

```
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    <div class="navbar-header">
      <a href="#" class="navbar-brand">
        <span class="visible-xs">
        <span class="hidden-xs">
          
        </span>
      </a>
      <p class="navbar-text">
        <a href="#" class="navbar-toggle">
          <i class="fa fa-bars"></i>
        </a>
      </p>
    </div>
    <div class="navbar-collapse collapse" id="navbar-collapse-main">
      <ul class="nav navbar-nav navbar-right">
        <li>
          <button class="navbar-btn">
            <div class="btn-alert fa fa-clock-o"></div>
            <div class="alert-top">20</div>
          </button>
        </li>
        <li class="dropdown">
          <button class="navbar-btn tab-on-top data-toggle="dropdown">
            
            <em class="cm-name-top">Nuttie Nanda Nutta Nanda Nutta Nanda Nutta
            <i class="fa fa-angle-down"></i>
          </button>
          <ul class="dropdown-menu">
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                <i class="fa fa-address-card"></i>
              </a>
            </li>
            <li>
              <a href="#">
                <i class="fa fa-sign-out"></i>
              </a>
            </li>
          </ul>
        </li>
      </ul>
    </div>
  </div>
</nav>
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Point of View

Future-Proof Your Career with **Low Code Application Platforms**

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I introduce you to **Kintsukuroi** (金繕い), which means Golden Repair. It is a Japanese philosophy that embraces an object with all its flaws and imperfections. Humans have the gift of imperfection, which makes us constantly push ourselves to attain perfection. The degree of imperfection is what makes each one of us unique. Most of us tend to reach the same goal by taking a different approach and achieve at different times. It is very uncommon to find two individuals doing the same thing in the same way within the given time.

To transpose this analogy to software developers – the productivity of two developers of equal educational qualifications and experience is not the same always. The runaway success of RPA has been because it helped relieve humans of repetitive, error-prone mundane tasks. This helped business users to focus on tasks that required higher cognitive functions. Low code application platforms are focused on getting software developers away from the mundane task of mastering programming languages.



Understanding low code apps better

Software development is a function of developers mastering their skills in complex logic and syntax of programming languages. The focus is not on solving business problems but achieving mastery over a chosen programming language. Suppose, we could eliminate the need to be fluent in programming languages. In that case, software developers are no longer required to focus on the technical aspects of the implementation. They can dedicate their effort to solving business problems and improving user experiences that require higher cognitive functions.

Three specific factors need to be considered in the context of software development – the size of the application (expressed in kilo lines of code), efforts (no of available FTEs), and productivity (kilo lines of code produced per unit of effort). The general convention is that the larger the application is, the larger the efforts required to make it, and with large team size, the productivity significantly increases. However, 2016 QSM Software Almanac discusses the productivity paradox by analysing over 4000 projects completed between 2001 and 2011 .

The finding summarizes that smaller team size generally tends to have higher productivity. The low code application platforms help create small, federated teams that can breakdown complex applications into smaller features and work independently of each other. The platform handles intricacies of integrating these features into one single application. It is not to say that large teams are inherently less productive, but it requires a great deal of oversight and coordination to reach higher productivity levels.

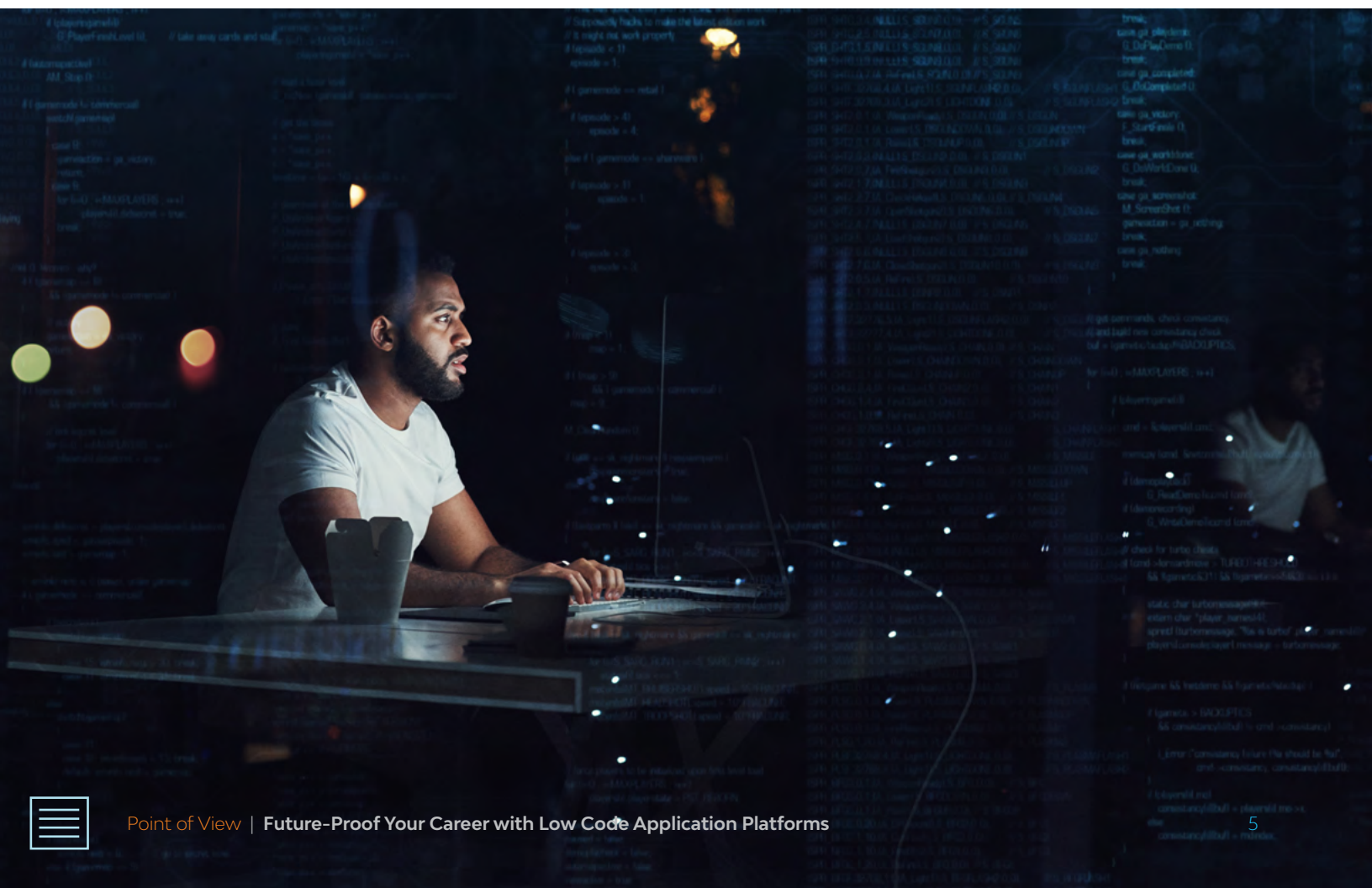
IDC estimates that the global shortage of full-time developers will increase from 1.4 million in 2021 to 4.0 million in 2025, which means that the full-time developer labor force will perform 90.8% capacity in 2021 and 84.9% capacity in 2025 . The shortage of full-time developers must be bridged by citizen developers to ensure that the planned legacy modernization initiatives are not delayed due to resource constraints. The sustainable long-term solution is to upskill full-time developers on various low code application platforms.

The availability of skilled professionals is not sufficient to serve the current wave of digital transformations. Traditional software development and full-stack developers are still required for engineering novel and complex systems. Organizations need to find a way to create software applications faster, cheaper, and less labour-intensive. The delivery velocity of applications from the backlog can be increased significantly by democratizing software development.



Organizations need to move the bulk of their current application portfolio into low code platforms. Low code application platforms are not eliminating the need for developers but, on the contrary, aim to convert more business users into software developers without the need to go through a long learning curve.

In its Worldwide Developer Census for 2020, IDC estimates the overall developer population was 26.2 million . Of these, about 7.5% (around 2 million) are low code developers with an additional 3.5% (approximately 1 million) no-code developers. In its worldwide forecast for the low code developer population for 2021-to 2025, IDC projects a CAGR of 40.4% from 2021 to 2025 the worldwide population of low-code developers . This projected growth rate for low code developers is roughly 3.2 times the general population of developers worldwide. This 3.2x growth in low code developers can only be achieved if a considerable portion of the full stack developers reskill themselves.



Bridging the skill gap

In the same way, for someone with little or no technical skills, getting their hands on low code application platforms does not make them skilled software developers. Software developers need to retool and reskill themselves to lead most citizen developers who can participate in software development. This helps software developers transition from development roles to design and architecture functions in a shorter period. Low code application development platforms, while disruptive, are not aimed at displacing software developers from their jobs. It is the opposite; these platforms are equipped with tools and technologies to enhance the work of software developers.

The additional skills that a traditional full stack developer needs to acquire to master low code application platforms are in three specific areas – UX, Data Management, and Integration. The full-stack development focuses on inputs, processing, and outputs. Now the paradigm will be experience, processing, outcomes, and impact. Low code application platforms provide a drag-and-drop interface for tools for creating UI. Still, software developers need to learn how to use these components efficiently to make an excellent user experience. Data does not reside within low code application platforms.

The required data is fetched from other source systems. Any suitable data transformation required is performed within the low code application platforms before the transformed information is posted to the target system for further downstream work. So, software developers need to develop skills around how to access data, perform data transformation, and manage the data after transformation. To automate the organization-specific process, low code application platforms need to connect with identity and access management systems, systems of records, systems of engagements, and other legacy applications within the organization's IT portfolio. This integration is primarily by APIs and many third-party connectors provided by low code application platforms. So, software developers need to develop skills around creating and manipulating APIs.



Is that all required to be reskilled as a low code developer?

No. Traditional full-stack development largely follows waterfall or hybrid agile methodology. Design thinking is an innovative approach to solving complex problems. There are three steps – understanding the problem clearly, exploring multiple approaches to solving the problem, and prototyping and testing each approach to identify the most effective way to solve the problem. Software developers need to learn and apply design thinking principles when using low code application development platforms. Agile methodology is applied to building and releasing solutions iteratively. With agile, the emphasis is on solving the problem immediately, whereas, with design thinking, the emphasis is on identifying the right problem to solve. Software developers will need to find a fine balance of agile + design thinking to create innovative enterprise applications that offer the proper business outcomes and create a lasting impact for end-users.

Which low code application development platforms should software developers be learning? According to Gartner, by 2024, “three-quarters of large enterprises will be using at least four low code development tools for both IT application development and citizen development initiatives.” Given the untapped demand for low code application developers, developers can learn more than one of the following platforms such as Mendix, OutSystems, Pega, Appian, Microsoft PowerApps, Newgen, and Quickbase. All these platform providers offer on-demand self-learning materials and access to a developer environment in the cloud for registered users. After completing a suitable learning path, one could register for certification to get credentialed by respective platform providers.

Conclusion

Analysts and predictions aside, everyone is witnessing two things – there is an insatiable demand for building new enterprise applications, and there is a definitive shortage of qualified software developers. You should be able to put together 2 + 2. The future of software development is going to low code applications. Gaining valuable skills in leading common code application development platforms can completely change the current career path for many full-stack software developers. A low code developer with a solid background in software development will eventually grow into a low code enterprise architect. It is not just that there is a strong financial incentive here. Low code application developers are one of the sought-after skills in the market.

Join the low code revolution.



About the Author



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Mouli is a seasoned leader and digital strategist with 18 years' experience in consulting, technology advisory services, program and service delivery, strategic alliances, sales, operations and people management. He has led enterprise wide customer programs in digital transformation. He holds Master's degree in Business Administration, Project Management

Professional from PMI, DevOps Foundation from DevOps Institute and ITIL Certification from Axelos. He has numerous certifications from Microsoft, Amazon, Box, Boomi, Celonis, Dell and IBM. He has advised and managed large low code transformation programs on IBM, Mendix, Newgen, OutSystems, PowerApps, Unqork and Quickbase. His low code solutions has won awards in Telstra Innovation Hackathon 2020, 2021 and Quickbase Appathon 2021. He has been featured by Dell for his technology expertise in their global proven professionals program.

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