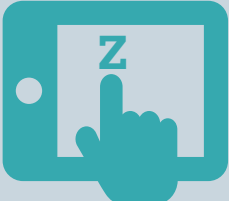
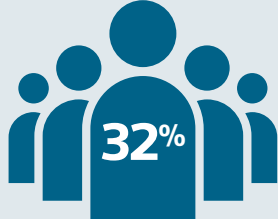




# Driving innovation efficiency in formulated product design

## Digitalization and changing demographics transform CPG

Digital generation	Growing population	Digital retail space	Global competition
<p>GEN Z is more digital than previous generations</p> 	<p>GEN Z will comprise 32% of the global population of 7.7 billion in 2019</p> 	<p>Retail shelf space is becoming digital, including automated purchase of standard goods</p> 	<p>Online shopping is driving the consumer packaged goods (CPG) industry toward fast, value-added innovation</p> 

(Source: Bloomberg, August 20, 2018)

## Consumer packaged goods and process industry challenges

<p><b>1</b></p> <p>Global markets and supply chains, and increasing regional regulatory compliance</p> 	<p><b>2</b></p> <p>Demand for personalized products, increased variety, high quality</p> 	<p><b>3</b></p> <p>Fast-changing consumer and seasonal demands</p> 	<p><b>4</b></p> <p>Price pressure</p> 
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## Ensuring competitiveness by improving processes

<p><b>Reducing time-to-market</b></p> <p>Shorter innovation cycles More complex products Broader product portfolios</p> 	<p><b>Enhancing flexibility</b></p> <p>Increased product variety Small campaigns Seasonal demand</p> 	<p><b>Increasing quality</b></p> <p>Closed-loop quality processes Traceability and full process transparency</p> 	<p><b>Increasing efficiency</b></p> <p>Use digital twin to simulate product performance Optimize resource and material consumption Provide single point of reference</p> 
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## Leverage Siemens software to develop new products faster

<p><b>Lower costs</b></p> <p>Lower costs for collaboration, process optimization and quality testing</p> 	<p><b>Reduce complexity</b></p> <p>Increase flexibility, transparency and control with reduced complexity</p> 	<p><b>Avoid recalls</b></p> <p>Adhere to regulatory compliance and avoid recalls</p> 	<p><b>Achieve consistency</b></p> <p>Achieve product data consistency across research and development (R&amp;D) and manufacturing</p> 
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To learn more about how you can drive innovation efficiency in formulated product design, please go to:  
<https://esteq.co.za/consumer-products/>