S-Square - LowCode/NoCode (LC/NC) Enabling Technology Presentation
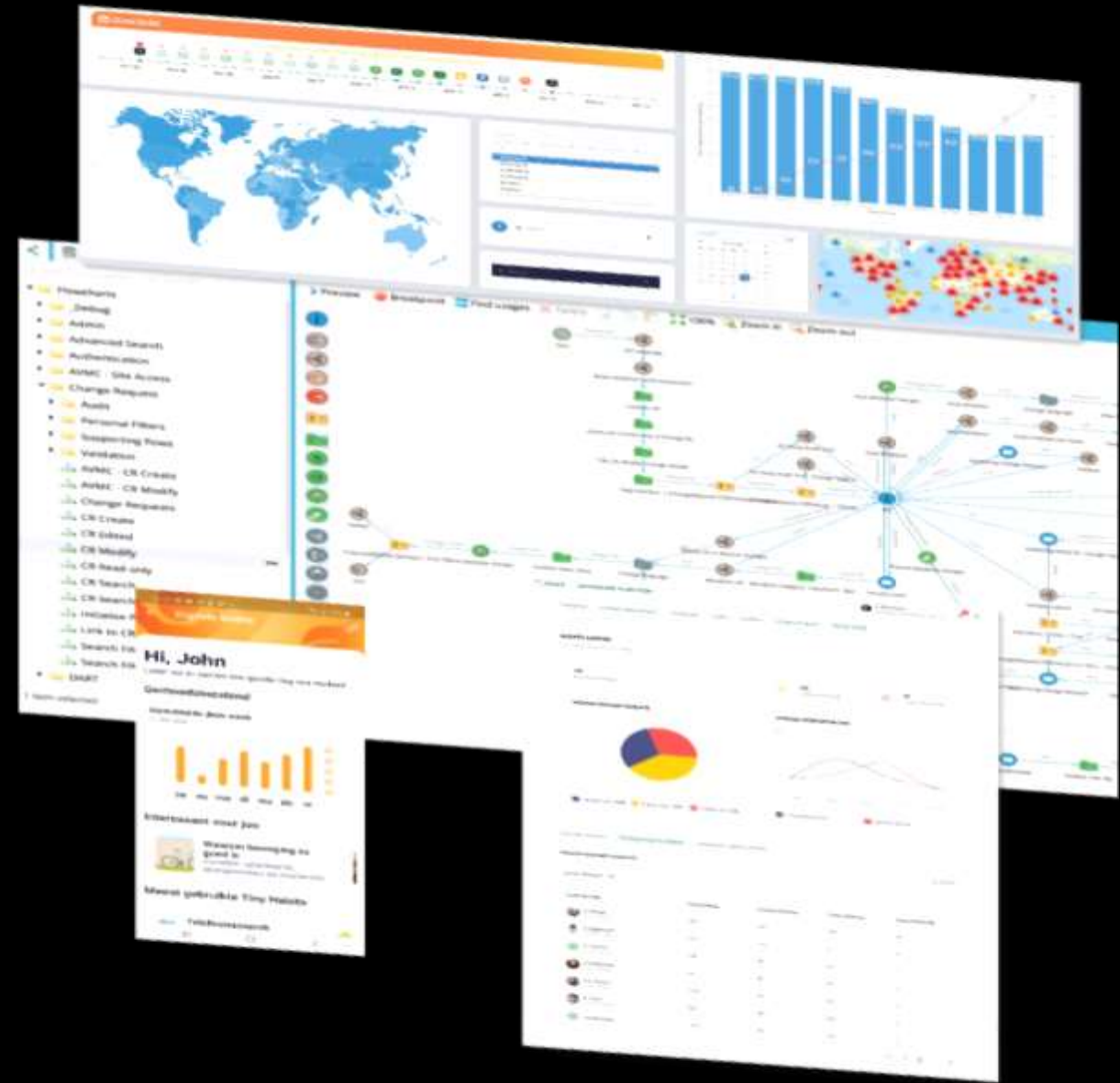
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Current Challenges in Traditional Application Development

Long Development Timelines

- Custom development with standard SDLC processes

- Long incubation period before seeing a MVP

- Minor changes require long turn around time for design, build and testing.

High Capital Expenditure and Operating Costs

- Investment in Software platforms and Infrastructure for custom development

- Higher support costs due to diverse support requirements

Disparate Technology Landscape

- Multiple small projects using disparate technologies

- No uniform platform to manage small developments

Developer Shortages

- Developer shortages and skill-set challenges

- Multiple small productivity projects get deprioritized

6 Generations of Programming Languages

First generation (1GL) - machine-level programming language used to program first-generation computers
Examples: machine-level programming languages

Second generation (2GL) - assembly languages.   Examples: Assembly

Third generation (3GL) - more machine-independent (portable) and more abstract therefore more programmer-friendly than previous generations of languages
Examples: Fortran, COBOL, BASIC, Pascal, C, C++, Perl, Python, Java, JavaScript, Ruby, PHP, C#

Fourth generation (4GL) - include support for database management, report generation, mathematical optimization, GUI development, or web development. Examples: ABAP, Unix Shell, SQL, PL/SQL, Oracle Reports, R

Fifth generation (5GL) - any programming language based on problem-solving using constraints given to the program to make the computer solve a given problem without the programmer, rather than using an algorithm written by a programmer.   Examples: Prolog, OPS5, Mercury

Sixth generation (6GL) - programming language based on visual development. The overall umbrella term for these is "NoCode".   Examples: Appian, WEM.io, Bubble.io
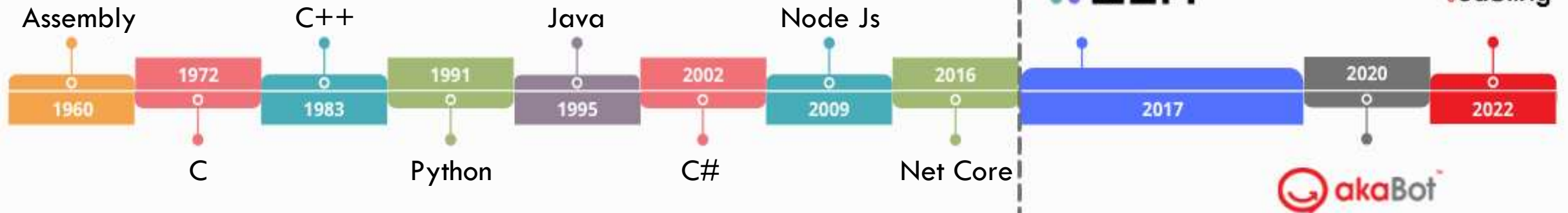
Traditional Coding

Requiring expensive, hard to retain code-linquists

No-Code

Empowering transforming support to employ business-knowledgeable techno-functional resources

Assembly   C++   Java   Node Js

| 1960 | 1972 | 1983 | 1991 | 1995 | 2002 | 2009 | 2016 | 2017 | 2020 | 2022 |

C   Python   C#   Net Core

WEM

edSling

akaBot

Traditional computer languages require programmers to translate their thinking process into code built for the CPU and memory

Optimized for how we humans think. Converting natural thinking process into working software

Digital Transformation. Legacy Modernization. Business Velocity.

80%
COST REDUCTION

Empowers employing business knowledgeable (techno-functional) resources instead of costly, hard to retain code-linquists to build, deploy and maintain secure scalable enterprise-grade software.

10%
FASTER TIME-TO-MARKET

View app development in real-time. Deploy and update applications with a single click. Deliver software 10 times faster than traditional programming methods.
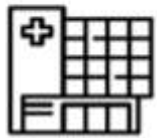
100%
ALIGNED TO BUSINESS

Translate innovative business ideas to custom software built with no code app builder at the speed of, and fully aligned with, business requirements.

Banks, Financial Services and Insurance >

Healthcare >

Telecommunication >

Education & Training >

Manufacturing >
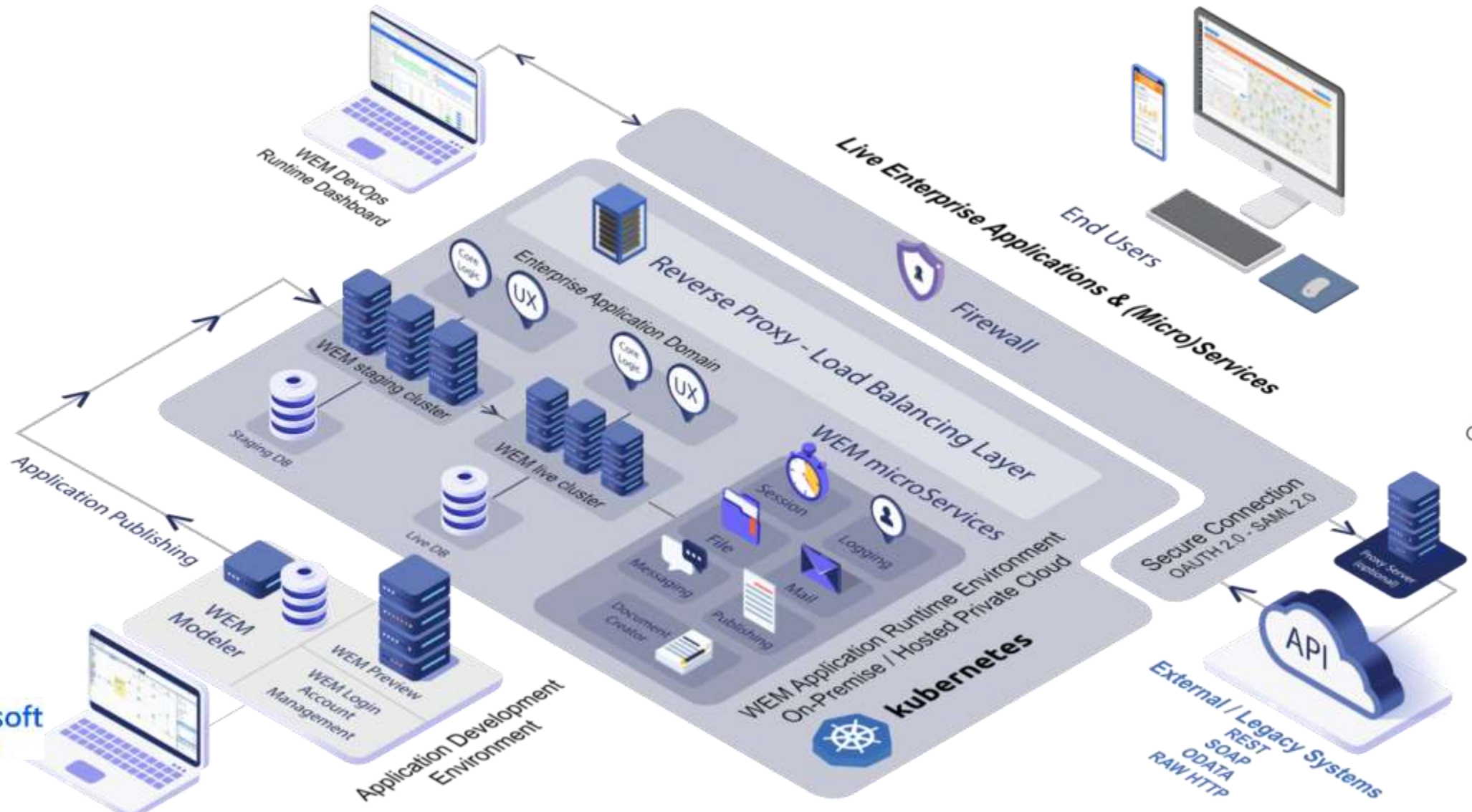
Public Sector >

Automotive >

Real Estate >

SCALABLE, SECURE CLOUD ARCHITECTURE

FLEXIBLE DEPLOYMENT OPTIONS FOR SHARED HOSTING, ON-PREMISE APPLIANCE AND PRIVATE APPLICATION CLOUD

3rd Party LCNC Marketplace Product Evaluation

Criteria	WEM	Betty Blocks	Power Apps	OutSystems	Mendix
Category	No Code	Low code	Low code	Medium to high code	Low code
Platforms	Web, native apps	Web apps	Web, native apps	Web, native apps	Web, native apps
Data Model	Drag & Drop	Visual Editor	Tables	Visual Editor	Visual editor
Visual Editor	Web-based	For backend apps	Web-based	Many designer	Web-based, desktop-based
Workflows	Drag & Drop	Action Modeler	MS Flow	Visual modeler	Visual modeler
Look & Feel	Custom templates	Custom js/css/html	Customizable	Custom js/css	Custom js/css
Environment	Public, private cloud, on premise	Public cloud, on premise	Public, private cloud, on premise	Public, private cloud, on premise	Public, private cloud, on premise
Release Management	Fully	Fully	Partially	Fully	Fully
Integration	All API standards	JSON, SOAP/REST	Office365, REST	SOAP/REST	SOAP/REST

Use Case – Manual Process Digitalization

It is the largest telecommunications service provider in the Netherlands having revenues of €6.8Bn with 13.5K employees. It offers best in class fixed & mobile voice and internet-based services to the wholesale, residential, and business segments with fixed mobile networks for telephony, data, and television, they serve customers at home and abroad.

CUSTOMER CHALLENGES

- Highly manual processes
- Excel sheet and email system to be eliminated
- Large integrations were required
- Inefficient process governance and monitoring

WEM ADVANTAGES

- **Development cost savings of over 87% (Business case €2.1 Mil for the cost of implementation vs. €255K (until Go Live)**
- **The concept was provided in 6 weeks, full implementation in 24-26 weeks across 135 departments across 10 organizations with 9 roles, 1000+ users (large scale implementation)**
- **Team strength: 4 (2WEM consultants, 1 Process Consultant, 1 engagement manager) compared to 12 if done via traditional development**
- **From an e-mail processed system to an easy to use and no-code web environment to be maintained by non-IT skilled employees**
- **Agile development, week to week results, short time to market (live in 3 months)**
- **Cloud solution offers flexible workspaces (not tied to a location)**
- **Easy to extend the application**

PROBLEM

The organization had a large number of existing manual processes like data was being captured on excel sheets, an email system to manage workflow and communication, multiple hand-offs, and data rekeying. The communication was weak and inefficient and incidents of missed communication were taking place. Their existing system was incapable of proactive issue identification. There was inefficient process governance and monitoring, e2e view of the process was missing and, a single data view was not available for analysis.

SOLUTION

We carried out an e2e process analysis across Telco's Network departments and MSPs (2nd & 3rd Line). A 'To-Be' process & operating model was created capable of one-time data capture with clean validations and an e2e workflow-driven process was also developed to drive efficiency. Controls were built for proactive monitoring. The development was rapid and we eliminated the excel sheet approach with the change request system.

Representative WEM Enterprise Customers

Thank You

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