The essence of Kanban is to have material delivered to a location only when it is needed, thus avoiding excess inventories.

Historically, Kanban has been used an internal manufacturing management technique, used to improve the efficiency of production and material movement. It is one of the more visible tools supporting a Lean Manufacturing environment.

As operations expand and work is distributed to suppliers and partners, the need for an expansion of the Kanban principles outside of the ‘four walls’ is apparent.

GLOVIA G2 Electronic Kanban can be executed as an integral part of the supply chain. It provides the ability to monitor inventory levels from suppliers and establishes triggers to automatically replenish inventory when a predefined minimum for each item is reached.

GLOVIA G2 Electronic Kanban provides important inventory control benefits, including:

- Full automation – Minimizing effort and increasing accuracy
- Lean, Minimal inventory levels
- Automatic generation of Purchase orders, Production Orders, Transfer Orders, and even Sales Orders (to replenish Customer Consigned Inventory) and negating the need for planning,
- Customer consumption driven processes
- Excellent customer service with minimal effort
- Ability to work with multiple companies across multiple continents

**Kanban Processing in GLOVIA G2**

Consider the standard Kanban graphic:

**Standard 4-Wall Kanban**

The graphic illustrates the monitoring of material flow within the plant. Electronic Kanban automatically initiates an inventory ‘pull’ when material replenishment is needed - thus making for a clean, efficient and effective process.

With Electronic Kanban the inventory replenishment is automatically identified as soon as a pre-defined minimum is reached, and a Kanban pull instructions is immediately generated identifying the required move of a pre-defined quantity from a source location to the Kanban location.

Because Electronic Kanban monitors the inventory levels and generates the replenishment pull tickets your workforce does not need to manage or monitor the inventory – They just need to focus on making the actual physical inventory movements that Kanban tells them to.
Automatic Generation of Production Orders and Transfers from Other Plants

Where you wish to generate production orders to replenish the Kanban, or transfer orders to obtain supplies from other plants within your business - Kanban policies can be defined to automatically generate the production orders or transfer orders for a pre-defined quantity as soon as a pre-defined minimum is reached.

Beyond the Four Walls - Suppliers & Customers

Now consider the ability to use Electronic Kanban to automatically trigger replenishments from suppliers and to customers. This is Kanban supply that extends beyond the four walls.

GLOVIA G2 Electronic Kanban capabilities allow you to identify suppliers as a replenishment source. Just as with Electronic Kanban within the four walls, GLOVIA G2 uses pre-defined inventory levels and replenishment policies to automatically trigger the appropriate supply mechanism for that supplier.

The concept of using Kanban to manage supplier replenishments can be extended to the control of supplier owned consignment inventory that resides within your four walls. The consigned inventories are considered the supplier’s until you record that they have been used. Financial records are maintained to indicate supplier ownership of the inventory until the ‘usage’ is assumed when material is moved to a ‘non-consigned’ location. At that point vouchering the ‘usage’ to a supplier invoice becomes possible.

Now, take this even one step further: Imagine doing the same thing for your customers. Imagine using Electronic Kanban to manage the replenishment of inventories that you own at the customer site. GLOVIA G2 enables customers to record their usage via a web-based customer self-service portal. Once the customer usage is recorded, invoices will be generated during the billing processing. Once the usage falls below the pre-defined minimum the automatic creation of a new sales order delivery will be triggered prompting the replenishment of the customer consigned inventory level.

GLOVIA G2’s Electronic Kanban can add significant value to the supply chain and support efforts for Lean operations by optimizing efficiency and cost effectiveness of materials and their movement: from 4-wall inventory and production management, through supplier, supplier consigned, customer and customer consigned replenishments - Electronic Kanban can manage it all.