Building a better working world

STATEMENT OF WORK   DMR-6949

Between

Unilever U.K.Central Resources Ltd, 100 VE, Victoria Embankment, London

& Ernst & Young LLP for project ML enabled Demand Forecasting

Further to the Engagement Agreement dated 6th **May 2023**, in connection with Ernst & Young LLP ("we" or "EY") performing professional services for Unilever U.K. Central Resources Ltd be read in conjunction with Unilever Purchasing Agreement or Master Service Agreement CW67101 executed on 1st May 2019 Between Unilever U.K. Central Resources Ltd and Supplier name Ernst & Young LLP. All the terms and condition in the above stated Unilever Purchasing Agreement are applicable to this Statement of Work.

1)   Statement of Work:
Client: Unilever U.K.Central Resources Ltd. **Project Name**: Industrialization_Thailand **Statement of Work**: May 2023 – June 2023 **MSA/UPA Agreement#**: CW67101 **Project Code: MLOps-Industrialization**

2)   Project Background:
By leveraging Machine Learning capabilities, Unilever has undertaken a program to support Industrialization. EY will be delivering MLops industrialization for **Thailand**. This is done under the program **Integrated Operations Program.**

3)   Overall Project Scope:
Our experienced professional would assist Unilever in managing complex programs across Supply chain projects that focus on delivering value, reducing risk, and enhancing enterprise alignment. **4) Geographical Scope:** Geographical scope includes Thailand. EY resources will work out of Unilever Bangalore locations to reap the benefits of cost advantages. **5) Functional and System Scope:** The project will be led by Global D&A Solution Factory and the Global solution Delivery project team consisting of UniOps Enterprise Solutions and EY will be formed. This is a non-system consulting project and hence involves not system changes as part of its scope.

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SoW No UKCR_230503_01_v1

We will not identify, address or correct any errors or defects in your computer systems, other devices or components thereof ("Systems"), whether or not due to imprecise or ambiguous entry, storage, interpretation or processing or reporting of data. We will not be responsible for any defect or problem arising out of or related to data processing in any Systems.

6) Technical Scope:

Scope	Details
Modularization	Code separation – Pre-processing, Model training, Post-processing Code Reusability - Classes/functions and libraries Scalability -
Parameterization	Settings file Naming convention
Experiment tracking	Tracking of the number of runs/experiments. Tracking of input and output dataset versions per run. Tracking of hyperparameters per run Tracking of model metrics per run.
Parallelization/Distributed Computing	Training of models in parallel Data engineering over multiple computers?
Logging	Logging the steps Exception handling. Logs/exceptions/warnings captured in a centralized location.
Devops	Code repository Separate branches for dev, QA, and prod. Branching / Merging strategy Automated CI/CD/CT pipeline in place in DevOps. Disaster recovery mechanism in place.
Testing	Data validation checks System integration tests. Model sanity checks in place.
Monitoring	Drift tracking Data quality checks Infrastructure monitoring Feature importance being tracked
Adaptability - Use of right design pattern	Ability to add a new feature Ability to add a new model Ability to add new metrics.
Data Sources	No manual files/ Plan to achieve data sources from UDL/BDL
The Monitoring part, drift detection/dashboard, will be done on best approach, either:	a. use approach proposed by EY, if it gives better results b. Or follow the current standards that MLOps has today

7) Project Timelines: Unless otherwise agreed, and subject to the terms and conditions, this SOW is valid till 30th June 2023.

8) Overall Project Assumptions: The calculation of fees is based on Fixed basis Fees are defined assuming India based resources only. Additional costs will be incurred for deploying EY resources from other regions/EY local resources for respective countries.

9) Travel and expense: Travel expenses will be billed as per actual and as per the standard contract between Unilever and EY

Team Scope, Deliverables and Key Activities

10) Team Scope:

This document covers the roles and responsibilities of the following teams, within the scope of the overall team structure.

a) Unilever Responsibilities

Unilever Enterprise solution managers will monitor quality standards of deliverables, evaluate whether objectives are being met and enable project management. EY is fully accountable for deliverables mentioned in part (a) above. Unilever manager will be responsible to escalate or take corrective actions where other 3rd parties are involved.

b) Specific additional terms and conditions

Our work will not be performed in accordance with generally accepted auditing, review, or other assurance standards in [the relevant jurisdiction] and accordingly does not express any form of assurance. None of the Services or any Reports will constitute any legal opinion or advice. We will not conduct a review to detect fraud or illegal acts.

Not withstanding anything to the contrary in the Agreement or this SOW, we do not assume any responsibility for any third-party products, programs or services, their performance or compliance with your specifications or otherwise.

We have based any comments or recommendations as to the functional or technical capabilities of any products in use or being considered by you solely on information provided by your vendors, directly or through you. We are not responsible for the completeness or accuracy of any such information or for confirming any of it.

Commercial Impact

11) Commercial details :-

Sr. No	No. of month	Months	Cost (EUR)	Total Fees (EUR)
1	2	May'23 – June'23	6000	6,000
			Total	6,000

- ✓ **IMP Note***
- **The above EUR rates are calculated at a conversion rate of 1 EUR = 81 INR. Billing will be done basis applicable monthly rate as per the agreement between EY and Unilever**
- The above rates are exclusive of Taxes & any applicable statutory charges
- Mandatory to attach a procurement-approved quotation
- Travel expenses need to be approved by IT (stakeholder & Procurement).

12) Other Overheads:-

	UOM	Rate (Per Month)	Total Amount
Laptop Charges			Nil
Data Card			Nil
Mobile charges			Nil

13) The Commercials:

The overall commercial for the project would be 6,000 EUR /- and the additional cost may be applicable based on the support requested and SR as applicable

Approval By: U.K. CENTRAL RESOURCES LTD	Supplier name: EY LLP
Approval By: *Abhishek Jain*	Approval By:
Name: Abhishek Jain	Name: Ajay Kamat
Title: Senior Manager, Solution Factory DP	Title: Partner
Date:	Date: 3rd May 2023

Approval By: U.K. CENTRAL RESOURCES LTD	Approval By: U.K. CENTRAL RESOURCES LTD
Approval By: *Chandrusen Kotai*	Approval By: *Poornima Biradar*
Name: Chandrusen Kotai	Name: Poornima Biradar
Title: Tech Solution Design Manager	Title: ML Ops Senior Manager
Date:	

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Final Audit Report

2023-05-08

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