DIFFERENTIATING INTELLIGENT SCHEDULING SOLUTIONS

KEY QUESTIONS:

P2

What are the impact and variations of travel distance and time in an intelligent scheduling solution?

P3

How does the concentration of technicians influence scheduling requirements?

P4

How do technician skillsets impact the need for an intelligent scheduling solution?

IFS WHITE PAPER

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DIFFERENTIATING INTELLIGENT SCHEDULING SOLUTIONS

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With so many scheduling solutions on the market it's difficult to select which solution best fits your service organization. Some scheduling solutions offer routing, others offer automated scheduling, while some provide real-time schedule optimization. It's important to recognize what type of solution is suitable for your service organization, but how do you determine which solutions are appropriate? There are many contributing factors to deciding which scheduling solution is best for your organization. This paper examines a few of those key factors.

Travel time plays a large role in determining what type of scheduling solution is suitable for your organization.

TRAVEL TIME AND COMPENSATION

Travel time plays a large role in determining what type of scheduling solution is suitable for your organization. Many organizations desire a better handle on field utilization and field productivity; in other words, knowing who is going where, and when and where technicians are currently located. If a service organization desires to take control of managing its field resource activity, including where it goes and in what sequence, there are scheduling tools that can address this requirement.

The generation of that schedule is highly dependent on the concept of time. Actual travel time provides for more visibility, tighter control of utilization, and a proactive role in scheduling resources in comparison with estimated travel time, or where a service organization assigns the work and allows the technician to determine his/her own schedule. Travel could include foot traffic, road travel, or even air travel. Service organizations that simply require estimated travel time can benefit from less complex field service scheduling solutions, whereas service organizations requiring actual travel time should pursue intelligent scheduling solutions.

Other constraints that have an effect on scheduling include compensation. Generally you want to send the least costly resource on an activity who has the proper skills or certifications and has availability to achieve the task within a given service level (SLA). We also want to consider the cost of overtime in this schedule determination. Overtime mitigation in a scheduling solution can have a huge positive impact on the business. As with overtime, travel mitigation can provide business benefits. If a service organization determines that technicians spend too much time in their cars because of inefficient routing to assignments, intelligent scheduling is a justifiable solution. For instance, let's say technician John works within a two-hour radius of his home. If John organizes his schedule so he is two hours away from home at the end of his 8am-5pm shift, he might complete his last job at 4pm, drive the last hour of the workday and then bill the remaining hour of

driving time as overtime. To make matters worse, he might drive past an overdue PM or a PM to be completed in the near future. An intelligent scheduling solution will spot these issues, address them, and yield better field utilization. Determining how an organization pays its technicians, whether overtime is an issue, and the importance of travel will better identify whether a manual scheduling assignment is sufficient or if an intelligent scheduling solution is desired.

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SCHEDULING AND DISPATCHING

A service organization's scheduling and dispatch processes can also help determine an appropriate scheduling solution. If an organization simply takes a customer call and schedules a primary technician, there isn't much need for an optimized schedule. If you have dispatchers generating the schedule, there can be a large administrative cost associated. System-generated scheduling can obviously reduce this administrative burden. If this is their only responsibility, it is reasonable to expect a more favorable dispatcher-to-technician ratio. However, if these dispatchers are focused on other activities like contract administration, billing, and general service activity, then you should be able to grow your business without a lot of additional overhead.

If a service business wants to improve its dispatcher-to-technician ratio, it likely will want to move away from manually scheduling resources and move toward automatic scheduling resources. This enables dispatchers to manage exceptions as opposed to managing resources and their schedules. This change is subtle, but it enables intelligent scheduling to reduce travel and overtime costs, increase technician productivity, and improve SLAs and on-time service while decreasing administrative costs.

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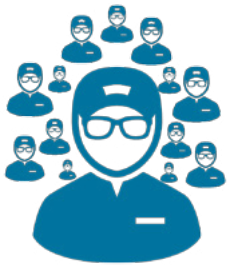
CONCENTRATION OF TECHNICIANS

A service organization with one technician in a geography and a service organization with 50 technicians in a geography will certainly represent a different scheduling problem and likely represent a different kind of solution. The organization with one technician in a geography will not require an intelligent scheduling solution because the technician can plan his/her own schedule without the need of a scheduling solution. This organization will be content with manual scheduling within a field service solution. This solution will be less complex, more affordable and will accomplish the organization's goals.

On the other hand, the organization with many technicians in a geography might require something more elaborate and intelligent. Having a large number of technicians in a relatively confined geography calls for an intelligent scheduling solution to keep technicians from crossing paths and making unnecessary trips across town. An intelligent scheduling solution will enable travel efficiencies, improve SLAs and improve resource utilization. Intelligent scheduling helps an organization identify the best technician for the job, in closest proximity with the least cost. In this scenario an intelligent scheduling solution is logical and has a measureable business benefit.



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TECHNICIAN SKILLSET

Another factor in determining a suitable scheduling solution revolves around skill requirements. This could include training, certifications, clearances like visa or travel restrictions, or licensing. If an organization has uniquely skilled engineers, a human can often figure out who is qualified to complete each task. In this instance, a manual scheduling solution would be appropriate. Typically, when the skill requirement decreases and the number of technicians increases, the need for an intelligent scheduling solution increases. When there are multiple skills and technicians involved, it becomes more difficult for dispatchers to evaluate the best resource based on cost, skills and proximity. In this case an intelligent scheduling solution almost becomes a necessity.

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CUSTOMER INTIMACY MODEL

In certain instances, the field technician is the company's face to the customer. This is common in some industries where the engineer will always get a service request for a given customer. It is true in route-based service, sometimes called a milk run, and it is common with appointment-based service like medical instrumentation. The primary engineer will receive a call and schedule a mutually convenient time to arrive and perform the service requested. In this case, most customers will have a primary, secondary or tertiary technician assigned to the site, and one of those three will get the call based on the nature of the service, skills and availability. An intelligent scheduling solution is not necessary for these kinds of scheduling problems.

WHAT'S NEXT FOR YOUR INTELLIGENT SCHEDULING SOLUTION NEEDS

Determining suitable scheduling solutions is dependent on how an organization's technicians are paid, assigned, geographically aligned, how the field team is organized and what business issues are under consideration when managing your field staff. Once these factors are determined, it can be decided whether a manual scheduling solution is adequate or whether an intelligent scheduling solution is required.

IFS can offer a full spectrum of scheduling solutions depending upon the needs and requirements of the customer. That way the customer gets what they need at the right price. IFS service solutions likewise are designed to address all significant service business processes. This is why we claim to be an end-to-end provider of field service and repair solutions.

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TOM DEVROY

As a Senior Product Evangelist at IFS, Tom DeVroy serves as a service management advocate to maintain high customer satisfaction while continuing to expand the IFS Service Management footprint. With more than 30 years of service management experience, Tom is well versed in the challenges facing modern organizations, allowing him to offer invaluable insight to service organizations. Tom has successfully provided service operations guidance to Fortune 500 hardware, software and consulting firms, as well as global service organizations. Tom joined IFS in 2012 with the acquisition of Metrix LLC, where he led the sales team as Vice President of Sales. Tom holds a degree in business administration from the University of Wisconsin-Parkside.

ABOUT IFS

IFS is a globally recognized leader in developing and delivering enterprise software for enterprise resource planning (ERP), enterprise asset management (EAM) and enterprise service management (ESM). Founded in 1983, IFS brings customers in targeted sectors closer to their business, and helps them be more agile and prepare for what's next in their industry. IFS's 3,300 employees support more than 1 million users worldwide from its network of local offices and through a growing ecosystem of partners.

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