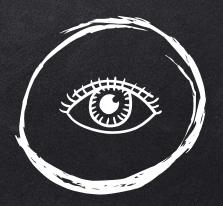
#### "Qa engineers distribution per teams" graph



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- ☐ You need some regulated process for adding/updating facts
- You need useful reports for participants
- You don't need complicated system for knowledge sharing
- $\square$  You even can use confluence for simple cases
- You can use graph databases for advanced cases with complex systems with many links





- Confluence Manual "Page Properties Macro" bit.ly/2qanxF4
- ☐ Confluence Manual "Page Properties Report Macro" <a href="bit.ly/2N5IMSA">bit.ly/2N5IMSA</a>
- □ Book "Graph Databases Specs" by Ian Robinson, Jim Webber and Emil Eifrem bit.ly/32ZQRwK
- $\Box$  Try neo4j in cloud sandbox <u>neo4j.com/sandbox-v2/</u>
- "Tinkoff.ru. How we hire people and work with their motivation" by A. Polomodov bit.ly/320YmSB
- "Tinkoff. Postmortem culture how we learn on fuckups" by A. Polomodov bit.ly/2q2pXWn

You can find me at fb.com/alexander.polomodovalexander.polomodov@gmail.com