INTENT OF THE REQUEST FOR PROPOSAL (RFP):

McKinsey.org is requesting proposals from interested parties to build or adapt a software platform for the operational management of recycling sorting centers.

BACKGROUND

McKinsey.org is an independent non-profit founded in 2018 by McKinsey & Company to address the world's most complex social and environmental challenges by partnering across sectors to create lasting and substantial impact. Rethinking Recycling – our flagship program – aims to empower every community to build green, inclusive and economic recycling ecosystems.

Our model for Rethinking Recycling is built around four pillars that together will drive economically sustainable and scalable recycling systems globally:

- **Secure sustained demand from industry players.** By understanding and addressing the unmet needs of the end market for recycled materials, we aim to generate new purchase commitments from industry players that cover the full recyclable waste stream.
- **Secure cleaner supply from communities through behavior change and service improvements.** To capture the full volume and value of recyclable material, we must collect the whole waste stream with clear separation of wet organics and dry recyclables (and residual waste).
- **Ensure cost-effective, ethical operations throughout the recycling value chain.** To provide end markets with quality, quantity, and price-competitiveness of recycling products, the recycling supply chain must be highly productive and efficient.
- **Apply digital innovation to improve transparency, efficiency, and user experience throughout the system.** Digital solutions such as automated data tracking, logistics optimization, services through mobile phones and smartphones, and secure verified transaction platforms all have enormous potential to shift the economics and environmental outcomes of the recycling system, while also driving user satisfaction and participation.

Our first initiative is to build a modular operational and financial management tool for sorting center operational managers, admin, collectors, sorters and the program team. This Operational Platform will help operational managers run efficient, profitable sorting centers and form a core part of McKinsey.org's scaling model. It will also allow us to start to gather a more holistic data set which shows how different elements of the value chain work together and start to build a data-backed set of initiatives for the following stages of development.

STATEMENT OF WORK

Create a modular operational and financial management tool with an associated user interface for sorting center operational managers, admin staff, collectors and sorters and the program team (McKinsey.org) in Indonesia and Argentina.

The core functionalities of the Operational Platform should include:

Waste Collection

- Automated pickup routing
- Manual pickup routing
- View pickup route
- Set priority tasks
- View priority tasks
- Mark poorly sorted or dangerous waste
- Input comments about the unit
- Track sorting compliance
- Track unit pickup history
- Track truck KPIs
- Receive and process customer scheduled pickups

Waste Inbound

- Forecast workload for planning
- Track material in (volume / material / source vehicle / source cooperative)

Waste Outbound

- Track sorted material out (volume / material / source / destination / price of sale)
- Add/modify recycling materials quantities

Reporting

- Track material quality
- Track worker throughput KPIs
- Track worker attendance (check-in / check-out)
- View worker attendance KPIs
- View aggregated sorting center data by cluster / region
- View operational manager performance (financial, SOP adherence, task management)
- Track strategic goals and targets across volume, HR, profit, costs
- View data of any sorting center
- Download audit data
- View sorting center performance over time
- View sorting center benchmarks

Fleet management

- Track vehicle use and maintenance

Financial performance

- Track sales
- Track customer payments
- Track staff payroll
- Generate ingoing / outgoing expenses including logistics

- Track financial performance over time

Customer management

- Manage customer details
- Take customer payment
- Pause / cancel customer collection
- Broadcast service update
- Capture customer feedback
- View customer feedback
- Manage customer feedback
- View customer feedback KPIs

Admin

- View user analytics
- Undertake user testing / beta testing
- Create test account
- Manage user access
- Deploy beta test

Additional nice-to-have functionalities:

- Customer platform including a customer dashboard, integrated 'chatbot' /feedback / complaint system, broadcasting mechanism and incentive-based mechanism at household level
- Route / cluster optimization algorithm for collection system

Please see the appendix for a full breakdown of use cases.

SYSTEM COMPONENTS

The solution should be composed of:

- A cloud-based application running on a public cloud environment, with a modular, API driven architecture and CI/CD tooling
- Mobile and desktop web interface, with mobile app (Android / iOS) for in-field data capture
- Data capture and processing
- Business process management and rule creation
- Customer CRM and payment gateway

DESIGN REQUIREMENTS

The platform should be web based, mobile friendly, assessible and light weight. It should be hosted in a public cloud environment such as AWS.

There are some specific requirements which are fundamental to this project:

- **Accessibility**: Elements of this solution will be used by end-users in industrial environments with limited IT competency, low-end mobile devices, limited data plans, intermittent data connectivity and potentially limited literacy. Options to deal with this will be important.
- **Data Ownership:** The data which is gathered on the platform will be critical to building models to improve efficiency in the future. The data generated by the platform must be owned by McKinsey.org and accessible for use by the team.
- **Affordable for end users:** Most of the end users (sorting centers) will have *extremely* limited budgets for high-complexity tools. Low ongoing cost solutions will be critical.
- **Security:** While we do not expect to collect highly sensitive data, the platform must still be highly secure, to avoid the risk of data breaches and reduced trust in the platform.
- **API Orientation:** It is *not* a requirement that the proposed solution has 100% of the required features – we are expecting to provide development expertise to support the project. For example, we may develop custom front-end solutions for collectors or waste workers. However, this means we are looking for API oriented solutions which can be easily extended or built upon.
- **Modular:** We will launch initially in Indonesia and localize specific modules for Argentina over time. The platform should be easily localized and translated.
- **Scalable:** The platform will be deployed initially to a small number of sorting centers, but we anticipate being able to scale to tens of thousands of sorting centers and hundreds of thousands of end users.
- **Lock-in:** Given we are a non-profit organization, we are highly sensitive to potential long-term lock-in to solutions which may fluctuate in price over time. We are also expecting that the Operational Platform will contain a number of components provided by different parties (as well as in house development), so exclusivity with a vendor will not be something we would be able to consider.

In your application, please specify which features are already available in your platform and which would need to be custom built. Please also specify which third party platforms (e.g., cloud providers, CRM platforms, etc.) you would leverage.

WAY OF WORKING

McKinsey.org is committed to working with you in an agile manner. This means:

- Collaborating with you to develop a shared product roadmap
- Prioritizing features based on business value
- Testing features through the release of MVPs and betas, and iterating together

This means that you should anticipate being committed to an agile way of working, which should include:

- A dedicated, full time project team of engineering, design and product management resources

- Willingness to work to a daily schedule that works for both project team and McKinsey.org leadership (GMT+8), with at least 3 hours crossover per day
- Working in two-week sprints, with regular feature deployments
- Regular sprint ceremonies, stand-ups and retros
- Shared OKRs and regular reviews against progress

The selected firm will be available for regularly scheduled weekly or periodical programmed phone calls and as needed with the rest of the team to ensure consistent communication and alignment on active tasks and deliverables. The firm will be expected to provide at least one discovery meeting via video conference, which should be included in the proposed budget. Please include expenses for any additional travel that the firm expects to incur in service of delivering the best quality results possible. The team works very collaboratively on all activities, and will similarly expect the input, guidance, and buy-in of the selected firm.

The firm will provide activity reports on an agreed upon schedule (usually monthly or quarterly) basis. Expenses cannot be reimbursed without a correlated activity report with respective receipts/invoices when applicable.

STAFFING

McKinsey.org will provide a number of digital resources to this project.

- **Barry Saunders**, McKinsey.org Director of Digital Innovation, will provide overall project direction and be primary point of contact.
- The McKinsey.org Digital Manager will support project operations and support.
- The McKinsey.org **engineering director** will provide overall technical guidance.
- The Mckinsey.org **design director** will lead user research and digital design, collaborating with your design team to undertake research, create and test prototypes, and create high-fidelity designs. This resource will be 0.5FTE for 6 months.
- The Mckinsey.org **product owner** will work with your product owner to create a product roadmap, priorities features, and test and iterate features through regular MVP releases. This resource will be 0.5FTE for 6 months.
- The McKinsey.org **development team** will work with your development team to co-develop and test functionality. This resource will be 4FTE for 4 months.

Please take these resources into account in your estimates.

TIMELINE

We anticipate a maximum of 6 months' work, deploying features every two-week sprint.

BUDGET STRUCTURE

In your proposal, please structure an upfront MVP phase of 4 to 6 weeks, which will constitute a stage gate to determine if we move forward with a full build phase of up to 5 months. Upon satisfactory deployment of an initial MVP, we will scope the remainder of the project. Please structure the budget presuming 2-week sprint cycles.

The budget must follow the format of the provided budget template and detail the following*:

- **Team Structure and Daily Rate**: Include the daily rate of each staff x number of days per person on a monthly basis. Please provide a description of each position's skill level and technical capabilities. Please include management and governance overhead
- **Licensing Fee**: Any licensing fees associated with MVP development
- **Platform Software**: Any platform or tooling software required for MVP development
- **Travel**: While we do not expect any travel, if the bidder believes travel is required to optimize this work, please calculate transportation (not including airfare) and per diem rate & lodging x number of days per traveler.
- **Other expenses:** Any other expenses not captured elsewhere

Please also separately specify ongoing support costs and assumptions. Please separate out hosting costs from maintenance.

*Use the second tab in the budget template "Back up Calculations" to provide the breakdown of your calculations.

McKinsey.org will consider proposals that include cost FLEXIBILITY based on potential co-branding OPPORTUNITIES.

IP OWNERSHIP

- McKinsey.org retains the rights to all customer data and personally identifiable information (PII) entered into the platform.
- McKinsey.org retains the rights to sell access to the Operational Platform to end users
- The vendor retains the rights to the implementation of the software features and software-specific patents unless otherwise negotiated
- McKinsey.org owns the rights to solely-McKinsey.org-built software modules

PROPOSAL FORMAT & CONTENT

Proposals should be concise and limited to information requested, no longer than 8 pages, Times New Roman 11 font size, 1" page margins, not including appendices, which shall be no longer than 15 pages total, for a combined limit of 23 pages. Proposals can include a maximum of 20 URLs or external references. Each proposal shall include the following information:

- **Work plan**: Provide a plan for delivering the features outlined in the Statement of Work, including timelines, deliverables, and expected results.
- **Existing features, roadmap and architecture**: Based on the requirements outlined in the Scope of Work, provide a clear view of which features already exist and which ones must be built, adapted or configured. Also give a view of the system architecture including 3rd party services and tools.
- **Costs**: Submit a cost proposal using the provided template including a proposed amount for each major stage and the overall cost to complete the entire Scope of Work. Proposals must

include a list of proposed personnel who will work on the project, allocations of time each person will work on the project and the corresponding hourly or daily rates. Cost proposals must include all costs that will be incurred including projected reimbursable costs for travel, communications and other related expenses.

- **Qualifications**: Provide resumes of the key personnel to be assigned to the project and list their portfolio within the last three years.
- **Case examples or samples**: Provide examples or samples of relevant project experience.
- **Schedule**: Provide a schedule, similar to the timeline shown above, outlining key milestones related to the scope of work and estimated date of completion.
- **Additional services (optional)**: Include any related and recommended services not specified in this RFP which may be considered essential or beneficial by the firm. These services should be priced separately.
- **References**: Provide 3 professional references including name and daytime contact information.

An electronic PDF version of the proposal must be submitted to Barry Saunders at barry@mckinsey.org

RFP PROCESS

Bidders can submit questions in one sending to Barry Saunders by 26 June 2020 at barry@mckinsey.org. By submitting questions, bidder acknowledges that their questions will be collated into a document of all questions and answers, to be posted for viewing by all bidders.

- Answers will be provided within 72 hours.
- All proposals must be received by 13 July 2020
- All criteria for evaluation are set forth in this RFP. Only these criteria will be used by the Project Team to determine, in its sole judgement, the most qualified firm.
- It is the responsibility of the firm submitting a proposal to ensure that the proposal is delivered on time. Any proposals received after the deadline will not be considered.
- The Project Team reserves the right to reject any or all proposals with or without cause.

SELECTION PROCESS

The selection of a firm will be made based on experience and qualifications; ability of proposed approach to meet the needs of the organization; and cost effectiveness. The selected agency will be notified 20th July 2020 and will be asked to respond to final negotiation requests and questions based on the review provided by the team.

The selected company will commence work 10th August 2020 unless otherwise negotiated.

Use Cases	Manager	Admin	Collector	Sorter	Mckinsey.org	Auditors
Waste Collection						
Automated pickup routing	x		x		x	
Manual pickup routing	x		x		x	
View pickup route	x		x		x	
Set priority tasks	x	x				
See priority tasks	x	x	x	x	x	
Mark poorly sorted or dangerous waste	x		x	x		
Input comments about the unit			x	x		
Track sorting compliance	x		x	x	x	x
Track unit pickup history	x					
Track truck KPIs	x					
Receive and process customer scheduled pickups	x	x				
Waste Inbound						
Forecast workload for planning	x				x	
Track material in (volume / material / source vehicle / source cooperative)	x			x	x	
Waste Outbound						
Track sorted material out (volume / material / source / destination / price of sale)	x			x	x	
Add/modify recycling materials quantities	x				x	
Reporting						
Track material quality	x			x	x	
Track worker throughput KPIs	x				x	
Track worker attendance (check-in / check-out)	x	x	x	x		

View worker attendance KPIs	x				x	
View aggregated sorting center data by cluster / region					x	
View operational manager performance (financial, SOP adherence, task management)	x				x	
Track strategic goals and targets across volume, HR, profit, costs	x				x	
View data of any sorting center					x	
Download audit data					x	x
View sorting center performance over time	x				x	x
View sorting center benchmarks	x				x	x
Fleet management						
Track vehicle use and maintenance	x	x			x	
Financial performance						
Track sales	x	x			x	
Track customer payments	x	x			x	
Track staff payroll	x	x			x	x
Generate ingoing / outgoing expenses including logistics	X	X			X	
Track financial performance over time	x				x	x
Customer management						
Manage customer details	x	x			x	
Take customer payment	x	x				
Pause / cancel customer collection	x	x			x	
Broadcast service update	x	x			x	
Capture customer feedback	x	x				
View customer feedback	x	x			x	x

Manage customer feedback	x	x			x	
View customer feedback KPIs						
Admin						
View user analytics					x	
Undertake user testing / beta testing					x	
Create test account					x	
Manage user access					x	
Deploy beta test					x	