Smart Workforce & Productivity Management

Improve Agility, Throughput, Efficiency, Quality, Safety and Costs!
Workforce Challenges

- Who is onsite or offsite (site map and geo-location)?
- Where is your workforce at any given time?
- How much time is your workforce spending in unproductive zones?
- What trade resources are available for job allocation?
- What resources have the subcontractors placed at the site?
- How much are your subcontractors costing you per shift?
- Who has not completed safety training?
- Is everyone accounted for in an emergency evacuation?
- If missing, where are they now?
- Who are high safety risk individuals in your operation?
Productivity Challenges

What is the actual productivity vs. planned?

Is the project on schedule? If not, what is causing the delay?

Is the project on budget? If not, where has the cost overrun?

How much time is each foreman spending with his team?

Which foreman is the most productive?

What project is the crew working on? Who is currently idle?

How many man-hours have been spent on a task?

What are the actual labor hours/costs vs. planned?

Are the subcontractors billing correctly? Are they on schedule?

What are the cost accounts and deviations from planned?
Solutions for Creating Productive, Profitable & Safe Working Environments

**Smart Workforce & Productivity Management**

Improve agility, throughput, efficiency, safety and costs!

- Attendance Management
- Workforce & Sub. Performance Management
- Productivity Management
- Safety Management
- Mustering & Evacuation Management
- Visitor Management
Safety First

Workforce & Subcontractors Safety
Automated man-down (fall-detection) and Panic/SOS emergency alerts. Expedite emergency response to the affected person. Identify high safety risk individuals in your operation.

Safety Training
Comprehensive safety and skills training with auto re-training reminders. Alerts if un-authorized person is operating an equipment.

Reduce Incidents
Reduce hazardous incidents or near misses as they happen. Helps in root-cause analysis of incidents to improve site’s safety.
Mustering & Emergency Evacuation System

Improve Site’s Evacuation Measures

Makes safe and timely evacuation the cornerstone of your emergency management plan.

- Wireless management of site emergency notifications.
- View people present at each assembly area (safe zones).
- Know precisely who is missing and their last reported location and time.
- Real-time mobile dashboards continuously update with the latest data.
Wireless Attendance Management

Indoor or Outdoor, Anywhere, Anytime.

Real-time visibility of workforce, contractors and visitors.

- Quick Workforce Entry/Exit
- Time & Attendance Control
- Remote Clock-In/Out
- Proof of Presence
- Wireless Roll-Call

Before installing Dominate Smart Workforce & Productivity Management, Site's entry & exit time was reduced by 90 minutes per shift for a workforce of 1,500.
Wireless Workforce & Sub. Tracking

Do more with fewer resources.

Identify idle workforce, and effortlessly allocate available resources to increase your operations velocity and reduce costs.

- Real-time Workforce Visibility
- Labor Cost Tracking
- Workzone Productivity Tracking
- Subcontractor Management
- Visitor Tracking
Balance Workforce Capacity

Real-time data for the decision makers

Balance your workforce workload to gain efficiency and minimize labor costs.

- Schedule workforce based on skill sets
- Real-time workforce update dashboard
- Labor forecasting and scheduling
- Track absence, leave and overtime hours
Analytics

Converting your site’s raw data into actionable intelligence!

Analyzes data gathered from a wide variety of sources to uncover patterns and trends that will deliver actionable insight to your operation.

- KPI at Multiple Levels
- Workforce Analytics
- Who’s In & Location Occupancy
- Member Visibility
- Location Activity
Productivity Management

No more managing projects from rear-view mirror!

Real-time productivity tracking of planned vs. actual KPI, helps project managers to quickly identify the bottlenecks and deliver projects on time and on budget.

- Project Completion Tracking
- Work Package & Task Productivity Tracking
- Workforce Allocation Management
- Work Completion Capturing
- Planned Vs. Actual KPI
Real-time Alerts & Integrations

Watches your operation without you watching it!

Real-time alerts & notifications bring accountability, validation and security at every level.

- Rule-based Alerts
- Site Messaging Notifications
- Site Mass Alerts
- Manage Restricted Location Access
- Actions (Pop-up message, SMS, email, siren, light strobe)
Integrations

Energize your Existing Applications with the power of IoT!

Built-in integrations with Primavera P6, MS Project, Ayap, access control, IRIS devices and extensibility features enable you to extend your business applications with real-time insights from streaming IoT data to improve efficiency and derive more value from your existing business applications.

- Primavera P6
- Microsoft Project
- Extensive APIs
- Import/Export Wizard
- Power BI
- IRIS & Access Control
End-to-End Security

We Take Security Seriously!

Through unique device identification, system provides secure environment of trusted devices and communications. Authentication is enforced prior to communication for proof-of-origin of data. Transport-level security helps prevent corruption. Role-based and user-based access control manages cloud and mobile access.

- Role and user-based access control
- HTTPS point-to-point connection
- Message integrity, confidentiality and replay protection
- Node authenticity
- AES 128 counter mode
- OMAC1 message integrity
- Transport-level security
Plug & Play Industrial IoT Hardware

IoT That’s Ready to Use.
Ready to Build.
Ready to Scale.

Pre-configured IoT hardware designed for harsh industrial environment without a need for AC power or network connection enables your operation to be IoT ready within days.

- No AC Power Required. Runs on long-lasting Battery (12 months).
- No Internet Connection Required (Creates its Own BLE Mesh Network).
- Quick Installation and Expansion (less than 2 minutes per device).
- Read Range of Up to 100 Meters (329 ft)
- IP67 Ratings (water & dust proof)
- Man-down (fall detection)
- SOS button for emergency alert notification
- High Availability with No Single Point of Failure
Wireless Industrial IoT Site Connectivity

Location Zone Tags

Data Analytics

Workforce Tags

Asset & Material Tags
Examples of our IoT Personnel Hardware

For full list, please visit http://dominatesmartsite.com/iot-hardware

Personnel Tags
BLE-based
- Helmet Tag
- Belt Tag
- ISO Card Tag
- Wearable Tag

Personnel Tags
BLE-based
- Pendant Tag
- Visitor/Staff Tag
- Keychain Tag
- GPS Tag

BLE Mesh Network
- Location Anchor
- Location Router
- Event Notification
- IoT Gateway
Real-Time Visibility

Time & Attendance
Presently, there are 1,347 workers on site. 34% are direct & 66% are subs. There were 49 late arrivals & 70 are absent. There were 20 early departures from yesterday.

Idle Workforce
Currently, there are 10 idle workers at the site.

Subcontractor Management
There were 18 ghost workers detected among Subcontractor009’s list during the last 4 weeks.

Arrival & Departure
Trade B’s workers take their lunch break 25 minutes early everyday.

Worker Health & Safety
16 workers from Group A have worked more than 5 hours overtime everyday last week, which can be harmful to their health.

Real-time Insights

Workforce Productivity
1000 cubic meters of excavation is taking up to 110 man hours in zone B1-C3, while with the same equipment, it took 50 hours in zone B1-A2.

Workforce Management
Group C is 35% less productive than expected. Perhaps they are working under improper conditions, or they lack proper equipment or materials.

Subcontractor Performance
subcontractor011 has been the least productive last month, with 25% of productivity lower than expected.

Schedule Issues
Electrical wiring in location A was planned to be done in 140 hours. The group has been working for almost 200 hours now, and it will apparently take another 50 hours. At this rate, it is reasonable to expect one week of delay.

Advanced Analytics

Workforce Arrangement
Which team members are more skillful, have training certificate and have performed best in previous tasks? We can assign them to the high priority task at hand.

Risk Mitigation Plans
It is necessary to finish the plumbing work before winter begins. Therefore, it is necessary to hire more plumbers.

Financial Decisions
It will be rainy for 3 days. This means labor cost and little productivity, plus risks for workforce and equipment. Should we put the project on hold?

Tactical Advices
Company’s profit margins are being gobbled up by overtime due to poor productivity during those hours. Perhaps we need to cancel overtime shifts & increase the number of workers during regular hours instead.
Real-time dashboards providing information about time & attendance, worker safety, costs, delays, etc.

Up-to-date reports providing insights into project performance & risks.

Advanced analytics providing recommendations for better management of resources.

**Example**

**Time & Attendance**
- 578 workers on site
- 120 late arrivals
- 15 no-shows
- 10 idle workers
- 100 in zone A
- 225 in zone B

**Project Performance**
Excavation work in zone B1-C2 was planned for 580 hours, but after 700 hours of work, it is only 78% completed. $12,080 of cost overrun is expected for this task. This is mainly due to Trade D's poor performance...

**Recommendations for Workforce Management**
Task B is of high priority. Needs to get done by the end of the week before task C is started. With 350 hours of overtime, the task will be completed only if it is carried out by groups E or L who have demonstrated the best skill & performance in similar situations...
Why Dominate Industrial IoT?

**Key System Features**
- End-to-end IoT Solutions or enable your existing applications with IoT.
- SaaS or on-premise installations.
- Quick learning curve with minimal operation disruptions.
- Plug & play, pre-configured and ready to go IoT hardware.
- Technology agnostic with quick DIY hardware installation.
- Mobile-enabled (iOS & Android).
- End-to-end security.

**Zero Investment & Risks**
- Low-cost bundled hardware & software monthly subscriptions.
- Accelerate time to value with no upfront costs or CAPEX.
- No long-term contract (maximum 6 months).

**Worry-free Support**
- Online knowledge base access.
- Remote dedicated consultants.
- On-site full-time dedicated consultants.
- Free data migration.
Collaborate with **multiple teams across multiple sites** to better manage projects, resources, time & attendance, costs, etc.

**Benefits:**
- Build accurate models of time and resources required to perform tasks.
- Mitigate risks.
- Gain full visibility into all activity across your site.
- Analyze data in real-time to assess productivity and detect vulnerabilities.
- Proactively prevent schedule delays and cost overruns.
- Encourage performance driven working environment.
- Enable workers on different parts of the chain to be more efficient.
- Enhance discipline and accountability.
- Improve sit’s evacuation measures.
- Achieve improved productivity and profitability.
- Identify high safety risk individuals in your operation.
Our Goal

Partner with our clients to transform their organizations in the ways that matter most to them.

This means embedding digital, analytics and design into core processes and mind-sets; building capabilities that help organizations and people to thrive in an ever-changing context; and developing excellence in execution to ensure that actions translate into outcomes, quickly and sustainably.