

GenX White Paper
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GenX Digital Transformation: The Modern Digital Transformation Approach for the Enterprises

Enterprise Digital Transformation

Digitalization and Tools

Social, Mobile, Analytics, Cloud, AI are pushing every enterprise to review how they do business internally as well as externally. Internally it leads to an employee centric portal where an employee can see his/her world; what they do daily; tasks and information pushed to them based on their role and participation across different business operations. Externally, it leads to how a customer or partner views, interacts, can create his/her world; gets offers/loyalty bonus; participates in campaigns; sends feedbacks and receives responses. Both the internal and external portals can be same and can be created using a virtual security layer and represents the current state of the enterprise at any given point in time.

Taking the enterprise to this level from the current state of affairs is “Digital-Transformation”. It may involve a set of tools/products from either open source community or from licensed vendors. But more important is the way the enterprise wants to define its business operations, processes, culture and interface experiences.

The backbone of Digitalization is a Portal through which external and internal interfaces are built. This portal should be Single-Sign-On (SSO) enabled and the access should be role-based, so that the system knows the identity of the user. By default, the Portal uses an active Digital Content Management System which would continuously display and articulate enterprise information, general/specific offerings by using cookies, campaigns and any such relevant information based on the details available about the user. But once the user logs-in, the system verifies the identity and personalizes the entire Portal as per user’s identity and behavior.

From customer experience (CX) perspective, the platform should

- a) Have personalization experience,
- b) Have mechanism to send feedbacks and receive responses,
- c) Allow him/her to participate in any relevant campaign or offering program,

d) Allow him/her to customize a product of their choice. The platform should have capabilities for listening on the social sites and responding to events. The platform should also be able to convert prospects from Social sites or random visitors. The platform should also facilitate QR Code based micro-sites for any product or campaign. Digital contents also play an important role in influencing a prospect. There are open source products to facilitate all the above tasks which can be integrated and customized with the Portal. This can further be extended to A/B testing as well. For the backend CX teams, there should be analytical tools based on actionable dashboard. The dashboard should be configurable to generate events out of the data and a process/workflow should get kicked off based on that event to manage it. Now a days, Digital Assistance technology is playing a vital role in CX. If a customer visits the website; he/she might have some questions, so a Digital Assistant or conversational Chatbot should help him/her in answering the questions.

Business partners would interface for their own set of transactions. The portal could provide them interfaces directly to relevant part of the enterprise IT applications based on their identity and role. For example, a business partner based on its category can check for room inventory of a resort in its area of operations and can reserve it directly. The Portal could have a micro-site linked to partner's own web site based on either QR Code or a campaign. The Portal should also be able to launch or display campaigns run by channel partners.

Vendors will see relevant part of the application landscape e.g. inventory status of their supplies, tasks assigned to them, their payment status or queries etc. In fact, RPAs should be able to make many of the vendor processes autonomous like their invoice submission, validation and payment; purchase order generation etc. These tasks or workflows will automatically get pushed to the vendor part of the Portal and visible to the relevant set of users based on their identity.

Similarly, employees will get their personalized view of the portal after logging in. Employees will have links either mashups or workflows/tasks or portlets for various work they need to do on a daily basis. So, instead of employees going to various applications and searching

around what they need to do based on an email or telephone call, their tasks will be pushed to them on the Portal based on their identity and roles. Let's take an example. A customer has raised issue about a partner charging him more or a complaint on service. This complaint can be raised either by a direct email to customer service or after interactions with a chatbot. Once this email comes to this email-id, a workflow process will get kicked off and assigned to a designated responsible person. The process could be made adaptive based on immediate data so that it either closes inside the organization or get spanned off to the business partner level for a satisfactory response and closure with the customer. Such processes can be made autonomous and be acted upon by bots with relevant human interfaces. Many business processes inside IT applications can be surfaced on the Portal for easier accesses and made autonomous for faster execution.

The current landscape of applications also plays a vital role in Digitalization but in a different form. These applications tend to become more of a data repository and doing minimal independent specific transactions. Users will continue to make transactions either directly with these applications or some of these transactions may get rendered on the portal as business services for different category of users. Many of these business services will be published as APIs on Service Bus or API Gateway to get surfaced over Portal. APIs also make the access available on omni-channel devices. In case if the enterprise is looking for applications landscape, there are many offerings from open source and licensed vendors. Some of the products from open source community are Vtiger CRM, Apache Ofbiz ERP and ASI FrontDesk or Abacre for Hotel Management.

Here's a brief set of tools & technologies which are available & we specialize in for Digitalization, depending on your specific needs a permutation-combination of these can IT-

Enable your Enterprise-Digitalization plans –

- Portal Software – Liferay, OpenText
- Identity and Access Management Software – Forgerock IAM
- Mobile Omni-channel access – PWA, Angular JS, Ionic
- Content Management System – Alfresco
- A/B Testing tool – Abba or Sixpack

- Campaign Management – Salesforce Pardot, Oracle Responsys/Eloqua
- Dashboard – Jasper, Grafana, ELK, Oracle BI, Microsoft Power BI
- Business Process/Workflow – jBPM, Camunda, Activiti
- Enterprise Service Bus – WSO2, Mulesoft, Apache Synapse
- Existing IT Applications – legacy or new, business services publishing
- Custom development for specific requirements - Node.JS, Apache Webserver, NGINX, WSO2/Kong API Gateway, Java/Javascript, Python
- Tensorflow/Kubeflow AI platform, NLP, Python for Chatbots and machine learning
- Database – MySQL, Mongo DB
- High Availability, Cloud, DR deployment architecture

GenX is an IT Product Engineering and Services Company based out of Gurgaon India. GenX is primarily focused on Middleware technologies and has technical expertise in building and implementing solutions. GenX has been working with the above-mentioned tools in the open source domain as well as similar tools from Oracle and Google. In addition, GenX has partners who can work on other parts of Digitalization such as Web presence strategy (from marketing angle), managed emails services including for campaigns, SEO Services, Content Development Services (Short movies, animation, AR/VR, promotion, content/script writing etc.)