Overview

The Espresso Book Machine (the “EBM”), a Time Magazine “Best Invention of 2007,” provides a revolutionary direct-to-consumer distribution and print model for books. Described as “the ATM of books,” the EBM Version 2.0 is a fully integrated patented book-making machine that can automatically print, bind, and trim on demand at point of sale perfect-bound library-quality paperback books with full-color covers (indistinguishable from a book on a bookstore shelf) in minutes for a production cost of a penny a page. The EBM’s software automatically tracks all jobs and provides for all payments to publisher/content owner. The EBM makes it possible to distribute virtually every book ever published, in any language, anywhere on earth, as easily, quickly, and cheaply as e-mail.

Operation

Designed to operate in a variety of environments, the EBM requires minimal human intervention and only occasional maintenance, such as refilling paper trays, replacing toner cartridges, emptying the trim-paper receptacle, and clearing paper jams. An onboard computer controls the EBM’s operation and provides a simple user interface for controlling print jobs and managing content.

EspressNet℠

Through EspressNet, the EBM’s custom software, the EBM is connected to a vast network of content, both in copyright and out. Content owners can manage their texts, permissioning what can be ordered where, and by whom. Print locations can manage and re-prioritize job queues based on demand. Customer-facing storefronts can easily add discovery and ordering of “print it now” books. The network uses industry-standard cryptography to provide secure communications, and delivers fine-grained visibility as content travels throughout the network. Content owners can see exactly where their content has been ordered and produced, and EspressNet tracks every step of every transaction, providing all data needed to apportion payments to publisher/content owner, production costs, network fees, and so on.

Content

On Demand Books has a strategic alliance with Lightning Source™ Inc. (“LSI”). LSI, a subsidiary of the Ingram Book Group (the world’s largest wholesale distributor of books), is the industry’s premier POD distributor of books. Its digital database includes over one million titles from over 8,000 publishers. ODB has the use of LSI’s digital conversion facilities and the right to print LSI’s vast library of titles, pending publisher approval. In September 2009, ODB and Google signed an agreement giving EBMs immediate access to over two million public-domain Google Books. These books are available on the EBM via EspressNet. In addition, the EBM has access to more than one million public-domain books through the Open Content Alliance and titles from other repositories. Content is expected to increase substantially as more EBMs are adopted by bookstores, libraries, and other venues around the globe.
How Does The Espresso Book Machine Work?

The EBM makes a perfect-bound paperback book virtually identical to the publisher's original in a matter of minutes. The EBM is fully automated, and performs the following actions with minimal human intervention:

1. The user chooses a digital file via the EspressNet software system, either at the physical EBM, or remotely via the Internet (users can also bring their own files in person: on CD's, flash drives, etc.). The EBM uses PDF files for the book block and the cover.


3. As pages are printed they are collected in the accumulator to ensure proper alignment.

4. Simultaneously, a color inkjet printer produces a full-color image on tabloid (11” x 17”) or A3 cover stock that is used to form the book cover. The printed cover travels downward from the printer to the binding table where it waits for the book block.

5. Once the book block is complete, it is positioned vertically by the accumulator and transferred, in constant positive retention, to a clamp. The clamp enables the book block to travel vertically.

6. The clamp holds the book block while the bottom edge is milled to roughen the edges in preparation for glue application.

7. Immediately afterwards, a rotating wheel applies a thin layer of heat-activated glue over the milled edge.

8. The clamp then moves the book block down to the cover, which waits on the binding table. The EBM uses special pneumatics and clamps to press the cover against the spine and around the book block. This produces a traditional "perfect-bound" book.

9. The binding table opens and the clamp passes through and transfers the bound book to a robot at the shearing station. In the final steps of the process, the robot rotates the bound pages while a single carbide blade trims the edges into a book infinitely variable between 4.5” x 5.0” to 8.25” x 10.5” (11.4 x 14.0 to 21.0 x 26.7 cm).

10. The completed library-quality paperback book is presented spine first by the EBM – still warm – ready to read. As we say, “Hot off the press!”

EBM Patents

7,014,182 Unified Process
6,986,630 Laminated Cover
6,928,914 Book Trimming Method
6,443,682 Bind and Trim Perfect Bound
6,193,458 System of Binding & Trimming
6,142,721 Binding Apparatus & Method

EBM 2.0 Details

Books:
- Binding: Perfect-bound books, indistinguishable from their factory-made versions.
- Page-Count: 40 to 830 pages.
- Trim Size: Infinitely variable between 4.5” x 5.0” to 8.25” x 10.5” (11.4 x 14.0 to 21.0 x 26.7 cm).
- Speed: A 300-page book in less than 4 minutes (serially, less than 3 minutes).
- File format: Standard PDF for book block and cover.
- Books can be downloaded from the web or in person from CD’s, flashdrives, etc.

Consumables:
- Standard US letter-size or A4 paper.
- Tabloid or A3 cover stock.
- Toner, ink, glue.

Core Unit Specifications:
- Dimensions: 3.8 feet wide, 2.7 feet deep, 4.5 feet high.
- Weight: 800 pounds.

EBM Electrical:
- 240v 1ph at 30 amps.
- Box with disconnect.
- UL certified stock.
What is EspressNet?
The Espresso Book Machine® (the “EBM”) is essentially an ATM for books. Using digital files, it automatically prints, binds, and trims, on demand at point of sale, perfect-bound, library-quality paperback books with full-color covers. These books are indistinguishable from other books found in a bookstore or library.

EspressNet is the proprietary software system that connects the EBM to a vast network of content as well as to other EBMs. It enables books to be ordered and printed onsite at the EBM, and can also be integrated with a retail/library website so that consumers can order books remotely via the Internet. EspressNet tracks sales, provides for all payments to publisher/content owner, and uses industry-standard encryption methods (as detailed below) to keep content safe.

How many titles are available through EspressNet?
EspressNet connects EBMs to a vast network of discrete digital repositories, enabling instant distribution of over 3,000,000 titles: trade, public-domain, academic, foreign-language, self-published, and other content. Some specific examples include:

- Publisher clients of Lightning Source, Inc.™ (the POD subsidiary of the Ingram Book Group), including Hachette, McGraw-Hill, Simon & Schuster, WW Norton, Macmillan, John Wiley, and others;
- Google Books (public-domain titles);
- Open Content Alliance;
- Numerous major publishers, content aggregators, and foreign-language content, representing additional titles, journals, and other material.

What precautions are used by EspressNet to ensure my content is protected?
EspressNet uses industry-standard cryptography to provide secure communications, and delivers fine-grained visibility as content travels throughout the network. All transmissions between a source of digital files (a “repository”) and an EBM are encrypted at the base level with a standard and strong PKI-based encryption. Furthermore, EspressNet utilizes the highest-level file wiping algorithms to ensure absolute un-recoverability from hard-disk drives.

Both EspressNet and the EBM are the creation of On Demand Books, LLC (“ODB”).
What precautions are used by EspressNet to ensure publisher/content owner payments are properly attributed?

All ordering and financial transactions employ digital signatures from all involved parties. This is intended not only (1) to guard against piracy but also (2) to provide for mathematically ironclad certification of orders and payments (i.e., non-repudiation). Revenues for books sold are collected at point of sale, and payments to publishers/content owners are later remitted.

I’m a publisher and my files are with Lightning Source; what will my compensation payments look like?

For publishers in the LSI network, compensation will be identical to their current compensation model with LSI.

How do I monitor when and where my files are printed?

Content owners can see exactly where their content has been ordered and produced, and EspressNet tracks every step of every transaction, providing all data needed to apportion publisher/content owner payments, production costs, network fees, and so on.

How do I find a book?

Books are searchable by title, author, keyword, subject area, publisher, and year of publication—anything that is included in the metadata of the book.

Who manages my content repository?

You can, or if you’d prefer, you may wish to “push” your files for hosting on either ODB’s servers or the servers of ODB’s partner company, Lightning Source.

How do users select an item? Can they also do it remotely, from their own computer?

Users can access the EspressNet catalogue of titles and order a book onsite or remotely, via the Internet. Book files can also be printed in person from CDs, flashdrives, etc.

How does the payment part work? How can I integrate with my POS system?

Catalogue items have unique identifiers that can be used to map to retailer-specific SKUs just like any other supply-chain item. EspressNet uses MySQL for all data.

Can we use digital files of anything a user might want to print? It doesn’t just have to be a book, right?

The EBM will print, bind, and trim absolutely anything that a laser printer can print. Users have used the EBM to print journals with custom covers and lined pages, technical manuals, and report collections.
A New Money-Making Technology from On Demand Books—
The SelfEspress Self-Publishing Toolset.

Allow your customers to publish locally and sell globally with SelfEspress—an automated self-publishing toolset for use with your Espresso Book Machine®.

- SelfEspress enables students, professors, and the entire school community to (1) create custom, self-published books, (2) print them in your bookstore or library, and (3) since titles can be made available on the EspressNet™ catalogue, sell them across the global network of Espresso Book Machines.

Participate in the Fastest-Growing Segment of the Book Business . . .

- Earn printing fees from all books printed on the Espresso Book Machine.
- Earn commissions from the SelfEspress self-publishing services provided online, without incurring any costs or labor on your end.
- Leave the behind-the-scenes work to SelfEspress, which is powered by WordClay, a division of Author Solutions (the world leader in self publishing). SelfEspress is a “private label” service that is designed to be lightly branded specifically to your bookstore or library.

Enjoy Happy Customers . . .

- Students, professors, and the entire school community can print dissertations, course materials, customized anthologies, rare books, collections of essays, stories, and poems. Your customers can purchase professional design and other self-publishing services, and then buy the finished books immediately in your store!
Customer accesses SelfEspress—at home through your website or in-store using a computer—uploads a document or manuscript, then chooses from a suite of services: editing, typesetting, proofreading, cover design, post-production marketing services, etc.

- **You Earn A Commission on the For-Pay Services Without Incurring Any Costs or Labor Yourself**

**STEP 2**
When the book is ready, it is added to the EspressNet catalogue of content and made available for sale in your store or library and throughout our global network of Espresso Book Machines.

- **An In-Store Advantage that Creates Value Not Available at Online-Only Self-Publishing Websites**

**STEP 3**
Customer instantly prints the book (single copies or a short run) on your Espresso Book Machine. Book is added to the global network of machines and can now be printed and sold throughout the world.

- **You Earn Printing Fees—and Customer Earns Royalties on Books Sold Worldwide**