
FPT
inswave systems
FPT
Webinar
로우 코드로
비즈니스 혁신

Agenda

	15:00 - 15:02	**Opening**	
1	15:02 – 15:15	**2021년의 파괴적 트랜드: Low-code의 전망**	**김상윤** 과학기술경영 겸임교수 | 이화여자대학교
2	15:15 – 15:30	**왜 지금 Digital Transformation을 가속화해야 하는가?**	**김명인** 스페셜팀 SA |FPT
3	15:30 – 15:50	**디지털 트랜스포메이션을 위한 HTML5 Enterprise UI Platform and Universal App Platform**	**김낙천** 부장 | 인스웨이브시스템즈
4	15:50 – 16:00	**Q&A**	

01

2021년의 파괴적 트랜드: Low-code의 전망

김상윤

과학기술경영 겸임교수 | 이화여자대학교

FPT – Inswave Systems Webinar

2021년 파괴적 트렌드 : Low-code Platform 전망

이화여대 김상윤 교수

주52시간 시대 … SI·SW업계 `개발 생산성 높이기` 속도낸다

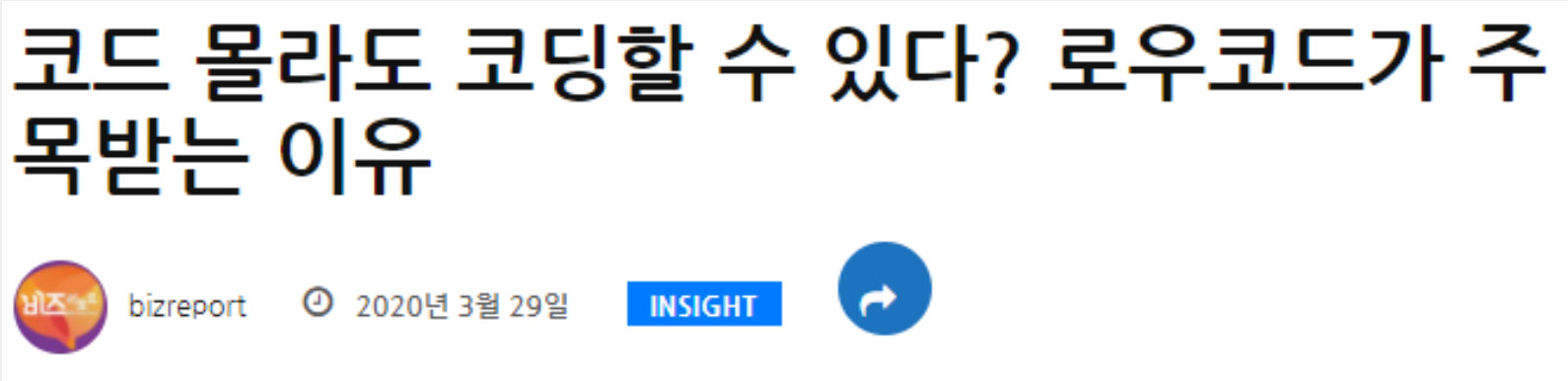
SW개발 프로세스 정립 다각적 시도
출·퇴근 시간 조정·유연근무와 병행
LG CNS '모델기반개발' 툴 대표적

복잡한 코딩작업 없이 원하는 기능을 입력하면
자동으로 프로그램이 만들어지는
SW 개발툴 '모델기반개발(MDD)'을 자체 개발, 활용

인공지능(AI) 기술을 활용해 일상업무를 자동화하는
'로보틱프로세스자동화(RPA)' SW 채택

개발 단계에서 2주 단위 품질리뷰를 의무화하고
개발 우선순위를 고객과 사전 합의해 문제를 최소화

디지털 트랜스포메이션의 시대 데이터 경제의 시대

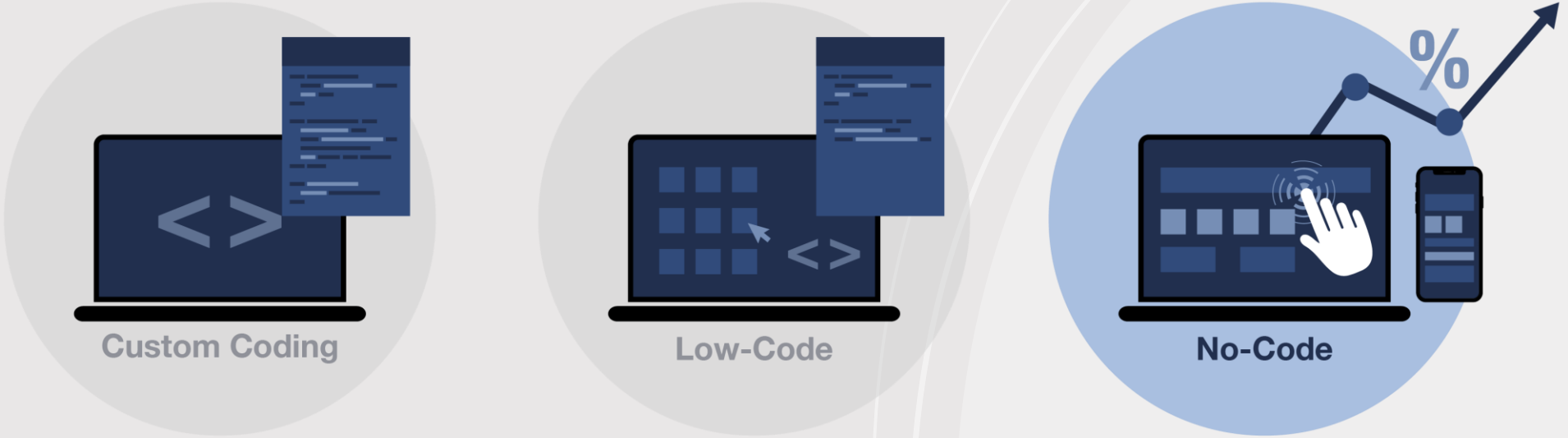


"디지털 전환이 필요하다는 것은 알지만, 우리처럼 직원이 10명도 안 되는 작은 회사 입장에선 정말 멀리 있는 이야기 같아요."

"어디서부터 손을 대야 하는지 막막하기만 해요"

"AI, 데이터 인력이 중요하다고 하는데, 어떤 인력이 필요한 건지 모르겠어요. 개발자와 무슨 차이죠?"

"개발자들이 우리 비즈니스를 잘 이해할 수 있나요? 아니면 실무자들에게 개발을 가르쳐야 하나요?"



로우-코드 (Low-code) 란?

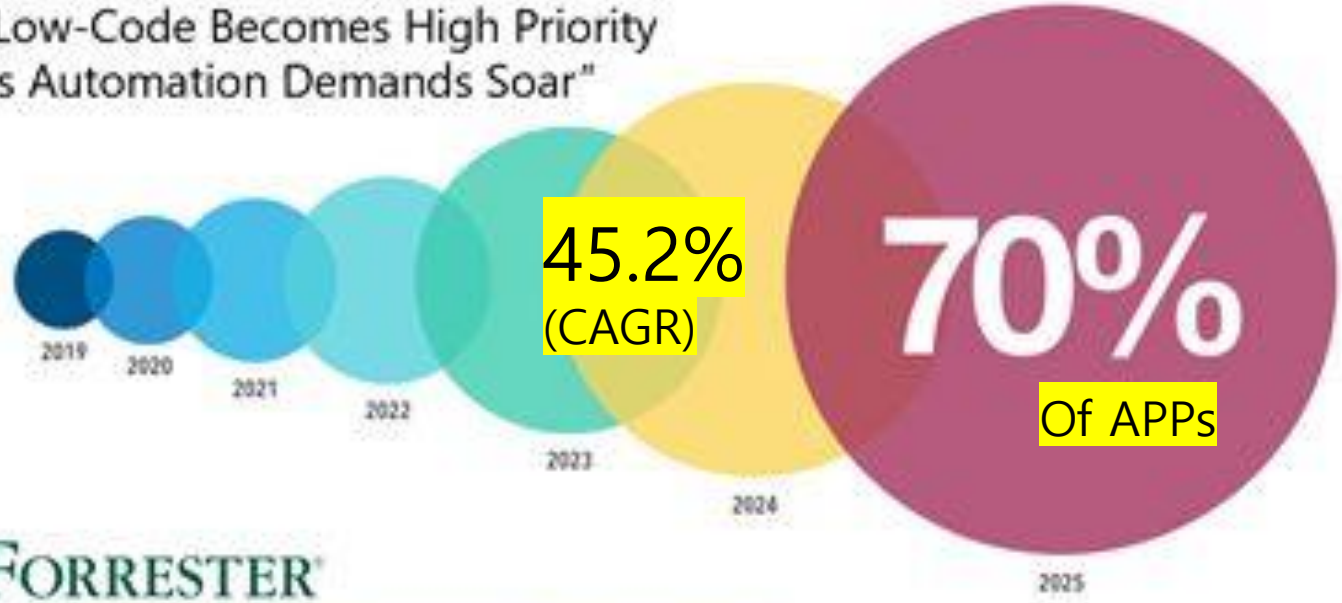
최소한의 수동 코딩으로 소프트웨어를 빠르게 설계하고 개발하는 방법
- 커스터마이징에 해당하는 10 %만 개발
- 2014년 개념 정의 (by Forrester Research)

2021년 IT 시장 글로벌 트렌드 중 하나로,
올해, 기업 애플리케이션의 10 ~25 % 정도는 개발자에 의해 개발되지 않을 것 (feat. 로우코드)

2021년, 로우-코드 트렌드와 활용 증대

WSJ

"Low-Code Becomes High Priority as Automation Demands Soar"



FORRESTER

"Forrester expects the low-code market to represent $21B in spending by 2022."

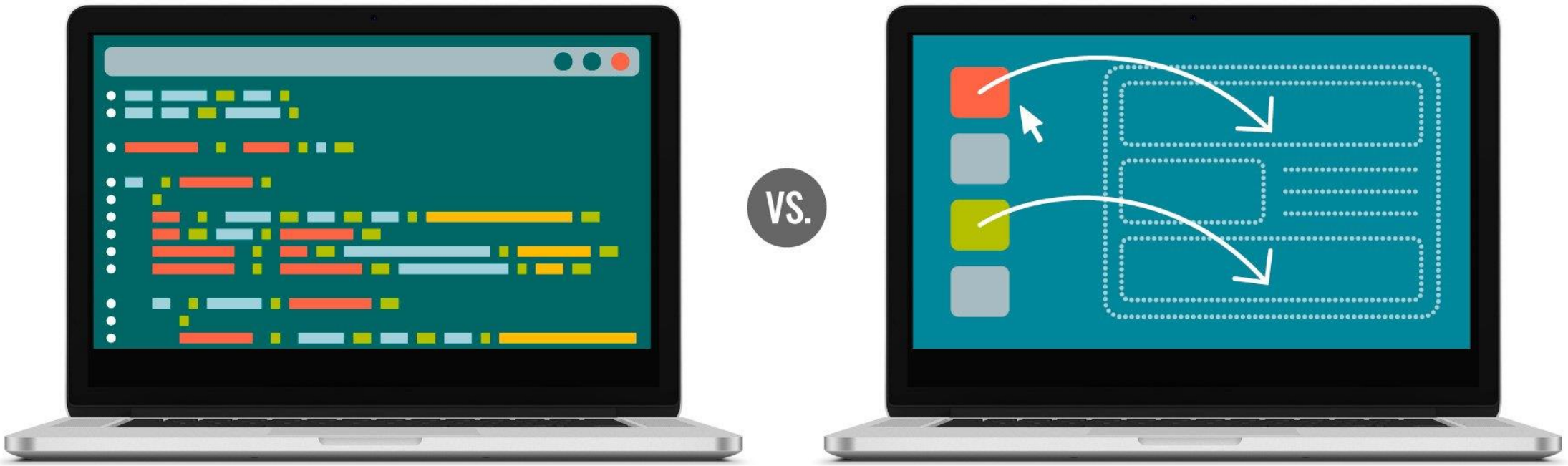
Forbes

"Low-code software presents an opportunity that most companies miss during a digital transformation journey - an opportunity to move fast and be nimble"

Gartner

"low-code application platforms will be responsible for more than 65 percent of all app dev activity by 2024."

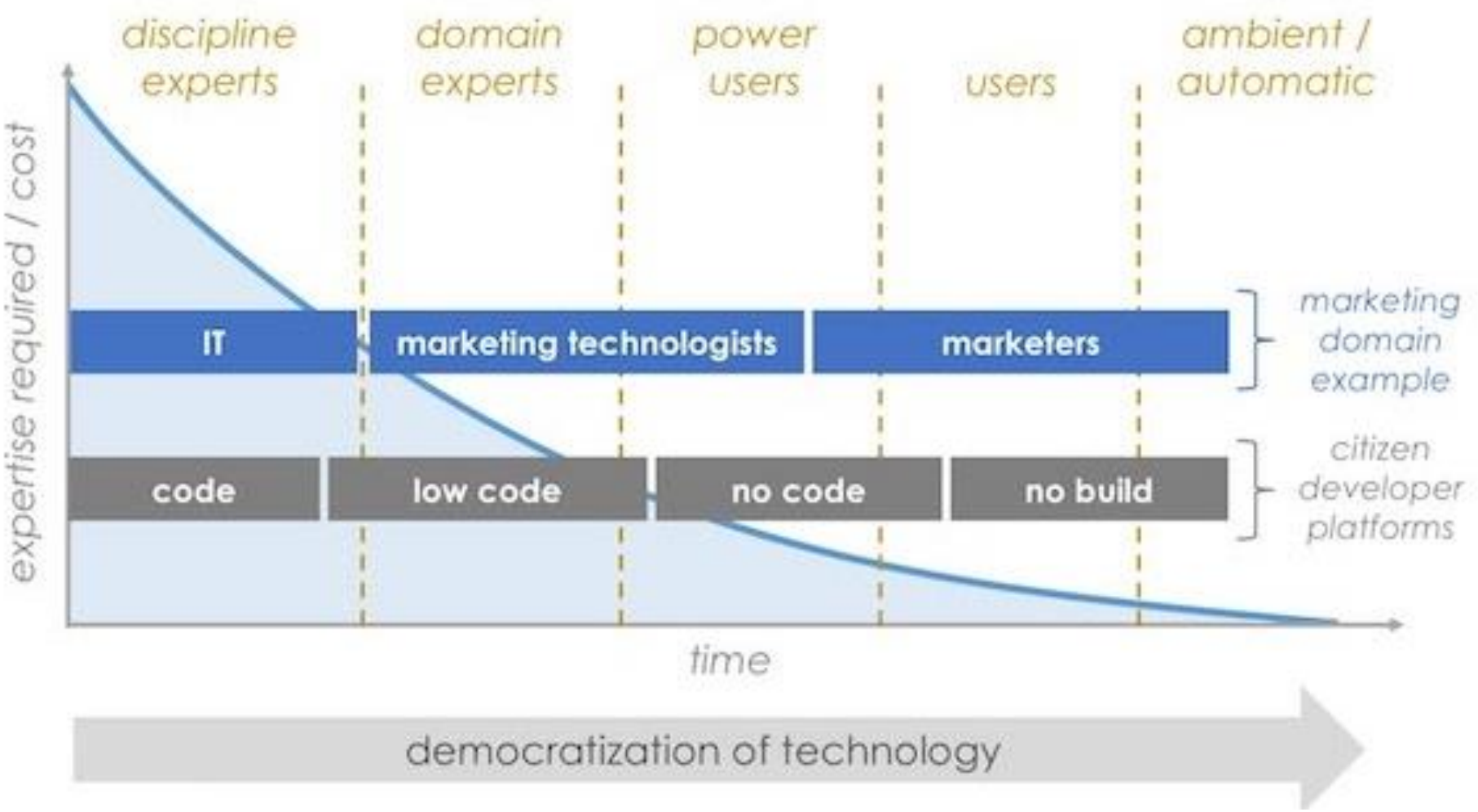
로우-코드 (Low-code) 방식과 전통적 개발 방식의 차이



기술 진화에 따른 기술 민주화 과정

BY SCOTT BRINKER MAY 29, 2018

Democratizing martech: distributing power from IT to marketing technologists to everyone



로우-코드 개발 방식의 이점

[Infographic] The Many Benefits of Low Code Application Development

January 17, 2019

Benefits of Low Code Development

1. Faster development time
2. Lower cost
3. Saves scarce IT resources
4. Allows for greater input from the business team

Low Code Platform Market Forecast

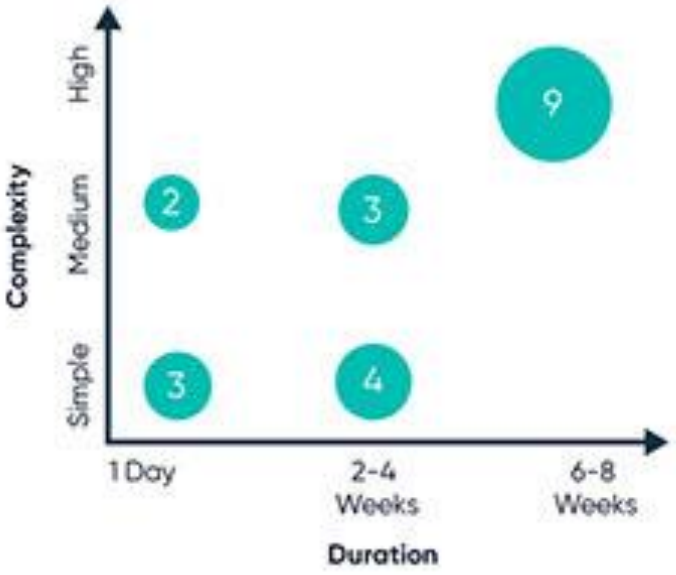
로우-코드를 활용한
App 개발 소요 기간 실험

How OCC Uses Low Code to Transform its Business Processes

By **Editorial Staff** - August 19, 2019

Number of Apps OCC Developed Using Low Code

We built 21 apps, from simple to high complexity, each completed within 8 weeks, some in as little as one day



21개 앱을 개발하는데 로우코드 방식을 활용한 결과,
평균 2~4주가 소요되었으며, 최소 몇 시간 (1일 이내) 부터 ~ 최대 8주 만에 개발 완료

Low-code 개발 플랫폼을 사용하는 이유

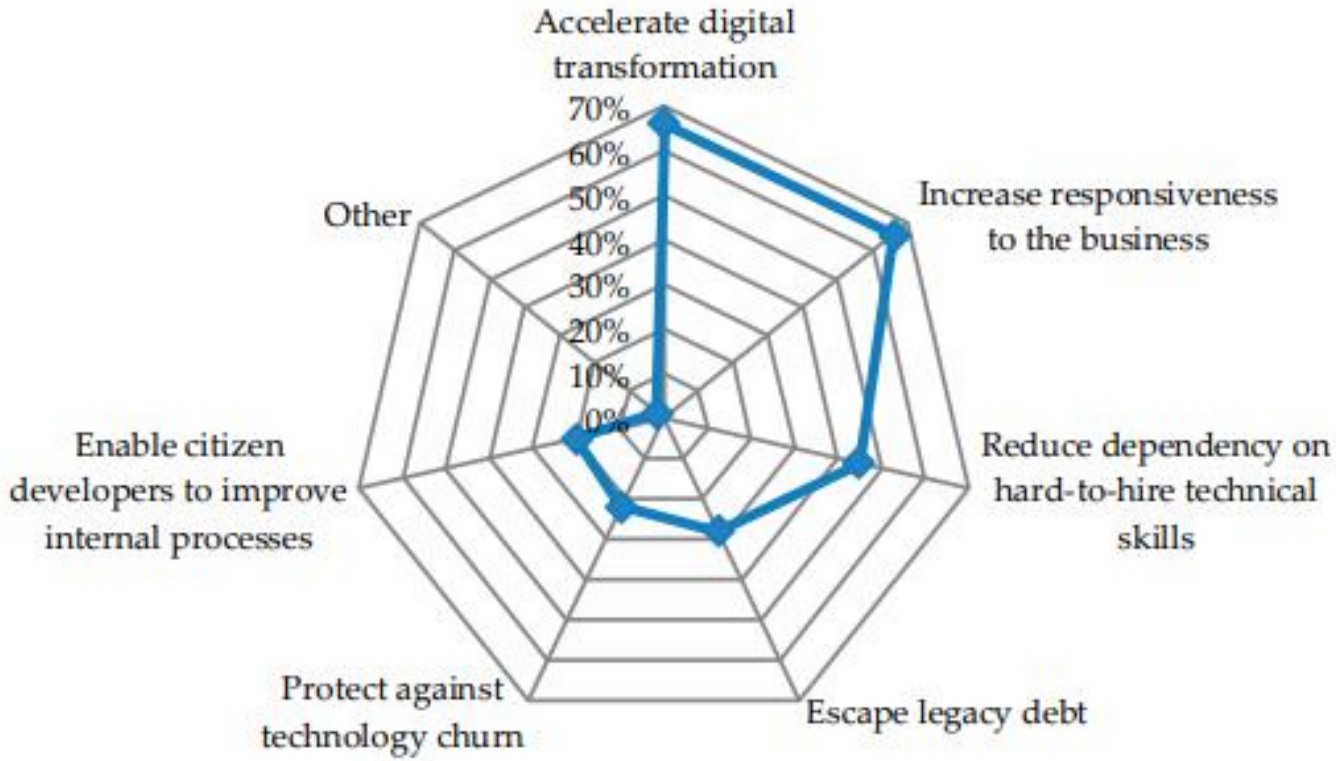
applied sciences

MDPI

Article

Low-Code as Enabler of Digital Transformation in Manufacturing Industry

Raquel Sanchis [1,*], Óscar García-Perales [2], Francisco Fraile [3] and Raul Poler [1]



Low-code 개발 플랫폼을 사용하지 않는 이유

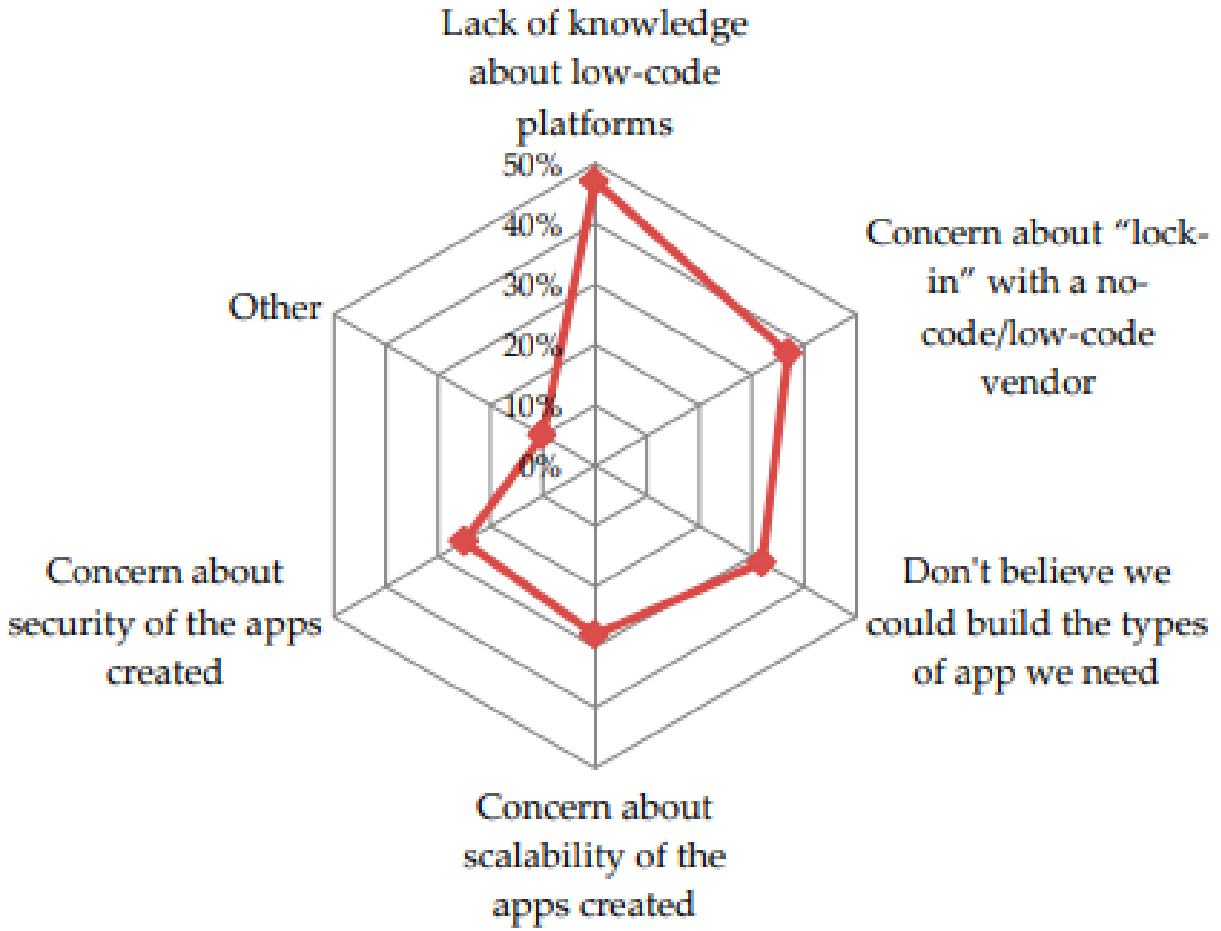
applied sciences

MDPI

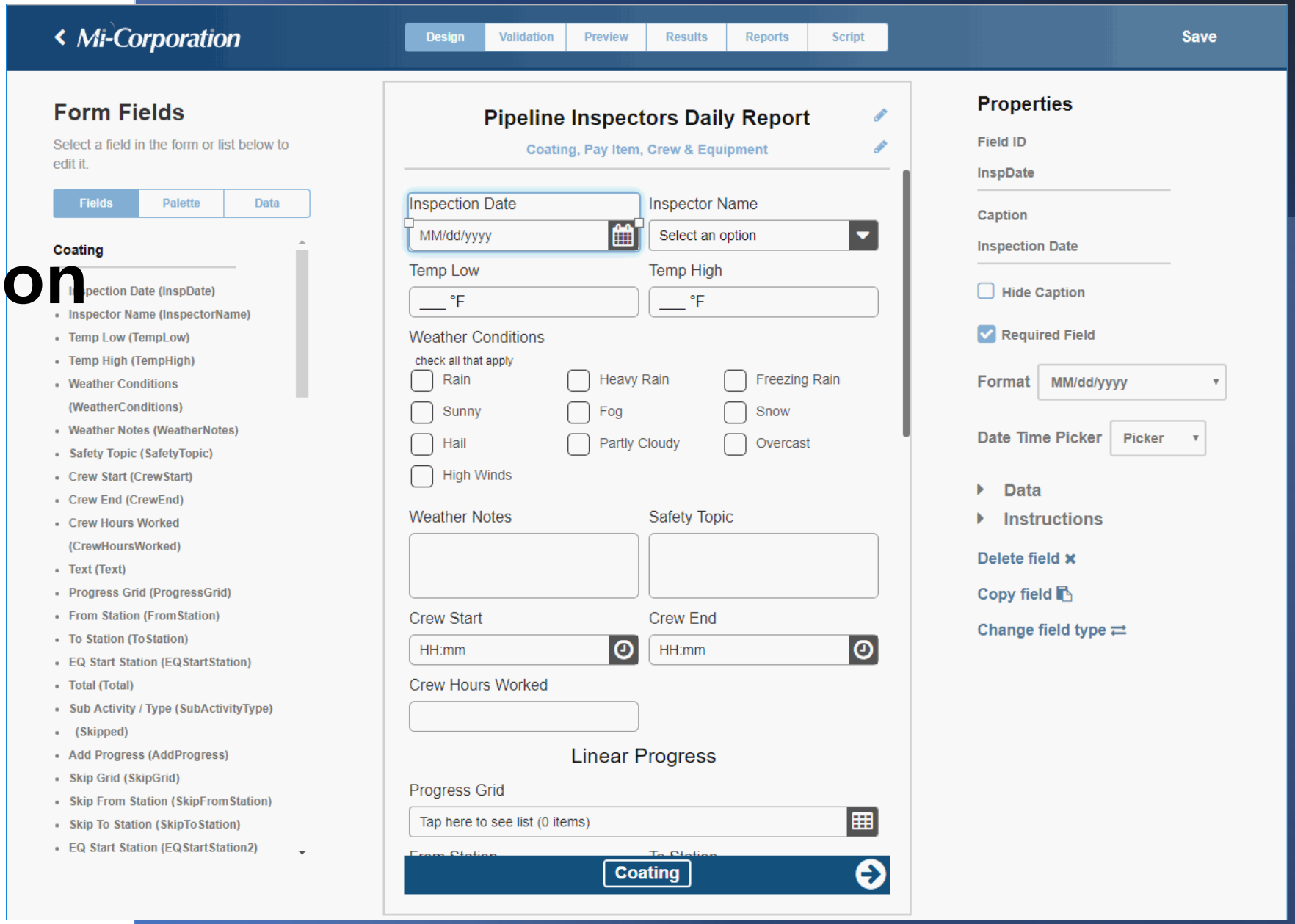
Article

Low-Code as Enabler of Digital Transformation in Manufacturing Industry

Raquel Sanchis [1,*], Óscar García-Perales [2], Francisco Fraile [3] and Raul Poler [1]

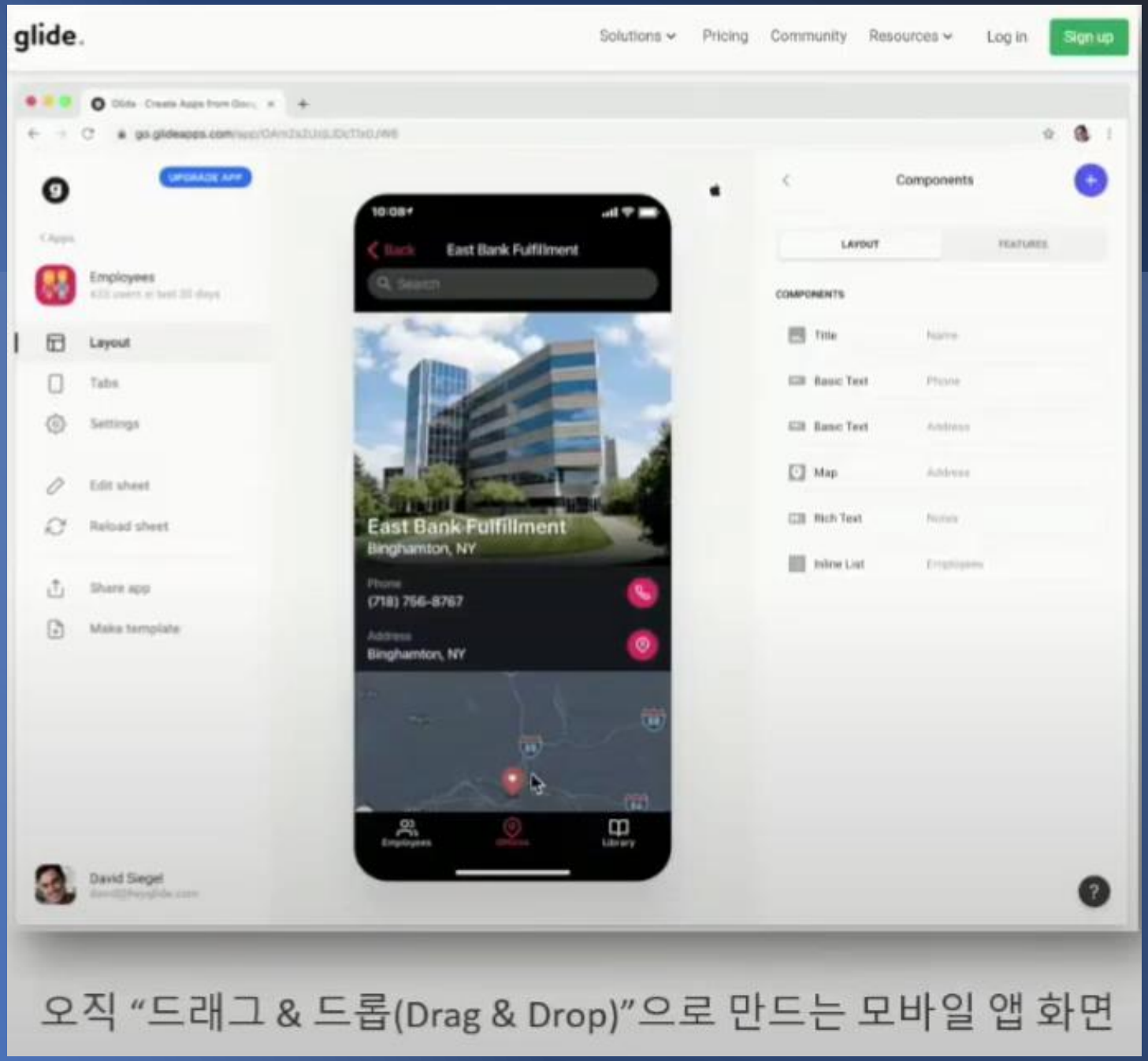


로우코드 개발 예) Mi-Corporation



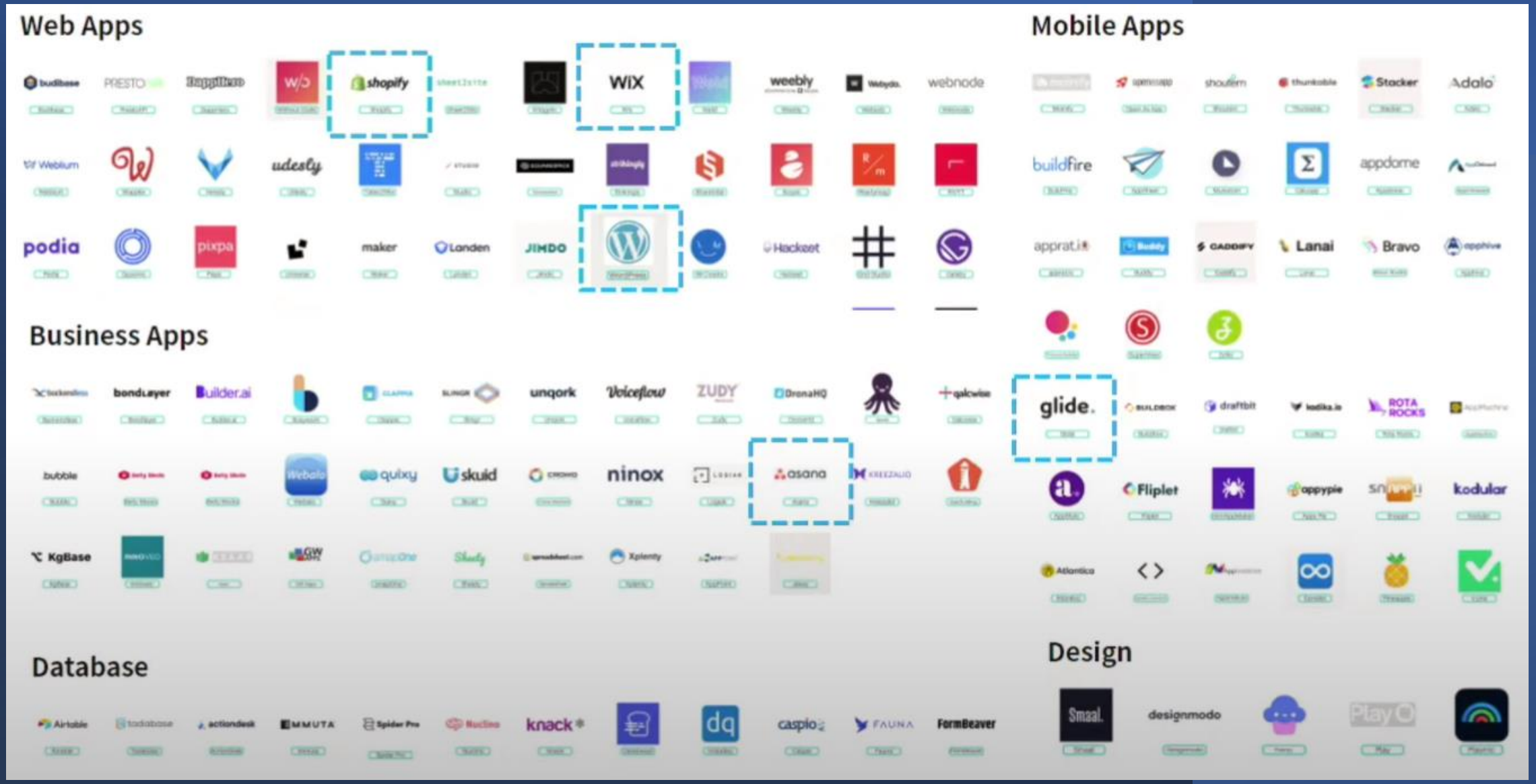
https://www.mi-corporation.com/blog/how-low-code-platform-helps-gulf

로우코드
개발 예)Glide



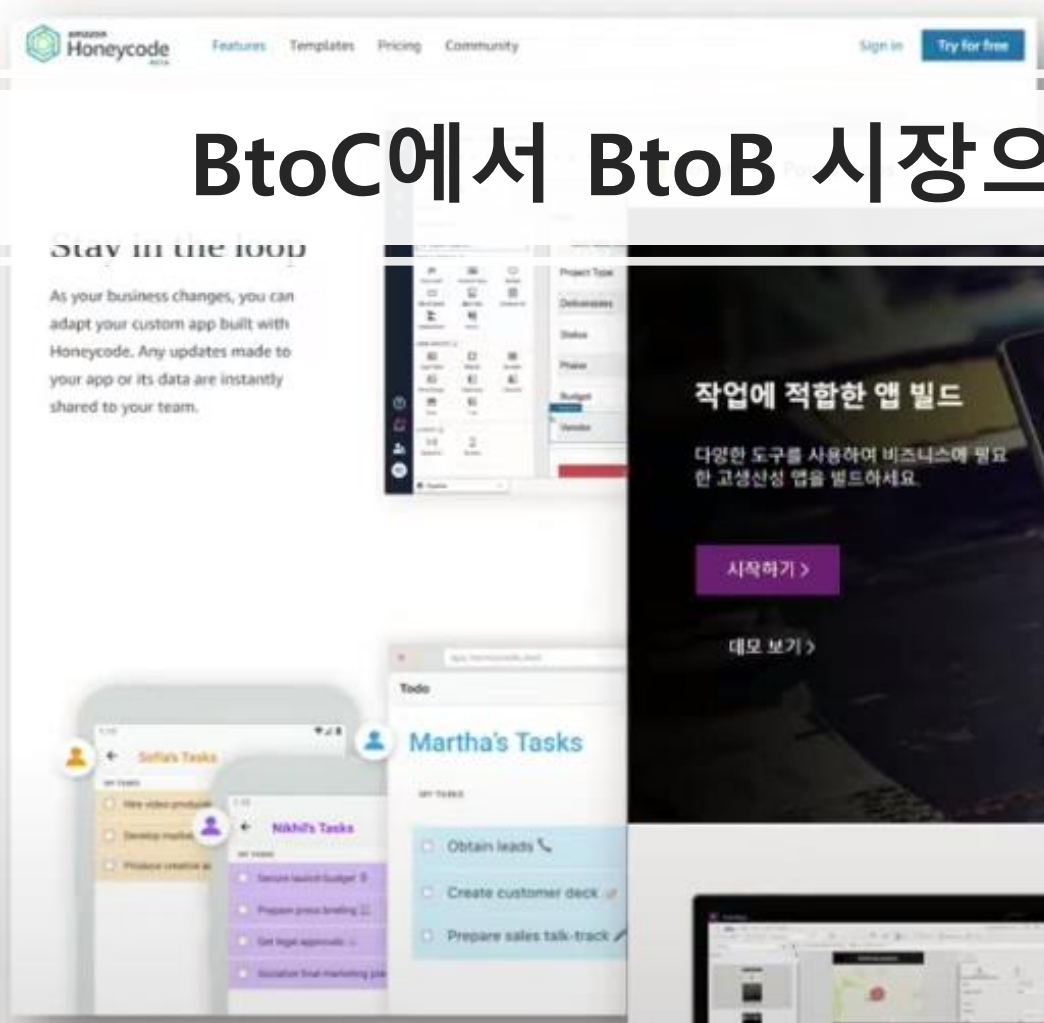
자료 : TOBESOFT

다양한 로우코드 플랫폼(기업)의탄생



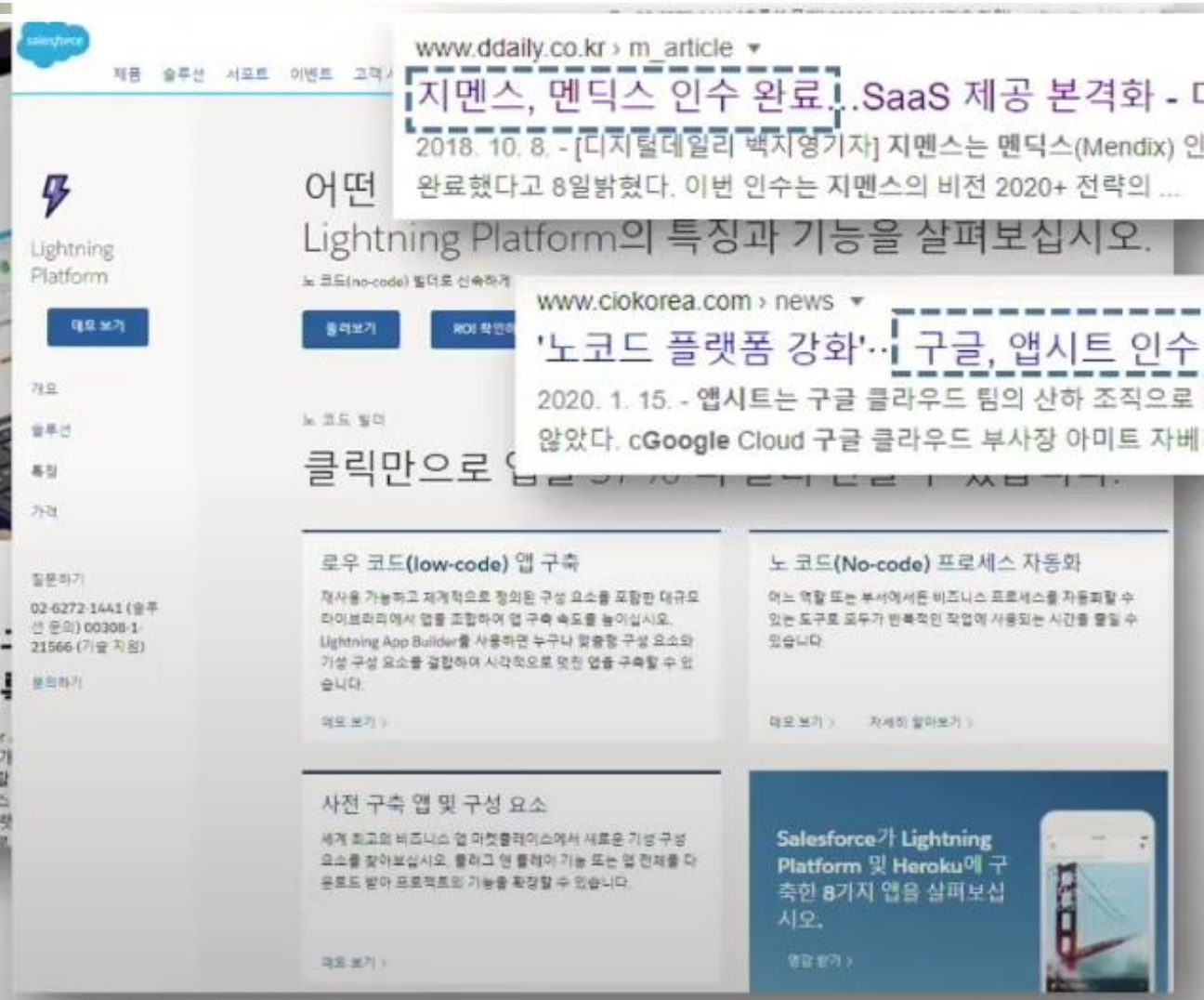
자료 : TOBESOFT

BtoC에서 BtoB 시장으로 확대 (제조업 산업용 플랫폼 등)



Amazon – Honeycode

Microsoft– PowerApps



Salesforce – Lightning Platform

자료 : TOBESOFT

로우코드가 활용 B to B 플랫폼 비교 (제조업)

Feature	Siemens MindSphere	PTC ThingWorx	GE Predix	IBM Cloud (BlueMix)	MS Azure IOT Suite	Software AG ADAMOS	vf-OS
Operating System	●	●	-	●	●	●	●
Security by design	●	●	●	●	●	●	●
Connecting IIoT	●	●	●	●	●	●	●
APIs to access third party software	◖[1]	◖[1]	◖[1]	●	-	●	●
OnPremise	●	●	●	●	●	◖	●
InCloud	●	●	●	●	-	◖	●
Marketplace	●	●	●	●	-	◖[2]	●
Development Environment	●	◖[3]	◖[4]	●	-	●	●
Business Process Modelling	-	●	-	●	-	-	●
Analytics	-	●	-	●	●	●	●
Data Ingestion and ETL	◖	◖	◖	●	●	◖	●
Developers' Hub	-	-	-	-	●	-	●
Open Source	●	-	-	-	●	-	●
Innovation	●	●	●	●	●	●	●
Messaging and Pub/Sub	◖	◖	◖	●	●	●	●
Product Management, Conception, Simulation	●	●	●	●	-	-	◖[5]

◖[1] via configuration, ◖[2] through Digital Marketplace, ◖[3] different tools for different purposes, ◖[4] under development, ◖[5] via vf-OS Assets.

자료 : Low-Code as Enabler of Digital Transformation in Manufacturing Industry

로우코드 플랫폼 도입을 위한 Check List

- **조직/구성원 특성을 고려한 개발 방식 선택 필요**
- **활용 목적 및 서비스 성격에 따른 개발 방식 선택 필요**
  - 필요 수준의 기능을 제공하는지 검토 필요
  - 적절한 사용자 통제와 정보 접근 권한 관리 필요
    *Shadow IT 이슈
  - 검증된 플랫폼 활용 (업체) 및 제공 기능에 대한 명확한 이해 필요
  - 유지보수 및 기술지원 가능 여부 확인 필요
    *Blackbox 코드 (숨겨진 코드) 이슈

02

왜 지금 Digital Transformation을 가속화해야 하는가?

김명인

스페셜팀 SA |FPT

PRESENTATION
Content outline

Feb ,2021

Agenda

1. Formula for success
2. Case studies

Formula for success

"Flawlessly functioning products and visually appealing designs can be created in a matter of minutes instead of weeks.

That's game-changing.

- Marc Fischer, Dogtown Media LLC

CHALLENGES WHEN **ADOPTING LOW-CODE & HOW TO OVERCOME**

Your concerns

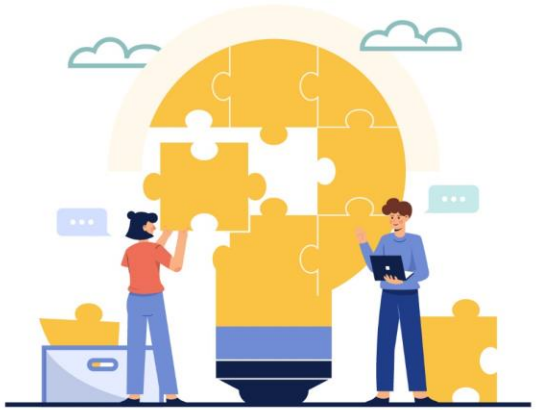
- Low-quality performance
- Difficult or slow to digital Transformation
- Slow delivery and change cycles
- Unable to keep up with market changes
- Unable to optimize costs

What to look at

- Roadmap
- Mobile target, digital engagement
- Application lifecycle management
- Integration capability, one-stop solution
- Pricing models, license

FORMULA FOR SUCCESS

Solution



+

Center of Excellence

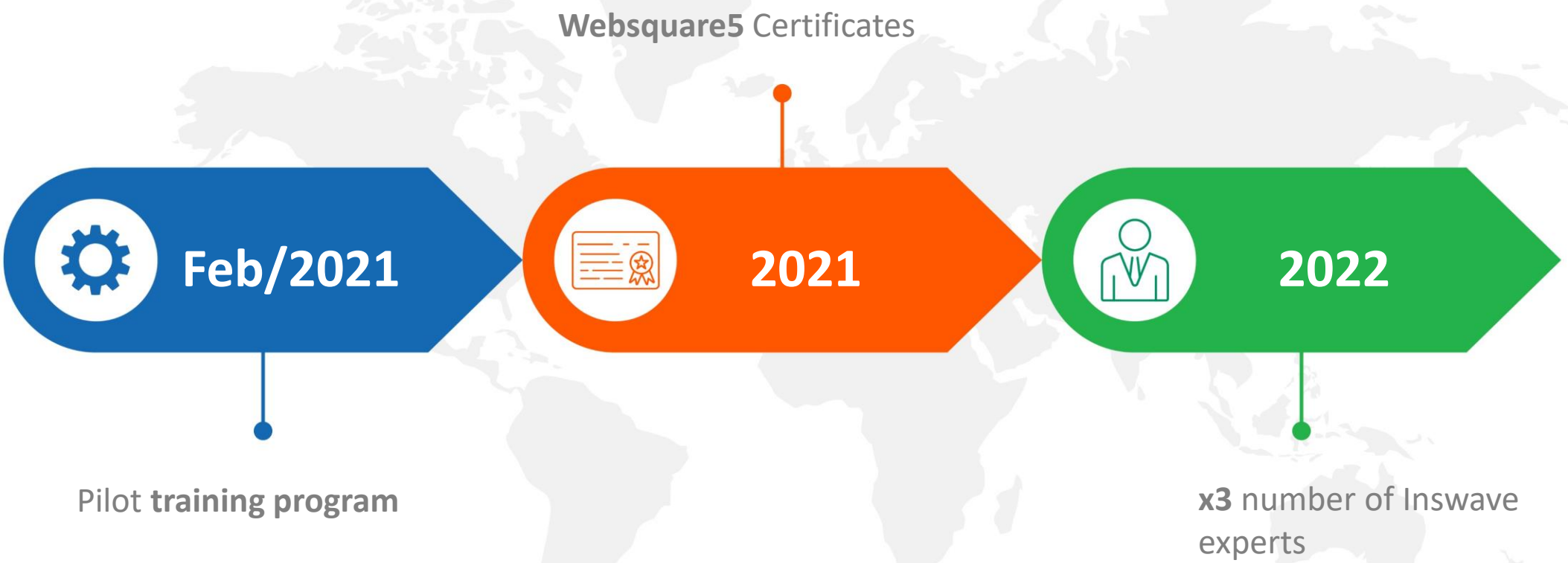
Legacy modernisation

Delivery model that fits

=

Success

ROADMAP FOR FPT COE



OUR EXPERIENCES WITH **MODERNIZATION**

Europe

Typical CS: Customer in Retail | Core Trading System
Cloudification | 30ppl in 15 months

Asia Pacific

Typical CS: Customer in Real Estate Sector | Booking Loyalty System **Modernization** | 40ppl in 1 year

America

Typical CS: Customer in Healthcare Sector | Global Authentication **Modernization** System | 15ppl in 8 months

Korea

Typical CS: Customer in Retail Sector | Smart Education Platform | 25ppl in 8 months

- Target 50+ Enterprises after 1 year open (5000+ users)
- After 5 years dominate ~30% education market of Korea
- Multi-tenancy to go Global

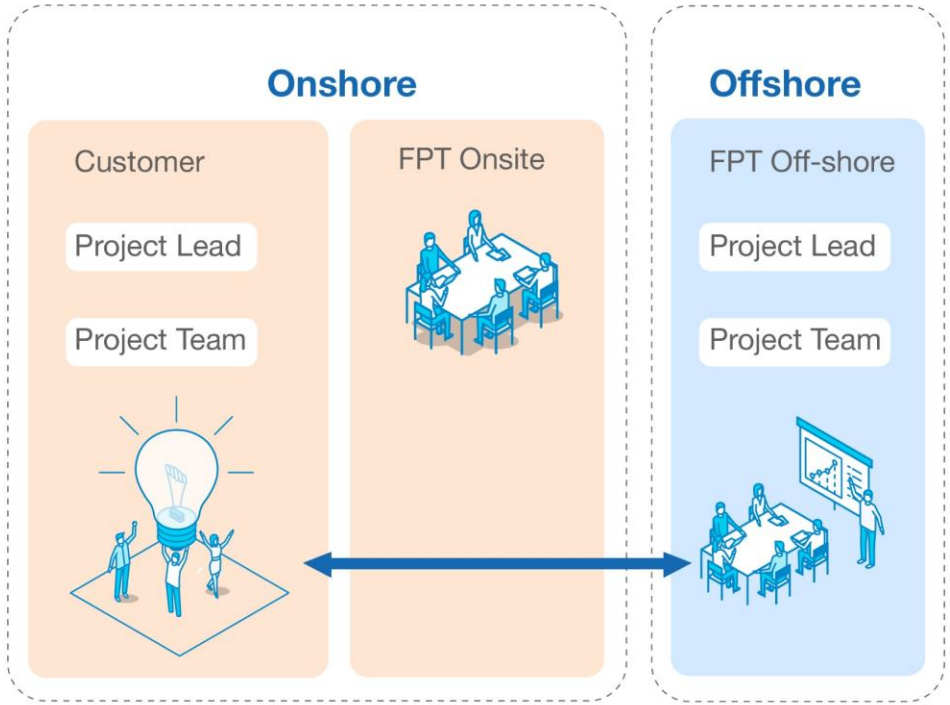
10+ prj
온라인 예약 3배 증가

6+ prj
매년 운영 비용 $800K~$1.2M 감소

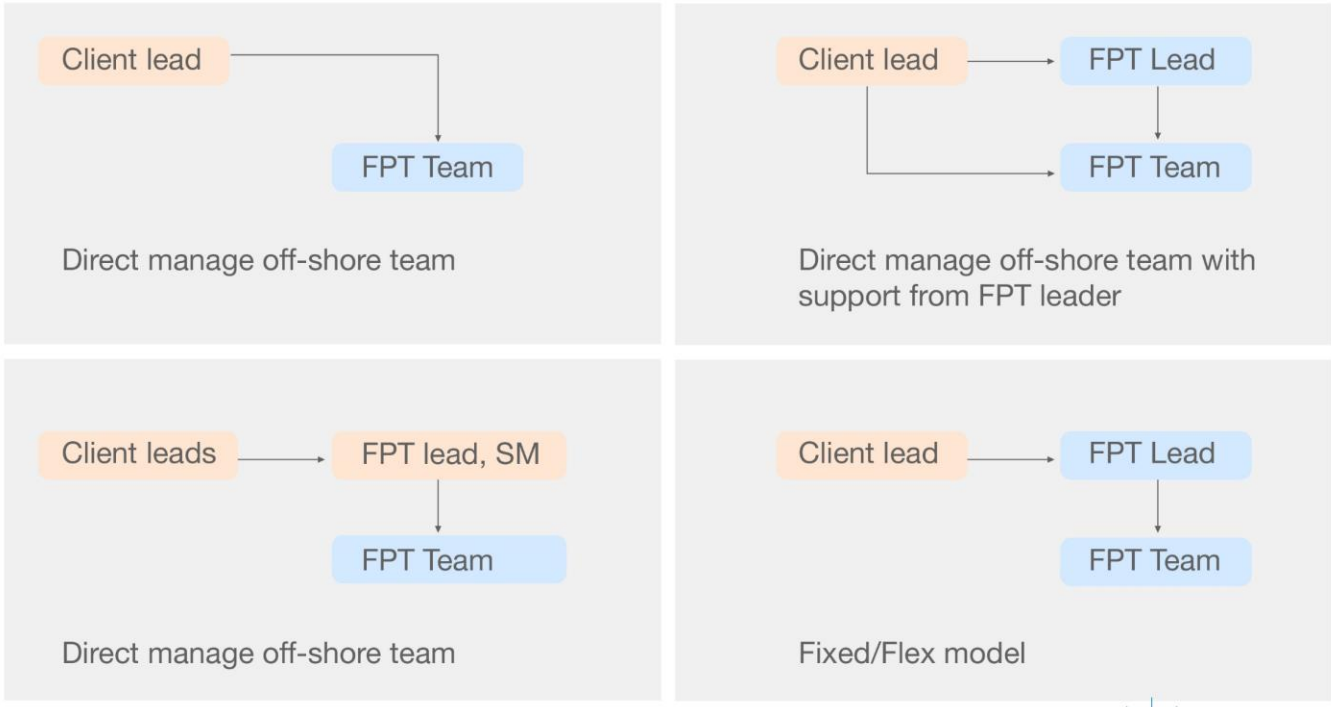
20+ prj
예약 대응 시간 최대 60% 감소
온라인 예약 매출 4배 증가

5 prj

OUR DELIVERY **MODEL**



- Option 1: There is no FPT Onsite
- Option 2: FPT Onsite – Single Contact Point
- Option 3: FPT Onsite – Facilitator/Technical Liaisons
- Option 4: Full-function Onsite Team



Offering Model:

- ODC (Offshore Development Center)
- Project based
- Outsourcing – body shoping
- Managed Services

Case studies

CASE STUDY 1: ECU MANAGEMENT SYSTEM

Overview

- **Customer:** Japanese multinational automotive manufacturer.
- **Main task:** Managing the upgrade history of automobile hardware and software.

Project details

- Project scale: **Lab**
- Number of screens: **50**
- Duration: **1 year**
- Team size: **15 members**
- Platform: **Low-code Web Platform**

Techniques

- Developing using the **Low-code web platform**
- Creating forms using **Low-code widgets, CSS and JS**
- Using **C# Add-In** for external integration
- Tools: **Low-code platform** and **Oracle**.

CASE STUDY 3: CONVERSATIONAL PLATFORM FOR CHATBOT

OUR CUSTOMER

Korean Energy Company

$57B+
USD Revenue

TOP 7
Business Enterprise in Korea (Total Asset)

300+
Global Networks

B Business Needs

- Develop a system to manage, monitor and test microservice API for Chatbot system.
- Consult the base structure for Chatbot's microservice API which developed to connect to Legacy system includes many Open API and databases.

C Technical Challenges

Risk of leak data because chatbot API is developed in the same system with ChatBot

S Services & Solutions

Apply microservice to develop conversational platform with different tech stacks such as: ElasticSearch, VueJS, Python, Docker, Django, Logstash, PostgreSQL

Size: 36MM | 4 months | Peak time: 10ppl

R Results & Impacts

1. Accessible anytime
2. Handling capability and cost effective by having thousand simultaneous conversation
3. Create new alternate sales channel
4. Increase customer satisfaction with

Thank you!


FPT
inswave systems
귀하의 의견은
우리에게 중요합니다


FPT
inswave systems
감사합니다!