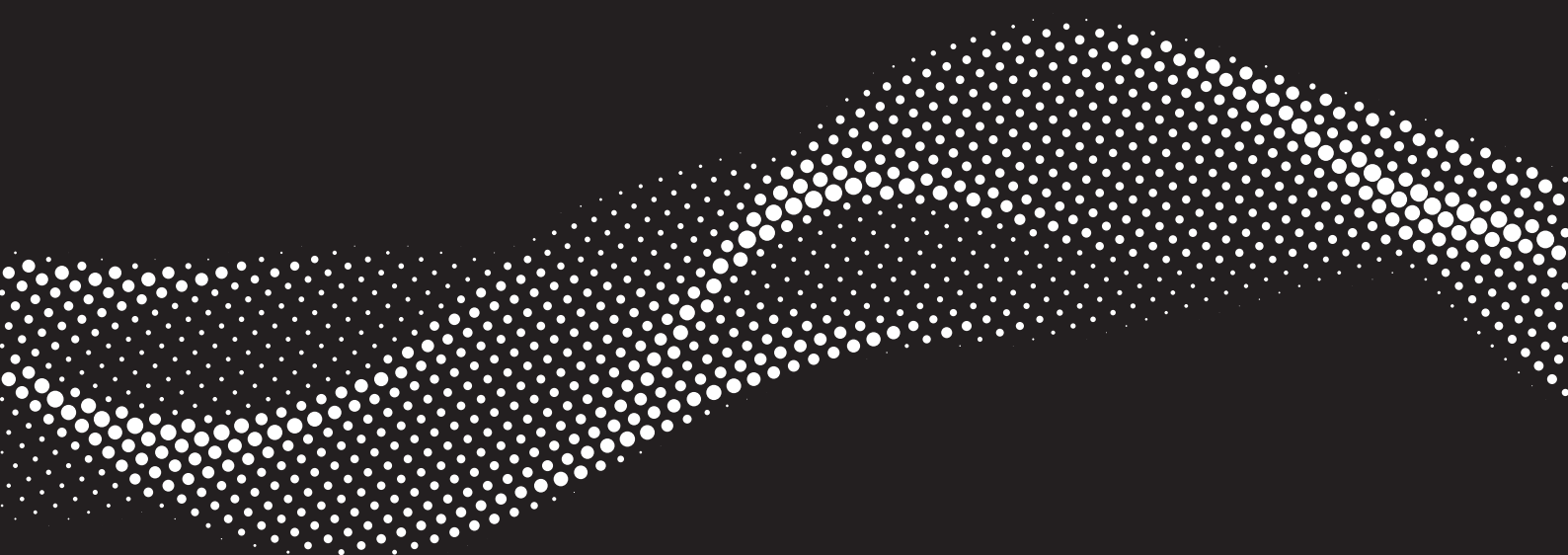


LOKULUS LABS

Workforce Optimisation

Managing a Work-From-Home workforce while
maintaining consistency and effectiveness



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The challenge

Organisations of any size will inevitably carry a backlog of open tasks that are required to be processed and completed. Customer Service departments epitomise this challenge as they receive wide ranging requests via different channels, there is the requirement to understand overall demand, skills required and relative priorities for each task when compared to adjacent activities. Get this right and customer satisfaction naturally increases as service expectations are consistently delivered, the consequences of getting this wrong is well documented, both from diminished customer loyalty and employee fatigue.

For the more modest business operation it may be practical to manage this on a manual basis, but this still requires continual re-evaluation of the facts to ensure good levels of service and is at the risk of both honest mistakes and deliberate abuse. Added to this the knowledge for managing this challenge are often vested in a single individual, ultimately creating a weak link in the business process.

Naturally as the size and complexity of a Customer Service operation increase the practicalities of achieving any consistency are diminished as tasks are inevitably distributed into silos, each of which will require their own individual expert, introducing both variance and a loss of the holistic visibility.



Work From Home Agent model complexity

The Covid-19 pandemic is a recent example of how organisations have been forced to reconsider the effectiveness of their business continuity plan. Businesses must address how a modern workforce can operate efficiently, as it adopts and adapts to new ways of working for the future.

Prior to the seismic events of Covid-19, customer service teams predominantly operated as centralised functions, organised and managed into physical teams by discipline or skill. Team leaders have the role to distribute and track tasks daily, creating a need for coaching or performance encouragement. This key role requires the, often-overlooked, ability of visual observation and a subconscious sense of what is normal.

As businesses transform from this well-understood and structured operational model, to one that is unstructured and disconnected physically, it offers the opportunity to capitalise and tap into the power of artificial intelligence to make decisions irrespective of workforce location.



A very empty Lokulus HQ in the midst of lockdown in 2020



Introducing intelligent workforce optimisations

The Oxford dictionary defines artificial intelligence as:

“The theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.”

At Lokulus to meet the increasingly complex challenge of optimising throughput for business tasks we have created our own AI ‘bot’ to address these demands. Codenamed REG, it has the capability to effortlessly scale from the smallest business operation through to largest enterprise that requires the simultaneous management of hundreds of thousands of active tasks combined with thousands of users, all day, every day.

As previously identified, to optimise the throughput of tasks a deep understanding of both the demand (task queue) and the available workforce are required. Exploring this concept in more detail, a detailed knowledge of both the demand and resources are required prior to applying the optimising intelligence. Each task is segmented by work type, method of working, anticipated duration and a relative priority.

For more diverse organisations, this segmentation may be extended to include other factors such as brand or language. In much the same way that tasks are analysed, colleagues consist of known primary and secondary attributes, coupled with dynamic properties such as most recent activities.

Unlike the traditional task distribution methods undertaken by a human, REG allocates tasks singularly based upon current real time knowledge of the demand backlog, allowing for the ultimate in flexibility during the working day. Additional factors such as continual context switching that have been proven to dramatically effect productivity and fatigue are also included within the resourcing algorithms.

In summary, when a busy organisation is managing many thousands of tasks, REG can consistently analyse every second of every day, dealing with all the possible variables that a human cannot.



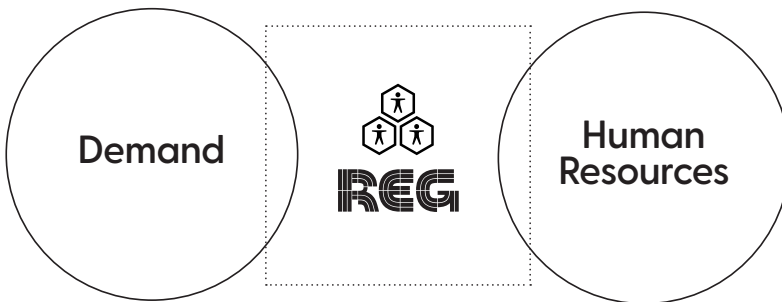
REG also monitors the performance of the individual, all in real time.

REG tracks the effectiveness of everyone, comparing their performance against benchmarks for each task type, overall availability and importantly their qualitative metrics.



Data-driven decisions

REG incorporates multiple data points into the decision rules when evaluating how tasks are effectively resourced across an entire organisation.



Demand Side

Channel - typically, different channels (email, chat, letter, social media etc.) require both uniquely different prioritisation and the requisite skills to action

Brand - orgs that operate multiple brands may wish to differentiate on service level or allocate to specific human resources groups

Language - the customers language may determine the resource type required to action the task

Process Type - what type of activity is to be completed, this could also encompass a sub- activity that requires a different skill, such as an authorisation of a previous process step

Human Resources

Data points for human resources typically mirror those on the demand side, with the opportunity to define primary and secondary skills to support virtual resource switching as demand dictates.



Task allocation logic

REG continually monitors the status of human resources and as they become available for work evaluates in real time the demand backlog to identify the most appropriate task for them to complete based upon their specific profile. As the urgency to resource tasks rises in certain skill groups, REG can automatically reallocate less utilised resources from other skilled areas to fulfil these spikes, progressively releasing them back to their original tasks as the spike declines.

REG considers a range of factors when determining the next best task for an available resource, the principle elements being the allocation algorithm, work determination and user load balancing.

Allocation Algorithm Parameters

The allocation algorithm is set to suit the operating principles of an organisation and is configured to be one of:

Lowest SLA - Allocates work items ordered by how close each work item is in age to breaching its service level agreement (SLA) target in elapsed time, ignoring whether the intervening days were working or non-working according to the brand calendar (identifies working shift patterns)

Standard - Allocates work items using the same order as Lowest SLA, but also taking into account channel ordering. Under this algorithm REG can pass more than one task to a user concurrently

Language - the customer's language may determine the resource type required to action the task

Oldest - Allocates tasks ordered by age as calculated in elapsed time, oldest first, ignoring whether or not the intervening days were working or non-working according to the brand calendar

FIFO - *First-In-First-Out* REG orders work purely on its order of receipt, no sorting, ordering or considerations of SLA are applied

Working Days - Allocates tasks ordered by age as calculated in SLA days, oldest first, taking into account whether or not the intervening days were working or non-working according to the active calendar

Standard With Calendars - This is the standard algorithm but uses calendar* information when calculating the effective SLA

Lowest SLA With Calendars - This is the lowest SLA algorithm but uses calendar* information when calculating the effective SLA

Working Days With SLA - This is based on the Working Day algorithm but uses the Age in Working Days adjusted by the SLA (converted to Working Days) to order the tasks. Where two tasks have the same ordering the one with the lowest SLA is offered first

*REG can be configured to operate with one or more (brand specific) calendars. Each calendar has defined shift or working hour definitions for each work pattern type (weekday, bank holiday, weekend etc.) whose values are used to calculate effective service levels.



About Lokulus

Lokulus was founded in 2001 and is a UK based technology provider. Over the past 20 years we have continuously developed our solutions to provide a best-in-class Customer Interaction Management platform.

We specialise in simplifying complex customer journeys and transforming customer service offerings.

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