High Level Overview
UBIX is an open-source data science platform designed to automate and scale all the key tasks across the end-end machine learning lifecycle.

Executive Summary
UBIX is an open-source data science platform designed to manage the complete machine learning lifecycle on a modern hybrid cloud and container infrastructure. Red Hat OpenShift is the industry’s most comprehensive enterprise Kubernetes platform, and Operators are a modern way to automate infrastructure management tasks. The UBIX Operator helps automate the deployment of UBIX on Red Hat OpenShift, so that OpenShift customers can focus on delivering AI applications instead of dealing with infrastructure issues.

Statement from Red Hat Connect
“Deploying AI applications on a hybrid cloud infrastructure is now easier to achieve with Red Hat OpenShift and UBIX,” said Douglas Barton, President of UBIX. “Partnering with Red Hat OpenShift provides our customers a force multiplier for the practice of data science and application of AI enterprise-wide.”

Statement from Red Hat Connect
“Developers and architects looking to build new applications in, and for the cloud, or migrate existing applications to a cloud-based infrastructure, partner with Red Hat to develop and deliver more supportable solutions sooner,” said Mike Werner, Sr. Director, Global Technology Partners, Red Hat. “Red Hat certification assures a supportable platform for all types of customer deployment models. Red Hat is thrilled to work with software partners like Ubix., resulting in the world’s largest open, and commercially supportable application ecosystem.
Product Benefits

UBIX creates an agile, turnkey approach to big, fast data architecture and data science pipeline that helps you start quickly and build intelligently

- Open Source: Turnkey, powerful open source technology yields performance, capability and cost advantages not possible with proprietary data architectures.
- Embedded ML/DL/AI: Scale knowledge by training models with embedded open source AI learning system libraries including Vowpal Wabbit, SparkML, H2O Sparkling Water, TensorFlow, Keras, among others.
- UBIX APIs are an easy to use, intuitive, and expressive set of routines, protocols, and tools for building and integrating other analytic applications.

UBIX delivers a data science platform that supports your data science team across the entire data and analytics pipeline

- Easier data prep: Automated data shaping speed ingest, cleanse, join, restructure, and transform tasks completed without programming. Dynamic profiling eliminates manual data wrangling.
- Intuitive workspace: No-code visual workspace supports collaboration of data science teams in the performance of tasks across the entire data and analytics pipeline.
- Easy deployment and monitoring: Easy deployment of models as a web service for use in applications. Continuous model performance monitoring and retraining with feedback data.

UBIX invented a learning engine that analyzes and learns from the tasks and teams and augments past, present, and future projects

- Knowledge Collection: Each action taken and each result achieved – positive or negative – feeds into the learning engine to enhance performance of data science team.
- Recommendation AI: Nudges suggest next best action based on analytical workflows during project and ongoing monitor improvement opportunities.
- Early warning system: Analysts are immediately alerted as soon as a deployed model performance drifts, as well as identifying possible future areas of concern.

Use Cases

UBIX helps organizations unlock new insights from big data through the application of AI in areas such as:

- Sport Analytics: wearables data and computer vision models yield insights on an athlete’s readiness-to-train in order to improve fitness and minimize injury risk.

- Life Sciences: clinical interactions data produce insights on the risks of adverse drug effects in order to improve patient safety.

- Supply chain and IoT: sensor data produce predictions on likelihood of equipment failures in order to schedule repairs before breakdowns occur.

UBIX is a Red Hat certified application and is available for customer download from the Red Hat certified container registry.

https://access.redhat.com/containers/?tab=overview#/registry.connect.redhat.com/ubixlabs/ubix-operator