

And then there were six

or How we are learning to scale Agile-DevOps for agricultural R&D

Classification: PUBLIC



- About Syngenta
- About me
- About my team

- What business problem were we trying to solve?
- Where did we start?
- What value did we create?
- What were the outcomes?
- What I need help with...



About Syngenta





Countries 90+

Employees 27,732



Research and Development Sites 120



Production and Supply Sites 104



People trained on safe use 8.3m



Recordable injury and illness rate 0.32



Suppliers included in sustainability and fair labor programs 99.6%





Group sales \$13.5bn

Crop Protection Sales \$10.4bn

Seed Sales \$3.0bn

	North America	Latin America	Europe, Africa, and Middle East	Asia Pacific
Sales (\$M)	3,514	3,646	3,877	1,986
Employees	4,120	5,676	11,690	6,246
Research and Development Sites	30	21	44	25
Production and Supply Sites	30	19	35	20

 $More\ about\ the\ Crop\ Protection\ industry\ consult:\ \underline{https://www.syngenta.com/\sim/media/Files/S/Syngenta/documents/our-industry-syngenta.pdf}$

More about Syngenta consult: https://www.syngenta.com/~/media/Files/S/Syngenta/syngenta-at-a-glance-2019.pdf

More about the Good Growth Plan consult: https://www.syngenta.com/what-we-do/the-good-growth-plan/progress



About me

1990's Environmental



Computational ecotoxicologist

Experimental design, modeling and predicting environmental impact in aquatic ecosystems 2000's Pharmaceutical



Director of Operations R&D Biometrics

Head of e-Governance

Provided on-line services and information to millions of patients and doctors monthly

2010's Agriculture



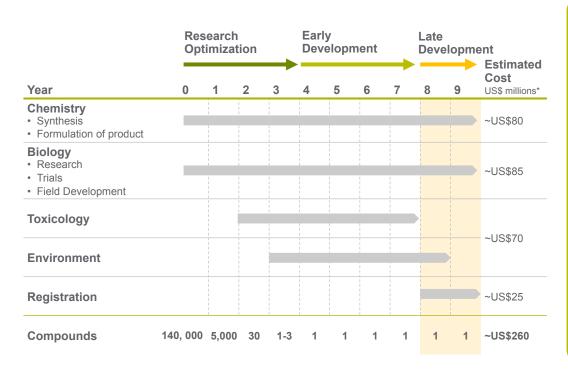
Program Manager Domain Head R&D IT

Delivering IT and digital solutions for scientists in R&D who develop product for millions of growers around the world

Look for me in LinkedIn: https://www.linkedin.com/in/kiamosshah/



About my team







What business problem were we trying to solve?



We want a rolling monthly view of expected registrations or launches for all product combinations within a country for the next 3 years





Where did we start?

Portfolio Management Change Program



Agile Delivery Application & Testing DevOps +
Cloud Infrastructure & Security
ITIL Operations





What value did we create?



Steve West, Head of Crop
Protection Development
said, "These tools will give us
much greater clarity of data —
something we've never been
able to achieve before — so
we will be able to deploy our
R&D resources more
efficiently and shape the
portfolio. These technologies
are going to help us deliver
our R&D targets."



Optimization of our pipeline by focusing on high-value crop/ country combinations and eliminating low-value combinations (\$M's)



Stronger culture of trust



50% improvement in quality and speed of IT delivery



30% reduction in manual and operational IT activities



What were the outcomes?



DevOps is the new black



One Product
Owner with a
single view on
priorities



System Principles driven by sustainability & simplicity





DevOps supplier with an exploitable CI/CD pipeline



Same supplier team builds and



Reserve 20% of monthly cycle for reducing technical or operational debt



Countries 120+



Employee Scientists 1000



Full technology replacement



Starts as an Agile Delivery

Use cases where...





What I need help with...

Use Case A





Countries 120+



Employee Scientists 1,000



Full technology replacement



Agile MVP









Agile-ITIL Hybrid Operations

