Robots as a Service:
The Fastest Path to Warehouse Automation
Learn about **Robots as a Service**

Robots as a Service (RaaS) is the newest and most affordable way of justifying a robotic-based automation solution.

RaaS starts with a service level agreement based on your throughput. inVia Robotics owns and maintains the robot fleet throughout the life of the contract. Because you don’t buy the equipment, there is no huge capital expense, which makes RaaS viable in applications where robotic automation was prohibitively expensive before. Finally, inVia Robotics will deploy your RaaS solution, so you won’t need to hire your own robotics experts.

What you will learn in this e-book:

- What challenge does RaaS solve for e-commerce?
- The inVia Robotics solution — How does it work?
- Economics — How does RaaS affect your bottom line?
What challenge does RaaS solve for e-commerce?

"As an online shopping destination for thrifty shoppers, we are always looking for ways to improve productivity, decrease operational costs and maximize efficiency so that we can offer our customers the best deals.

— David Yeom, co-founder and CEO of Hollar"

A RaaS-based e-commerce fulfillment solution provides agility to your warehouse:

• Keep up with growing e-commerce demand or peak periods
• Funded from operational budgets without the need for a capital purchase
• Supported by a service-based organization
RaaS provides multiple benefits for the e-commerce warehouse:

**Turnkey solution** – no need to be a robotics expert. The RaaS vendor programs and monitors the robot fleet.

**Complete solution**
No need to be a robotics expert. The Robot Management System (RMS) monitors and controls the robots.

**Predictable costs**
Solution cost reflects the actual robot use.

**Lower risk**
The vendor owns and operates the equipment over the lifetime of your service contract.

**Scalable**
Add capacity as needed to manage peak periods.

**OPEX vs. CAPEX**
Pay as you go, no huge upfront investment.
Improving Warehouse Efficiency:

A goods-to-person automation solution can cut the labor costs of a pick up to 75 percent. Peak periods also cause havoc on warehouse efficiency rates. With automation, warehouse throughput is easier to predict and manage.

Warehouse robotics are now able to introduce efficiencies in existing fulfillment processes. There is no need to rearrange your warehouse layout. Mobile robots use existing racking to pick up totes or boxes and deliver the product for pick and pack.

inVia robots do the picking 500 percent faster than non-automated processes. This efficiency gain provides the headroom for your existing floor space to continue to support your business growth for years to come.

Robots reduce inventory shrinkage, and adding peak capacity is as easy as unboxing a new robot and powering it up.
inVia mobile robots move parts over long distances and increase order fulfillment by 500 percent or more.

2 Minutes vs. 30 Seconds
inVia Robotics is a flexible warehouse automation system that puts you in control of your order fulfillment process.
Warehouse Management Software

Warehouse workflow is complex. You need to track order requests, identify product locations, optimize the flow of material and meet shipping deadlines.

With the inVia Robot Management System (RMS) you can:

1. Streamline your goods-to-person workflow using existing floor space.
2. Integrate with your warehouse management system for order data.
3. View real-time updates from any mobile device.
Implementing a **RaaS Solution**

**inVia Robotics** is a complete warehouse automation system, delivered as a robots-as-a-service solution.

**inVia Robotics** pioneered the **pay-as-you-go concept to make the solution affordable** and reduce the technology risk.

Goods-to-person automation is now a viable solution for **any size warehouse or throughput**.

**The inVia Robotics advantage:**

- Superior throughput
- Five times the fulfillment productivity
- Turnkey solution
- Deploy in days, not months
- Seamless WMS integration
- 99.9 percent picking accuracy
- Drastically reduced shrinkage
- Flexible and scalable
- No single point of failure
- Happier customers
Lowering the **Cost Per Pick**

With inVia Robotics, warehouse automation can be an affordable option without the requirement of dedicated floor space for automation or conveyance.

- **Collaborative robots** are **safe to operate** around manual pickers.
- **Subscription-based pricing** is predictable and scalable according to your needs.
- inVia robots adapt to **any warehouse configuration**.
- It **deploys in days**, not months.
- Swappable battery, to **operate 24/7**.

inviarobotics.com
Economics of RaaS

The key principle of RaaS is that you hire the robot. There’s no large capital outlay upfront, and you pay a monthly subscription for the solution.

All operating costs are included.

inVia Robotics continues to own and operate the equipment over the lifetime of your service contract. **The RaaS contract covers all parts and service.** At the robot’s end of life, it’s replaced with a new robot at no additional cost.

You don’t have to hire a robotics team/engineer. **A subscription comes with your own robotics team focused on reducing your costs.**
Economics of RaaS

CAPEX vs. OPEX
RaaS Total Cost of Ownership vs. CAPEX Purchase

Challenges with a typical warehouse automation project:
- Large CAPEX investment
- Warehouse reconfiguration or new warehouse
- Dedicated floor space, equipment bolted to the floor
- Reduced warehouse capacity during implementation

How inVia Robotics can solve those challenges:
- Predictable operating expense
- Use existing warehouse racking
- No major warehouse reconfiguration
- Scale up/down without impacting warehouse operations

What does RaaS mean for your business?
Predictable cost • No large upfront investment • Scalable to meet any current or future needs
Flexibility Is Built Into RaaS

The Service part of RaaS is one of the keys to its power. With a RaaS solution you don’t own the equipment and you pay for what you need. As a result, you can scale the solution up and down as your needs change.

Need more throughput for peak seasons?
Need to add a third shift to cover additional demand?

Then easily add capacity with a RaaS-based solution like inVia Robotics. Longer runs equal lower costs.
What Makes RaaS Flexible?

Service contract is based on key performance indicators (KPIs)

- Remote system monitoring allows inVia Robotics to track KPIs.
- Uncrate and go: no special installation needed to add additional robotic pickers.
- The service level agreement in a RaaS contract defines the deliverables for the solution.
- The RMS monitors the system so you have access to the throughput data of the solution.

inVia Robotics will work with you to scope the initial size of the fleet to meet your throughput requirements; however, by analyzing trends, the fleet size can be optimized over time to ensure that you have the right capacity for your business needs.
The **Bottom Line**

A RaaS-based solution allows you to **look at robotic automation like you would any variable cost** in your warehouse. RaaS provides a total cost of ownership (TCO) that is measurable, predictable and based on current throughput requirements. With the inVia Robotics goods-to-person solution, you will enhance working conditions for your workforce and scale up your fulfillment system to meet your customers’ expectations while also increasing accuracy and reducing shrinkage.

**The inVia Robotics solution is simple to set up and risk free.** With an intuitive pay-as-you-go subscription service fee, you only pay for what you need, and **the system can quickly scale to meet your changes in demand.**

With inVia Robotics as your automation partner, you can now modernize your warehouse and exceed customer expectations.

**Email** [sales@inviarobotics.com](mailto:sales@inviarobotics.com) **to schedule a demo today!**
Patented Technology

9120622 - Autonomous order fulfillment and inventory control robots (September 1, 2015)

9050723 - Human and robotic distributed operating system (HaRD-OS) (June 9, 2015)

9457468 - HaRD-OS2 (October 4, 2016)

9513627 - Lanes and Locks (December 6, 2016)

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