

Snapdragon  
smart

# A Practical Guide to Getting the DNN Accuracy You Need and the Performance You Deserve

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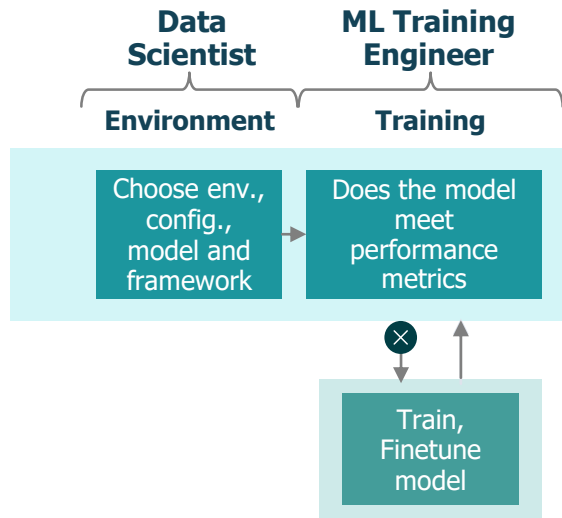
# Qualcomm Technologies AI software stack

Supporting every AI software layer from applications to the metal



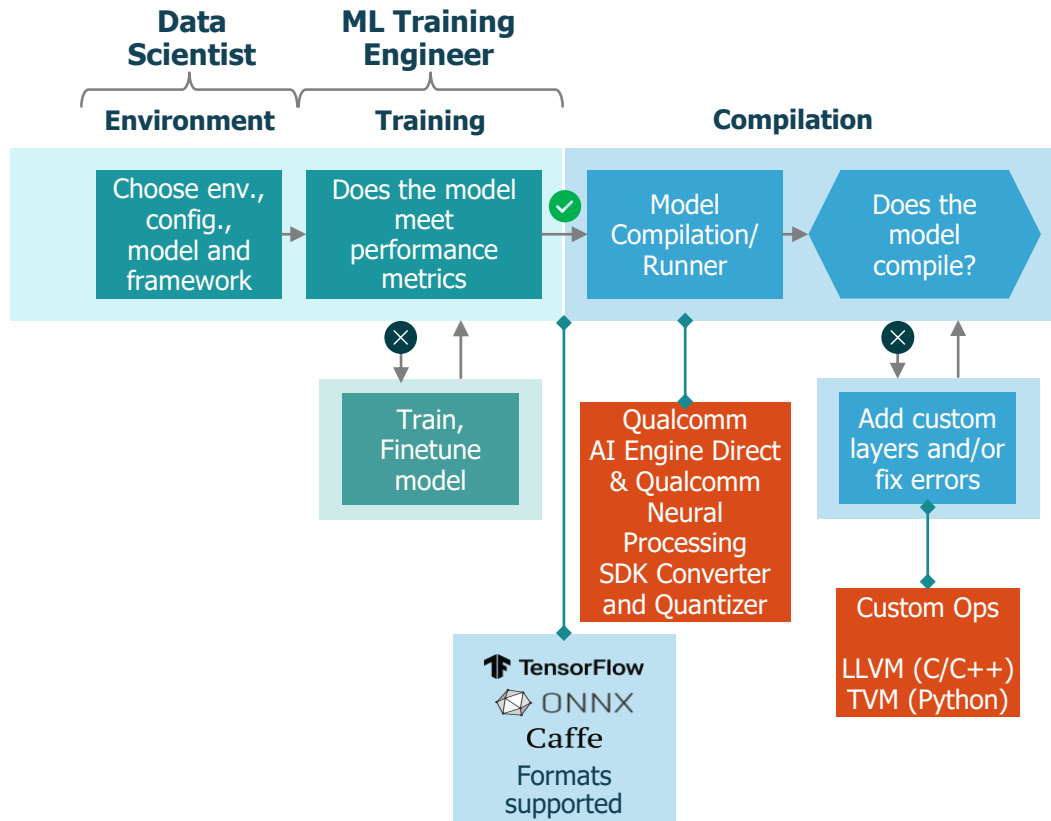
Qualcomm Neural Processing SDK and Qualcomm AI Engine Direct are products of Qualcomm Technologies, Inc. and/or its subsidiaries

# AI software workflow today



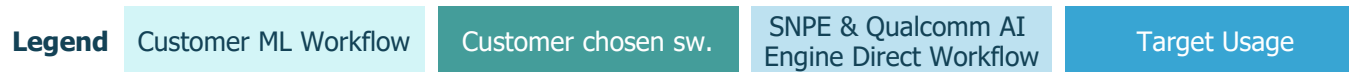
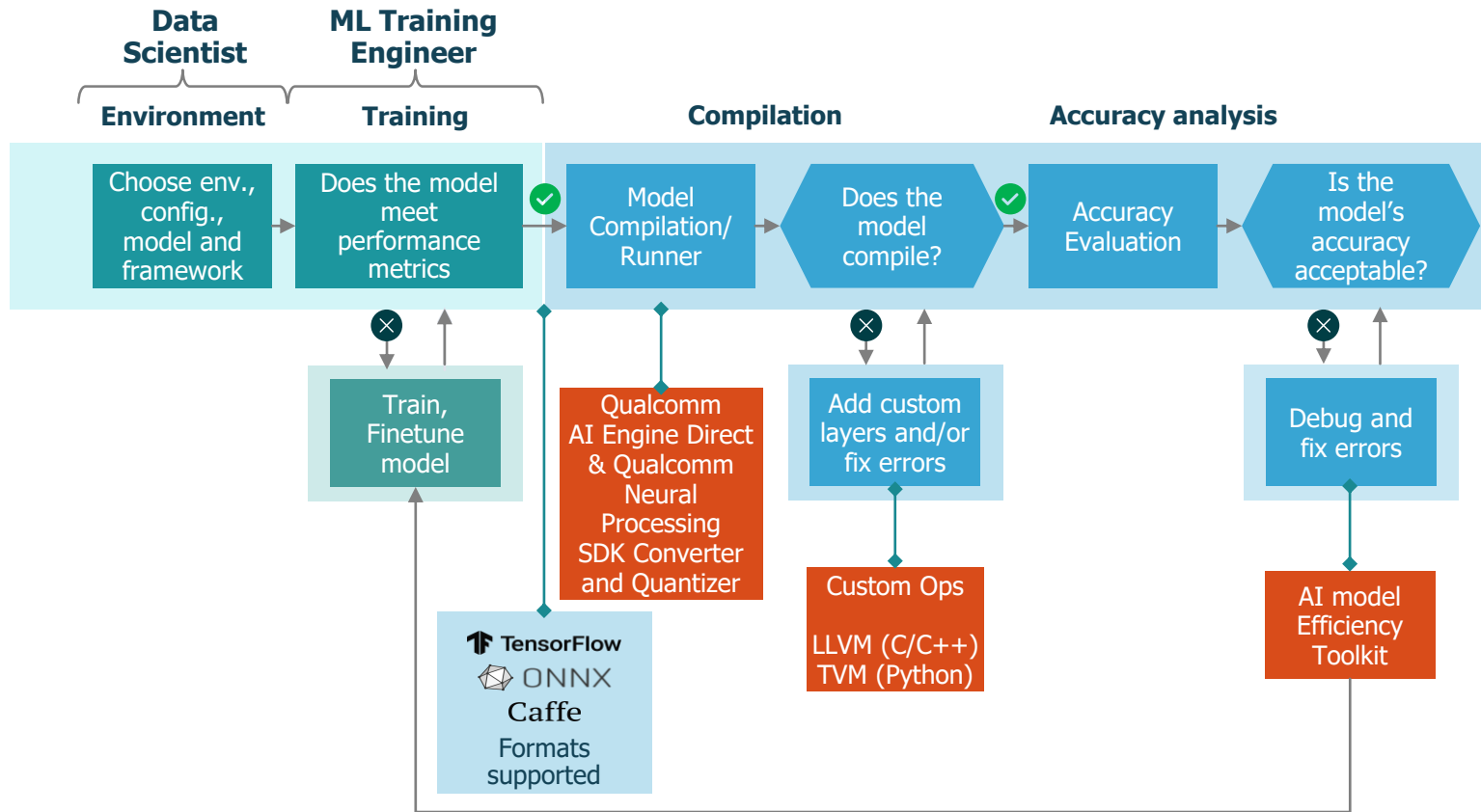
**Legend** Customer ML Workflow Customer chosen sw. SNPE & Qualcomm AI Engine Direct Workflow Target Usage

# AI software workflow today

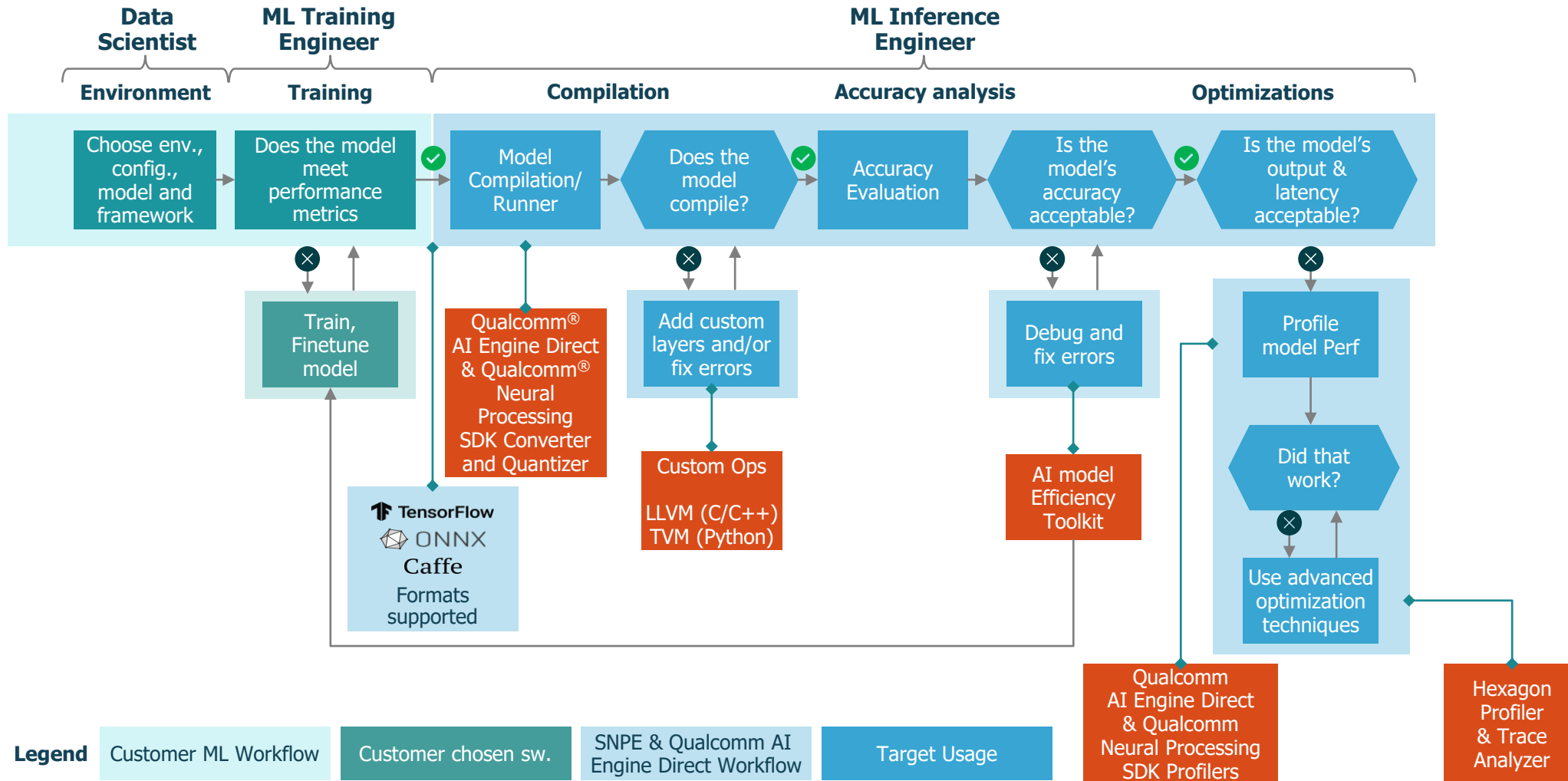


Legend	Customer ML Workflow	Customer chosen sw.	SNPE & Qualcomm AI Engine Direct Workflow	Target Usage
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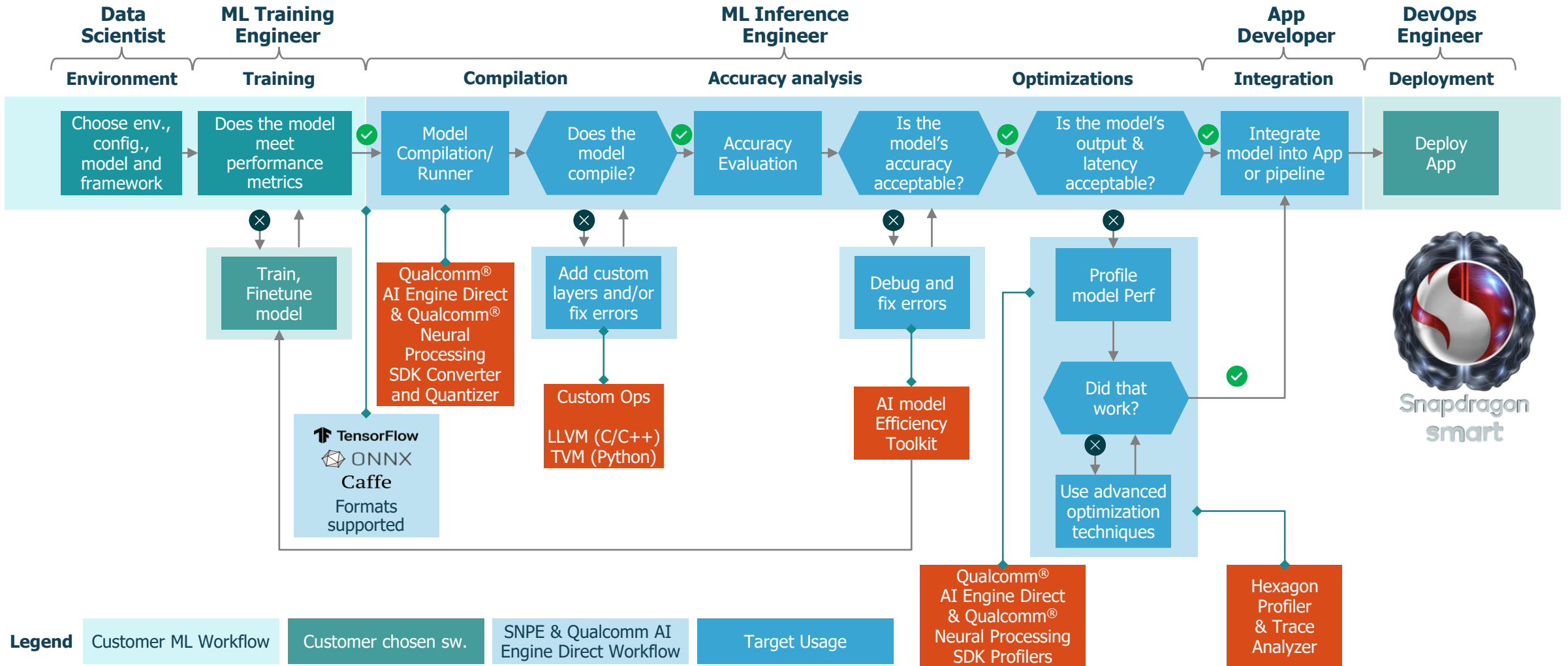
# AI software workflow today



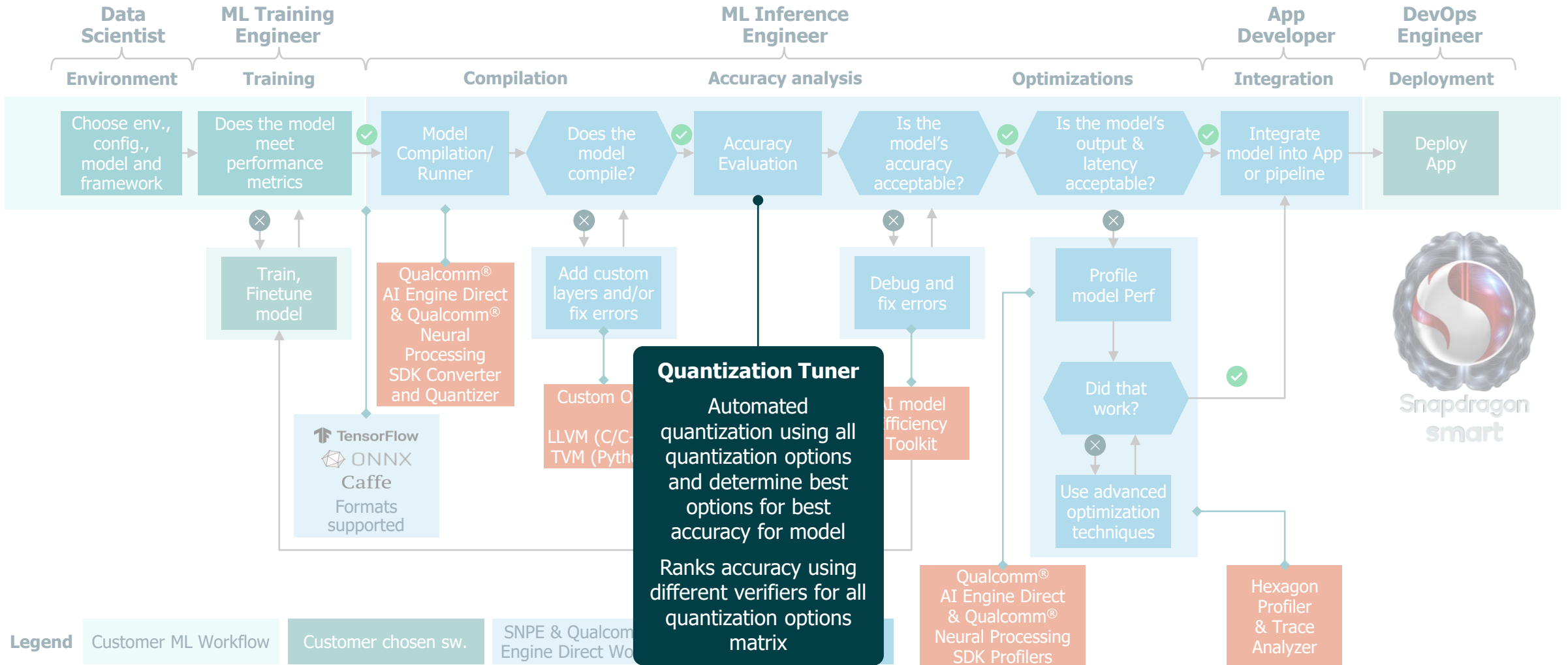
# AI software workflow today



# AI software workflow today

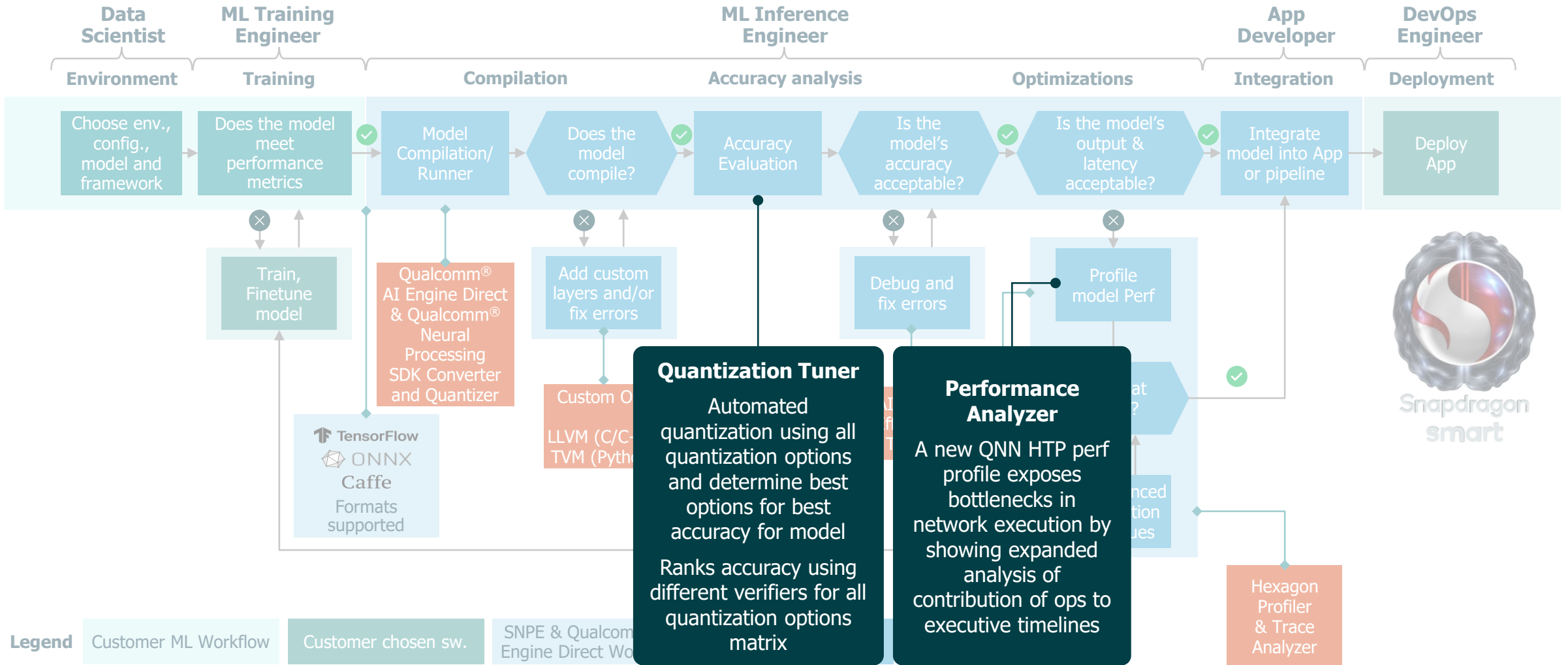


# AI software workflow today

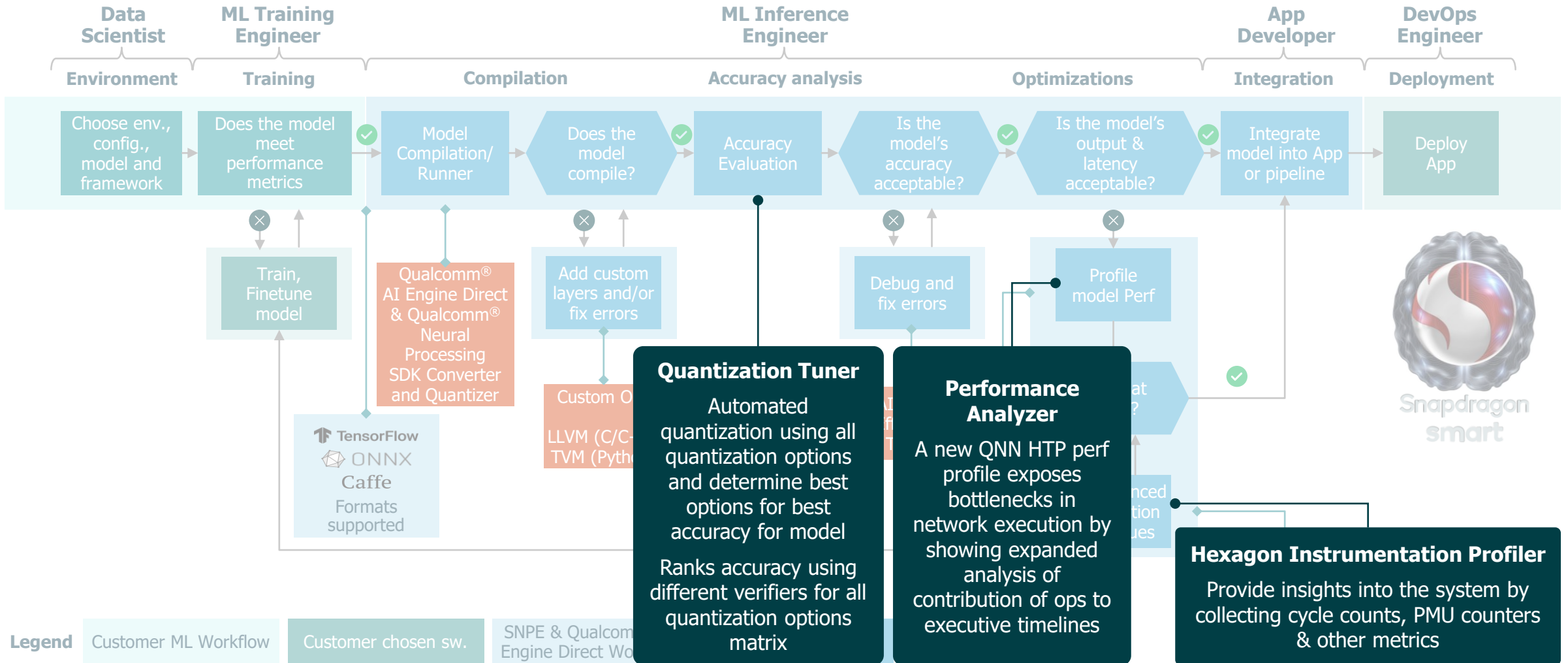




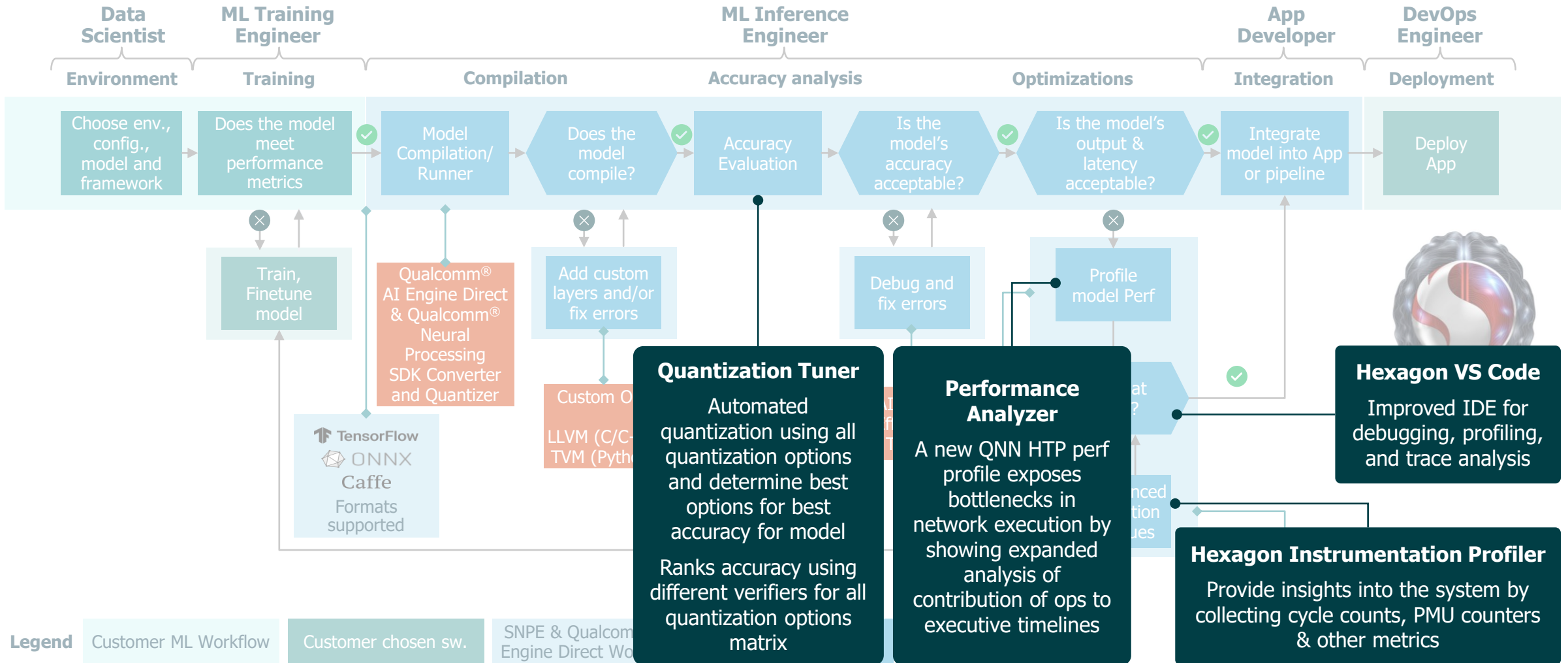
# AI software workflow today



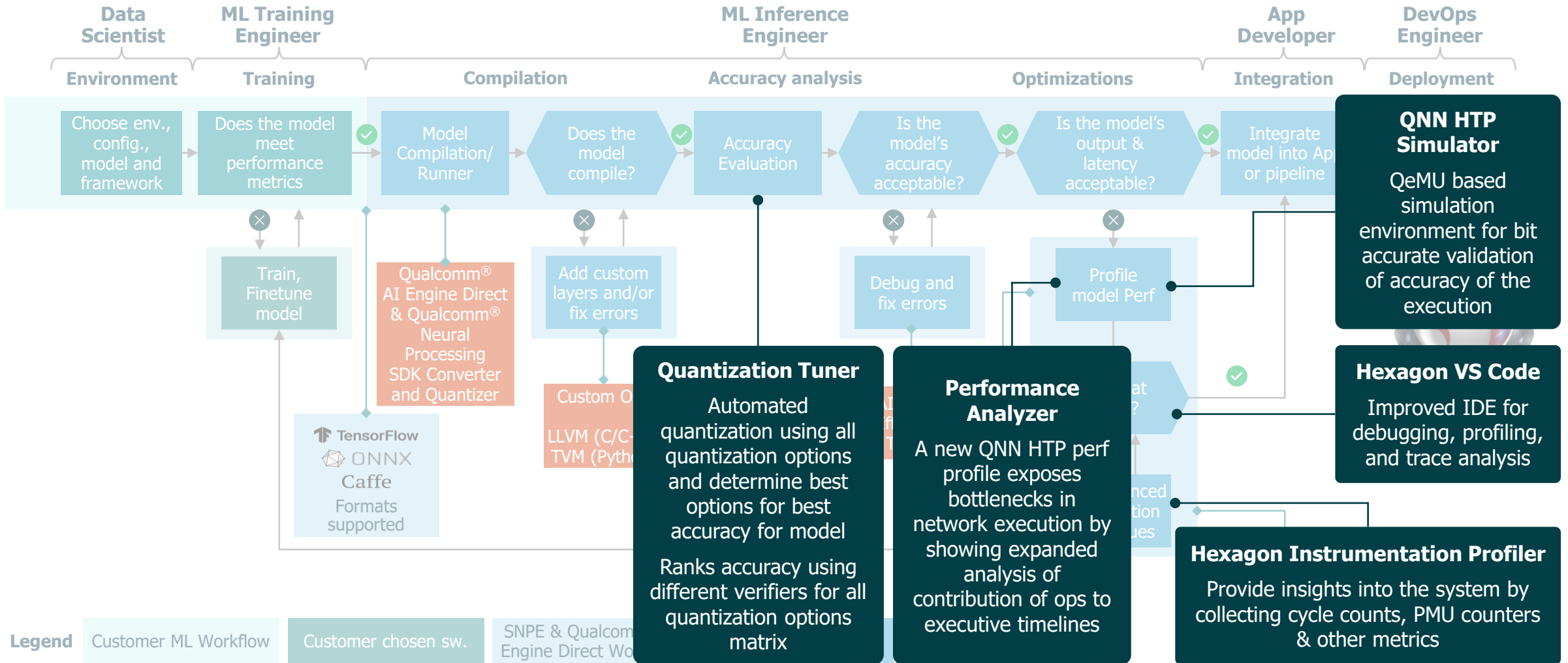
# AI software workflow today



# AI software workflow today



# AI software workflow today



## Take away



- Not all applications are built the same way, your software stack will determine how well your application will perform
- In order to achieve your application full capacity, you need a software stack that is tailored to specifically to what you are looking to accomplish
- Different models require specific tools that only customizable stacks will offer



## Qualcomm AI page:

<https://www.qualcomm.com/invention/artificial-intelligence>

## Qualcomm AI Research:

[https://www.qualcomm.com/invention/artificial-intelligence/ai-research?cmpid=fofyus193556&gclid=CjwKCAjw19z6BRAYEiwAmo64LfQjU8vgH8TxqKTM2PZQp8JibXrjev85wLfKFknJnS\\_b494yZ7e\\_WhoCPQkQAvD\\_BwE](https://www.qualcomm.com/invention/artificial-intelligence/ai-research?cmpid=fofyus193556&gclid=CjwKCAjw19z6BRAYEiwAmo64LfQjU8vgH8TxqKTM2PZQp8JibXrjev85wLfKFknJnS_b494yZ7e_WhoCPQkQAvD_BwE)

## Qualcomm Platform Solution Ecosystem:

<https://www.qualcomm.com/support/qan/platform-solutions-ecosystem>

## GitHub AI Model Efficiency Toolkit (AIMET):

<https://github.com/quic/aimet>

## Qualcomm Mobile AI page:

<https://www.qualcomm.com/products/smartphones/mobile-ai>

## Qualcomm Mobile AI blog:

<https://www.qualcomm.com/news/onq/2020/12/02/exploring-ai-capabilities-qualcomm-snapdragon-888-mobile-platform>

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## 2022 Embedded Vision Summit

*"Powering the Intelligent Connected Edge and the Future of On-Device AI"*

**Ziad Asghar May 18 9:30 - 10:00 AM PT**

*"Seamless Deployment of Multimedia and Machine Learning Applications at the Edge"*

**Megha Daga May 17 2:40 - 3:10 PM PT**

*"Autonomous Driving AI Workloads: Technology Trends and Optimization Strategies"*

**Ahmed Sadek May 17 2:05 – 2:35 PM PT**

*"Tools for Creating Next-Gen Computer Vision Apps on Snapdragon"*

**Judd Heape May 18 10:50 - 11:20 AM PT**

*"The Future of AI is Here Today: Deep Dive into Qualcomm's On-Device AI Offerings"*

**Vinesh Sukumar May 18 12:00 - 12:30 PM PT**

# Thank you

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