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THE FORWARD DEPLOYED INVENTORY SYSTEM

What Is Forward Deployed Inventory, Really?

Chapter 5 · Part II · The Shift from FDI to FDIS

A zebra is not a striped horse.
They are different.

FROM CHAPTER 5

Glenn Caudill

COMPLIMENTARY PREVIEW · NOT FOR RESALE

PART II · THE SHIFT FROM FDI TO FDIS

Chapter 5

What Is Forward Deployed Inventory, Really?

"Things are defined by their working and power; … we ought not to say that they are the same when they no longer have their proper quality, but only that they have the same name."
— Aristotle, *Politics*, trans. Benjamin Jowett

"A zebra is not a striped horse. They are different."
— Glenn Caudill

FDI Is Inventory Positioned Within the Market

Forward deployed inventory is inventory intentionally positioned within a market, close enough to its anticipated point of use or delivery that its availability can materially change the outcome.

To understand forward deployed inventory, it is useful to begin not with the item but with its position in the supply network. Traditional supply networks generally concentrate inventory in plants, warehouses, and distribution centers. Centralization offers important advantages. Inventory can be pooled against demand from many customers and locations, handled by trained personnel, protected through standardized security, and managed through consistent receiving, storage, counting, and shipping processes.

Centralization also creates distance. When demand occurs, the item must travel from the central facility to the place where it will be delivered or used. That distance becomes a constraint when the required response time is shorter than the network can reliably provide. Forward deployment begins when the organization responds to that constraint by positioning selected inventory beyond its primary facilities and closer to the demand it is intended to support.

The word *forward* therefore describes a position in the supply network rather than a direction on a map. The movement may cover a great distance or a relatively small one. What matters is that the new position changes the organization's ability to respond, reducing the time between the appearance of a need and the availability of the item required to satisfy it.

This does not mean that every item outside a central warehouse is forward deployed inventory. Inventory may be remote because it was misplaced, abandoned, overordered, or never returned. Physical dispersion by itself is not a strategy. FDI exists when inventory is intentionally positioned—or intentionally allowed to remain positioned—within a market because proximity to anticipated use or delivery is expected to improve an outcome. The distinction separates purposeful forward placement from inventory that has simply escaped control.

Forward deployment therefore represents a tradeoff. Centralization improves pooling, standardization, and control, while forward placement improves proximity and responsiveness. The organization gives up

some of the natural efficiencies of concentration in exchange for time. The remaining questions—how the market is defined, what purpose the inventory serves, how it must be handled and controlled, and how its placement should be optimized—follow from the decision to move it closer to where something important is expected to happen.

The Market Is Defined by Time to Use or Delivery

The word *market* is often used to describe a group of customers, a sales territory, an industry segment, or a geographic region. In forward deployed inventory, it has a more operational meaning. A market is the practical area within which inventory can support its anticipated point of use or delivery within the required amount of time.

Administrative boundaries are rarely designed around the physical availability of inventory. A metropolitan area may be divided by traffic patterns, physical barriers, or transportation infrastructure that make two apparently nearby points more distant in practice. Conversely, locations in different districts or territories may belong to the same inventory market because they can be reached within the required time. The market relevant to FDI is the area of practical reach, not the area created for reporting or organizational convenience.

An FDI market has no universal travel-time boundary. The required time is a function of the situation: the purpose the inventory serves and the period within which it must be available. In one operation, inventory within roughly a two-hour drive of its point of use may be close enough. In another, the requirement may be measured in minutes, while a third may allow several hours or longer. What makes the inventory forward deployed is not compliance with a fixed distance or time limit, but its deliberate placement within the response window required to support its intended use or delivery.

The same location may therefore be forward enough for one purpose and not forward enough for another. A position may be inside the effective market for an outcome with a four-hour response requirement and outside the market for an outcome requiring a thirty-minute response.

For the same reason, drive time is more meaningful than mileage. Geography, congestion, road networks, weather, operating hours, and entry restrictions can make the same number of miles very different from one market to another. An item may be physically nearby but unable to reach the point of use in time, while another item farther away is connected to a reliable delivery process that makes it available sooner. A radius drawn on a map may be convenient, but the relevant measure is the time and certainty with which the inventory can be converted from stock at rest into an item available for use or delivery.

The point of use or delivery is where the item will be installed, consumed, demonstrated, sold, used, or delivered to its intended recipient. That endpoint gives the market its meaning. Without a defined relationship to use or delivery, a forward location is simply another place where inventory happens to be stored.

A market may contain many points of use or delivery and more than one forward inventory position. Those positions exist within a common local operating area and collectively provide the inventory presence intended to support it. A central or regional facility may supply the market, but that does not make all of its inventory forward deployed. The inventory becomes forward deployed when it is

positioned inside the local operating area, close enough to the anticipated point of use or delivery to satisfy the applicable time requirement.

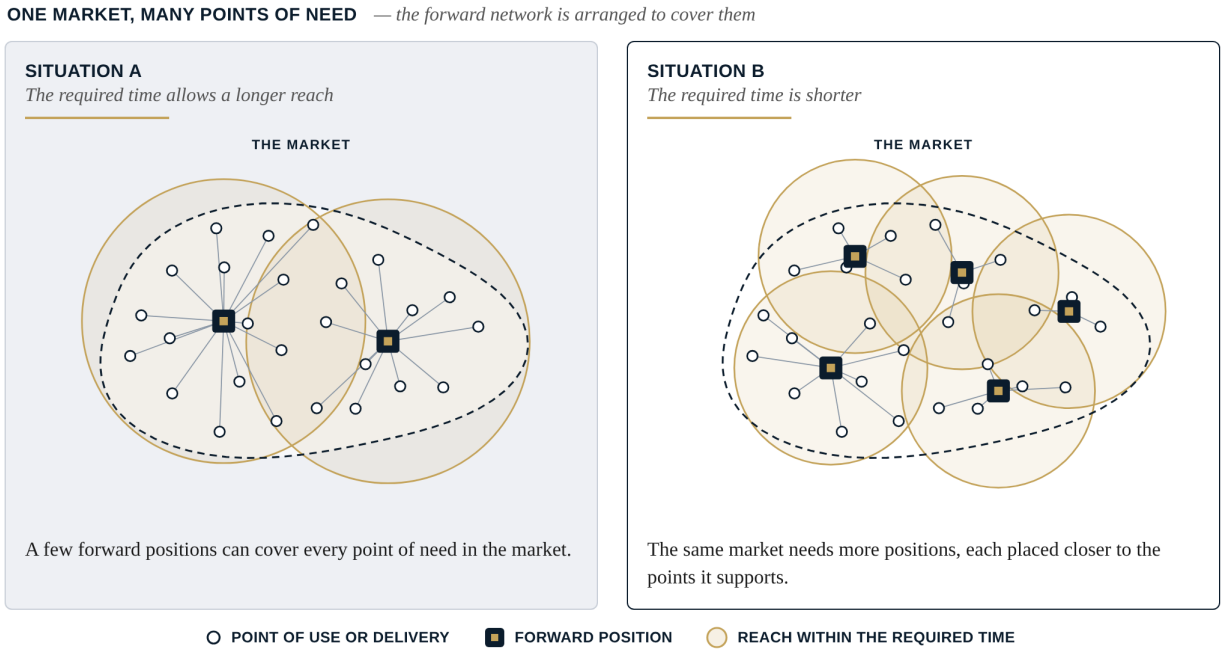


Figure 5.1 *A market is a collection of many points of use or delivery. Forward deployed inventory is arranged as a network to cover that need, and the shape of the network depends on the situation.*

The same item can therefore occupy two different roles depending on its position. When it is held in a central or regional facility, it remains part of the broader supply network. When it is deliberately positioned within the market because proximity matters, it becomes forward deployed inventory. The physical characteristics of the item have not changed. Its relationship to the activity it supports has.

In FDI, proximity is measured by the ability to support the point of use or delivery within the required time.

Forward Placement Can Give Inventory a Different Purpose

Moving inventory into a market does not change the physical item, but it can change the role the item performs. Inventory held in a central facility remains part of a larger pool that can be allocated across many requirements, generally in support of production, fulfillment, or sale through an established distribution process. Once an item is positioned within a market, a portion of that pooled inventory has been committed to local readiness.

The organization accepts the cost and complexity of forward placement because waiting for the normal supply process could reduce the value of the outcome. The benefit may come from faster fulfillment, the continuation of an operation, the ability to respond to an immediate requirement, or the preservation of an opportunity that would otherwise be lost. In each case, the value of the forward position comes from the difference between having the item locally available and having to obtain it from outside the market.

Forward deployment does not eliminate the item’s ordinary commercial or operational purpose. An item intended for sale is still intended for sale. A component intended for installation is still a component.

A consumable remains a consumable. Forward placement adds another purpose: readiness within the market. The item should not merely exist somewhere in the supply network. It should exist close enough to an anticipated requirement to affect the result.

For some items, the value created by local availability is direct. The item is sold, and the organization earns revenue and margin from the transaction. Even then, immediate availability may help retain a customer, fulfill a broader agreement, or strengthen a revenue stream that is larger than the transaction itself. For other items, the economic relationship is indirect. The item may enable an activity that produces revenue, restore an operation that has stopped producing value, or protect a commitment whose failure would create a larger loss. Such an item may have little or no independent margin. Its importance comes from what can happen when it is available—or what can be prevented from happening because it is available.

The distinction is not between items that have value and items that do not. Every item consumes capital, storage capacity, and management effort. The distinction concerns where the larger value resides. In some cases, most of the value is contained in the item and realized through its sale. In others, it resides primarily in the activity, relationship, service, or operating capability the item supports. Frequently, both forms of value are present at the same time.

THE SAME ITEM
the physical item does not change

	HELD CENTRALLY	POSITIONED WITHIN THE MARKET
ROLE	Part of a larger pool that can be allocated across many requirements.	A portion of that pool committed to local readiness.
PURPOSE	Production, fulfillment, or sale through an established distribution process.	Its ordinary purpose, plus readiness when the requirement appears.
WHERE THE VALUE RESIDES	Mostly in the item, realized through its sale.	Often in the activity, relationship, service, or operation the item supports.
THE QUESTION	Will demand appear somewhere in the network?	What outcome depends on this item being available here, at the required time?

Figure 5.2 *Forward placement does not change the item. It changes the role the item performs and where its value resides.*

This is why acquisition cost and direct margin cannot always describe the importance of forward deployed inventory. An inexpensive item may support an outcome worth many times its own value. A high-margin item may still be poorly suited to forward deployment if local availability adds little to the outcome. The economic importance of the item depends not only on what it costs or earns, but also on the consequence of having—or not having—it within the market when the requirement appears.

The item's eventual disposition does not resolve this question. Forward deployed inventory may be sold, installed, consumed, demonstrated, loaned, recovered, or returned. These actions describe what eventually happens to the item. They do not explain why the organization positioned it within the market

before the exact requirement was known. The defining purpose lies in the readiness created by its local presence, and readiness has value even when the inventory is not used immediately. Whether that capability is justified depends on the importance and probability of the requirement, the cost of holding the inventory locally, and the consequences of being unable to respond. At this stage, the essential point is that forward inventory exists to create a local capability, not merely to wait for a transaction.

Purpose also determines which facts about the item must be known. If the item exists to support immediate use, its condition and accessibility may be critical. If it exists to satisfy a particular customer commitment, the organization must know whether it is already reserved or available for another requirement. If it has a limited useful life, remaining shelf life may matter as much as quantity.

This leads to a more useful question than asking whether an item belongs to a predefined FDI category. The organization should ask what outcome depends upon the item being available within the market at the required time. If local availability materially affects that outcome, the inventory is performing a forward-deployed role.

The value of forward deployed inventory is determined by the purpose its availability supports, not only by the value or margin of the item itself.

The Forward Environment Is Distributed and Less Controlled

The objective of forward deployment is not to create another large warehouse. It is to place selected inventory close enough to anticipated use or delivery that distance no longer prevents an acceptable response. As a result, the forward network usually consists of many relatively small inventory positions rather than a few large facilities.

A market may contain a staffed location with people responsible for receiving, storing, and issuing inventory, and that location may resemble a small warehouse or local distribution point. More often, however, the inventory is divided among locations that hold limited quantities and have little or no dedicated inventory staff. Even when a location is staffed, inventory management may be only a minor part of the work performed there.

The small size of each position can make the inventory appear less important than it is. A single location may hold too little inventory to attract management attention, justify dedicated personnel, or appear significant in a financial report. Across an entire market, however, hundreds or thousands of small positions can represent a substantial investment. The inventory is economically meaningful in total even though it is operationally fragmented.

Fragmentation changes the nature of control. In a warehouse, the organization can establish a common physical layout, limit access, assign trained personnel, and require a consistent process for receiving, storing, counting, and issuing inventory. The forward environment is rarely so uniform. Locations may differ in size, operating hours, physical security, storage conditions, staffing, technology, and local management. Some may be controlled directly by the organization, while others depend on customers, partners, contractors, employees, or other parties. The organization may own the inventory without controlling the place in which it is stored.

This does not mean that every forward location is unmanaged or insecure. It means that control is less uniform and often more indirect. A process that works naturally in one location may be difficult to follow in another.

The number of locations also changes the economics of oversight. A discrepancy at one small location may not justify immediate intervention. Repeated across a large network, however, small discrepancies can accumulate into a material problem. The same is true of excess stock, expired items, unrecorded use, weak security, and inventory that remains in a location after its original purpose has disappeared.

Placing inventory within the market also does not guarantee that it will be available when needed. Physical proximity creates the possibility of availability, but the inventory may still be inaccessible, unusable, committed to another requirement, or unsuitable for its intended purpose. Local presence and practical availability are not the same condition.

The organization gains proximity by distributing inventory into smaller positions closer to anticipated demand. At the same time, it gives up some of the consistency, concentration, and direct control available in a traditional facility. Managing FDI begins with recognizing both sides of that decision.

FDI gains proximity by distributing inventory into environments that may offer less consistency and control.

Handling Must Fit Within the Primary Work

A traditional warehouse is organized around inventory. Receiving, storing, selecting, counting, and shipping are not interruptions to the work; they are the work. The facility, systems, staffing, and performance measures are designed to support those activities.

The forward environment reverses this relationship. The people who interact with the inventory are often present for another reason. Their primary responsibility may involve serving a customer, completing an operational task, supporting a sale, performing an installation, or making a delivery. Inventory enables that work, but managing inventory is not the principal reason the person is there.

A warehouse process can require several distinct steps because the worker’s role is designed around completing them. The same process may be unrealistic when inserted into work whose success is measured by speed, service, completion, or customer response. If the inventory activity appears to delay the primary task without adding visible value to the person performing it, compliance will be difficult to sustain.

When a process does not fit the work, people adapt it. They delay the inventory transaction until later, record several activities at once, rely on memory, create personal notes, or bypass the process entirely. These actions are often described as failures of discipline. Often, they are evidence that the inventory process was designed without sufficient regard for the environment in which it must operate.

This does not mean that forward inventory should be exempt from control. It means that control must be incorporated into the natural flow of the work. The required action should occur at a point when the event is clear, the information is available, and completing the inventory step does not require the user to abandon the primary task. The easier it is to perform the correct action at the correct time, the less the system must depend on memory and later correction.

The same applies to training. A warehouse employee may perform the same inventory activity many times each day and become proficient through repetition. A person in the forward environment may encounter the activity infrequently. A process that depends on detailed procedural knowledge can therefore fail even when the user is willing to comply. Forward handling must be understandable at the moment it is required, not only during an earlier training session.

Small forward locations can amplify the consequences of poor process design. Across a large network, however, missed or delayed activities gradually separate the recorded inventory from the physical inventory. What looks like an occasional exception at one position can become a persistent source of uncertainty across the market.

The design objective is not simply to reduce the number of steps. A process can be short and still be confusing, or easy and still fail to create accountability. The objective is to make the necessary control proportionate to the event and compatible with the work, collecting enough information to maintain confidence without imposing a warehouse workflow on an environment that is not a warehouse. That requires the organization to begin with the work as it is actually performed rather than with an idealized process developed elsewhere.

A warehouse designs work around inventory. FDI must be managed around the work.

Forward Deployment Creates Custody, Security, and Accountability Requirements

In a controlled facility, ownership, custody, access, and responsibility are often closely aligned. The organization owns the inventory, controls the building, employs the people handling the goods, and assigns responsibility through established roles.

Forward deployment separates them. An organization may own inventory that is physically held in a location it does not control. The person with access may not be responsible for inventory accuracy. The person who uses the item may not be the person who received it. A local manager may oversee the location without owning the process that replenishes it. The physical position of the inventory no longer provides a complete answer to the question of responsibility.

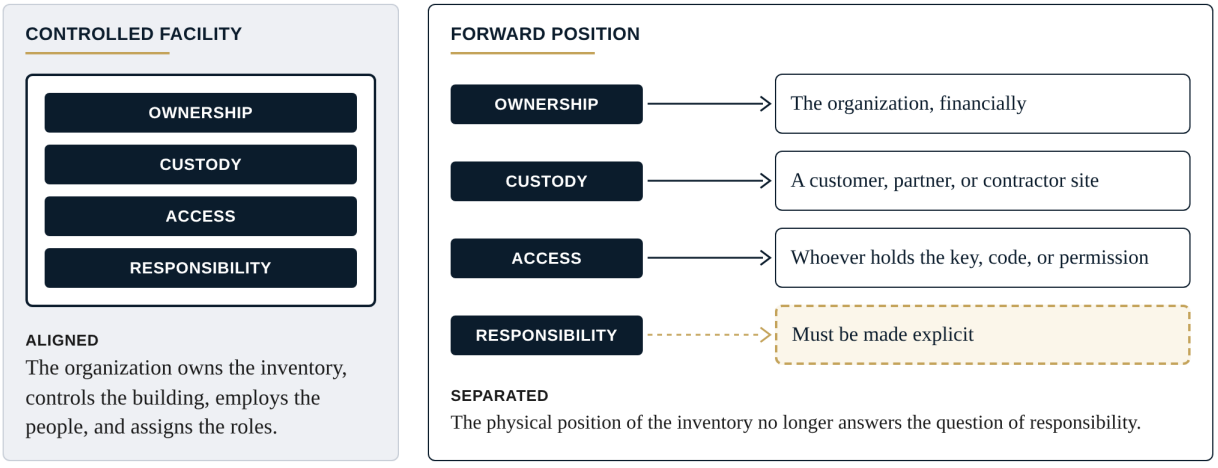


Figure 5.3 *In a controlled facility, ownership, custody, access, and responsibility travel together. Forward deployment separates them, and each must be defined on its own.*

Custody describes who has physical responsibility for the inventory at a particular time. It is different from ownership. An organization may retain financial ownership while another party provides storage, access, or daily supervision. Unless custody is clear, inventory can become everyone's property in principle and no one's responsibility in practice.

Access presents a related challenge. If access is too restrictive, the inventory may fail to serve the purpose for which it was positioned forward. If access is too broad, the organization may lose the ability to determine who removed an item, why it was taken, or whether the activity was authorized. A locked location may protect the inventory but prevent timely use. An open location may provide convenience but create unacceptable uncertainty. Security and accessibility must therefore be considered together, and the appropriate level of control depends on the value of the inventory, the consequence of unavailability, the number of authorized users, the conditions of the location, and the purpose the inventory serves.

Accountability connects these elements. The organization must know who is responsible for the inventory, who is permitted to access it, and when that responsibility changes. This does not require every location to operate like a formal warehouse. It does require the relationship between the inventory and the responsible party to be explicit.

A staffed location does not automatically solve the problem. People may be present without having responsibility for inventory control. Several groups may share the same space, or local personnel may regard the inventory as belonging to a distant department. Physical supervision is useful only when responsibility and authority are understood. Likewise, the absence of permanent staff does not make accountability impossible, but it does make accountability dependent on clearly defined access and responsibility.

Custody, security, access, and accountability are therefore not secondary administrative concerns. They are part of the operating definition of forward deployed inventory. Proximity creates value only when the organization can make the inventory available to the right person while maintaining confidence in what remains.

In FDI, "Who is responsible?" can be as important as "Where is it?"

A Forward Position Can Be Expensive to Reverse

Moving inventory forward is usually part of a planned outward flow. The organization identifies an item, assigns a destination, prepares a shipment, and uses an established transportation process to place it within the market.

The reverse process is rarely as efficient. Inventory that is no longer needed may be scattered across many small locations, with only one or two items available for recovery at each position. The organization must first determine that the item should be removed, confirm where it is, arrange access, collect it, and decide what should happen next. The cost of those individual actions can approach or exceed the remaining value of the item.

Recovery also requires a judgment about condition. Its packaging may have been opened, its history may be uncertain, or its remaining useful life may have declined. Some items can return directly to stock, while others may require repair, testing, repackaging, special handling, or disposal.

Time makes the problem more difficult. Inventory can remain in a forward position after the requirement that justified it has changed. Demand may have moved, the supported activity may have ended, or a newer item may have replaced it. Because each local quantity is small, the condition may attract little attention. By the time the organization decides to act, the inventory may have expired, become obsolete, deteriorated, or lost enough value that recovery is no longer economical.

Local behavior can create another barrier. People may be reluctant to release inventory even when recent activity no longer justifies its presence. Their resistance may be rational. If they do not trust the replenishment process or believe they will be blamed for a future shortage, keeping the item provides protection. The organization may see excess stock; the local user may see insurance against an uncertain future.

This helps explain why forward inventory tends to accumulate. Adding an item appears to increase readiness, while removing one appears to increase risk. Unless the organization has a disciplined way to reconsider the need for the inventory, placement decisions can become effectively permanent.

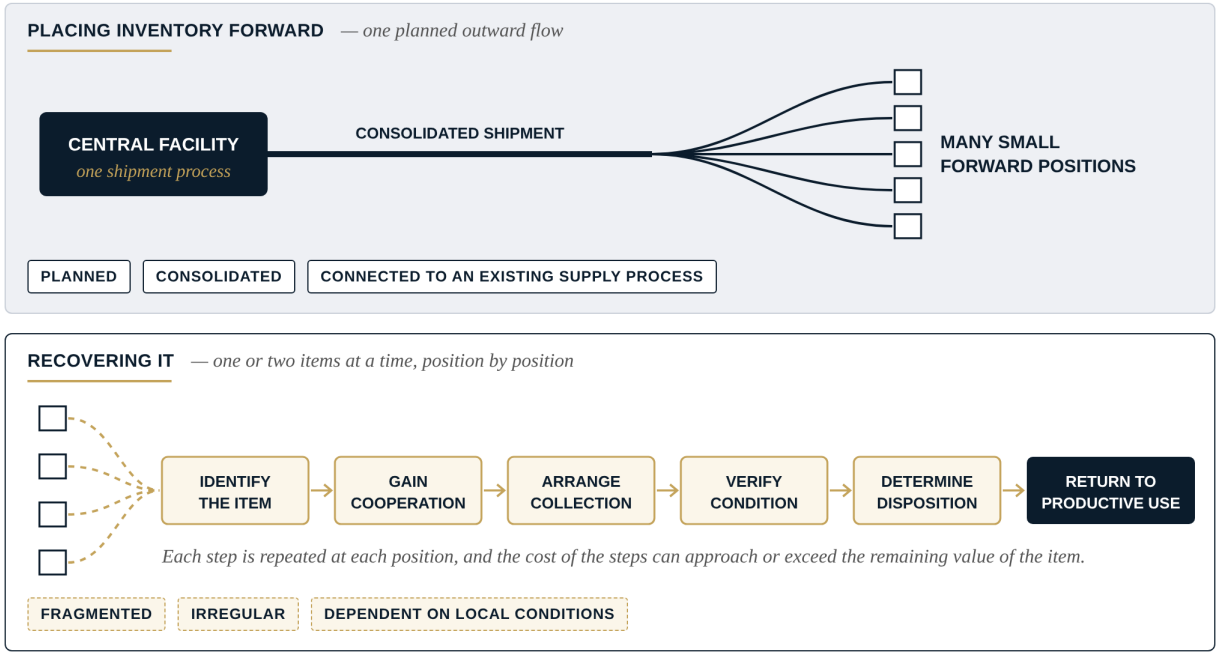


Figure 5.4 *Forward deployment is asymmetric. Placing inventory follows an established outward flow; recovering it is a series of separate, local efforts.*

The cost of reversing a forward position therefore includes more than transportation. It includes the effort required to identify the inventory, gain cooperation, arrange collection, verify condition, determine disposition, and return the item to productive use. It may also include the opportunity cost of leaving usable inventory stranded in one position while purchasing additional inventory elsewhere.

None of this means that inventory should not be deployed forward. Proximity can create substantial value, and the supported outcome may justify the cost. It does mean that the economics of placement should include the full life of the decision: not only the cost of putting an item into the market, but also the cost and practical difficulty of recovering it if the anticipated need does not materialize. The outward movement is usually planned, consolidated, and connected to an existing supply process. Recovery is

often fragmented, irregular, and dependent on local conditions. Recognizing that asymmetry is necessary if the organization is to understand the real cost of the forward network.

Forward placement may be easy; reversing a poor forward-placement decision can be slow, costly, and operationally disruptive.

FDI Must Be Understood as a Market Network

A forward inventory position does not exist in isolation. It is one part of a larger market that contains multiple points of use or delivery, different levels of expected need, and a collection of inventory positions intended to support them. The individual location may be the place where inventory is physically held, but the market provides the context that explains why the inventory is there and how much inventory is required.

This distinction is especially important because most forward positions are small. Each may hold only a limited number of items and experience relatively little activity. Viewed separately, a location can appear insignificant, and long periods may pass without an item being used. Viewed across the market, however, the combined inventory and activity may be substantial.

Low activity at an individual location also limits the usefulness of its history. One use may make demand appear unusually high, while a period with no activity may make the inventory appear unnecessary. The smaller the location and the less frequent the activity, the more unstable a location-level conclusion can become.

This creates a practical problem when every forward position is treated as an independent planning unit. If each location receives a minimum quantity simply because it exists, inventory can be multiplied across the market without a corresponding increase in need. If each location is evaluated only by its own recent activity, important inventory may be removed because no single position can demonstrate sufficient demand. One approach creates excess; the other can leave the market without the capability it was meant to provide.

The market offers a more useful level for understanding the requirement. Activity that appears random at one small position may become more meaningful when considered across the full local area.

Determining the market requirement and determining the physical positions of the inventory are related, but they are not the same decision. The first asks how much inventory should be committed to the market. The second asks where that inventory should initially be placed so that it can support the anticipated need. Confusing these questions encourages the organization to calculate a permanent inventory level for every small position, even when the available history cannot support that degree of precision.

Planning at the market level does not imply that inventory should be moved continually among forward locations. Frequent local movement would add cost, weaken accountability, and run into the difficulty of reversing a forward position described earlier. The objective is to make a deliberate market-level decision and then place the inventory according to the needs and risks within that market, in positions stable enough to remain manageable.

Understanding FDI as a network also prevents the organization from judging every location solely by its individual utilization. A position may contribute to the market's response capability even if its own activity is low. At the same time, the market view prevents every location from claiming inventory independently without regard to the combined investment. Individual locations still matter, because physical position determines proximity, access, custody, and the ability to support a particular point of use. The location is where the inventory is executed and controlled, while the market is often the more appropriate level for understanding the overall requirement.

A forward location is an execution point within a larger market—not necessarily an independent planning unit.

FDI Changes the Management and Optimization Question

Once forward deployed inventory is understood as a market capability rather than a collection of isolated stocking locations, the optimization question changes. The organization is no longer asking only how much of an item each location is likely to consume. It is asking how much inventory the market requires to support an intended outcome and how that inventory should be positioned to provide the required level of readiness.

This does not mean that traditional inventory mathematics is wrong or irrelevant. Forecasting, safety-stock calculations, service levels, carrying costs, lead times, and network models can all contribute to an FDI decision. Mathematics is a means of comparing alternatives. It does not determine by itself which outcomes matter or what the system should attempt to optimize.

An implemented optimization system is more than its mathematics. It embodies an objective. It recognizes certain variables, assigns importance to them, applies constraints, and defines a successful result. A system designed primarily around centralized fulfillment or direct item economics may produce a mathematically correct answer while overlooking the larger purpose of forward placement.

Traditional inventory decisions commonly give substantial weight to item demand, margin, inventory turns, carrying cost, order quantity, and fulfillment efficiency. These variables still matter. Forward deployment does not make inventory cost irrelevant, nor does it justify placing every item near every possible requirement. The organization must still control investment, loss, aging, obsolescence, and operating expense.

FDI adds another set of considerations. The decision may need to reflect the time allowed to reach the point of use or delivery, the consequence of not having the item available, the value of the activity being supported, the likelihood and urgency of the need, the number of points being protected, the reliability of replenishment, and the cost of recovering inventory from a poor position. These variables can change the answer even when the underlying item demand remains the same.

The weights assigned to those variables also matter. An item with low activity may appear unjustified when judged primarily by turns or direct margin, yet be economically reasonable when its availability protects a much larger outcome. Conversely, a valuable item with a high margin may not justify forward placement if the normal distribution process can satisfy demand without harming the outcome. Optimization depends not merely on including the right variables but on assigning them importance consistent with the purpose of the inventory.

This is where the distinction between the mathematics and the system becomes important. In theory, a general optimization method can be modified to include additional variables and objectives. In practice, the system may not recognize the market as the planning level, distinguish local presence from usable availability, or incorporate the cost of recovering an item after the need has disappeared. If the system cannot represent those conditions, changing a few parameters will not change its underlying intent.

The sequence of the decision is also different. The organization should first determine the inventory capability required within the market, and then the appropriate physical positions for that inventory based on the need and risk present in the market. Starting with a fixed quantity for every forward location reverses that logic. It allows the existence of the location to create the inventory requirement.

None of this requires the organization to discard its existing planning, warehouse, transportation, or enterprise systems, which may continue to perform the functions for which they were designed. The issue is whether the complete management environment can recognize the purpose, location, and operating conditions of FDI well enough to make and execute the correct decision. The central argument is therefore not that FDI requires an entirely new mathematics. It is that a different management problem requires the mathematics to be applied to the correct objective, at the correct level, with the correct variables and weights. A highly sophisticated model can still optimize the wrong thing if the system surrounding it does not understand what the inventory exists to accomplish.

The algorithms may be transferable. The assumptions, variables, weights, and intent may not be.

A Distinct Inventory Environment

Forward deployed inventory begins with a change in position. Selected inventory is moved beyond the organization's central or regional facilities and placed within a market because proximity to anticipated use or delivery matters. That decision appears simple, but it changes the environment in which the inventory operates.

Within the market, inventory is distributed among many relatively small positions, most without the people, infrastructure, or controls of a traditional warehouse. Inventory activity must fit within work that exists for another purpose. Ownership, custody, access, and responsibility may be divided among different parties. The importance of the item may extend well beyond its own cost or margin. Inventory that is easy to deploy can be difficult and expensive to recover. And because activity at any one position is often too limited or irregular to plan from, the requirement becomes clearer only when viewed across the market.

These characteristics are not created by a particular item type or industry. They result from the relationship among the inventory, the market, the point of use or delivery, the required response time, and the purpose being supported. An item becomes part of the forward environment when it is intentionally positioned within that relationship.

Organizations already operate forward inventory networks whether or not they describe them in these terms. Inventory has been placed close to anticipated demand, divided among local positions, assigned to people whose primary responsibility lies elsewhere, and justified by outcomes larger than the item itself. Without a common definition, these positions may be treated as unrelated exceptions belonging to separate functions. Naming the environment makes the shared management problem visible.

Forward deployed inventory can therefore be defined as inventory intentionally positioned within a market, close enough to its anticipated point of use or delivery that its availability can materially change the outcome. It operates in a distributed environment where time, purpose, access, custody, local control, and the cost of recovery determine whether the inventory can fulfill the role for which it was placed.

This definition establishes what FDI is. It also raises the next question. The systems used by most organizations were developed around controlled facilities, stable stocking locations, established transactions, and traditional inventory objectives. Those systems may serve the central network well. Whether they can manage inventory effectively after it has moved into a different operating environment is the question Chapter 6 will examine.

Forward deployed inventory is not defined by what the item is. It is defined by where it has been placed, when it must be available, what outcome it supports, and the conditions under which it must be controlled.

ABOUT THIS SAMPLE

The Forward Deployed Inventory System

A Maturity Model for Seeing, Trusting, and Improving Field Inventory

This complimentary chapter is offered so leaders in field service, spare parts, aftermarket operations, and supply chain can examine the operating case for Forward Deployed Inventory Systems before committing to the full book. Chapter 5 defines forward deployed inventory itself: how its market is drawn, what purpose it serves, and why moving inventory closer to the point of use or delivery creates a distinct management problem.

The chapters that follow ask whether systems designed around controlled facilities can manage that environment, define the Forward Deployed Inventory System as its own category, and lay out a maturity path for establishing control, connecting inventory to the work it supports, and progressively improving placement decisions as information and capabilities mature.

If this chapter describes inventory your organization already holds — divided among small local positions, handled by people whose primary work lies elsewhere, and justified by outcomes larger than the items themselves — the rest of the book provides a structured path for managing it.

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