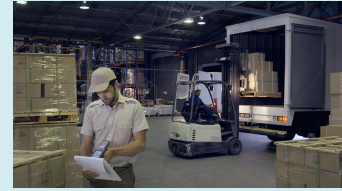




## RESOURCES

**Home**  
**Resources**  
**Resource Center**

# Managing Serialization Data at the Edge with Edge Track



Serialization is about more than just shipping product: it requires shipping the right container every time. Edge Track acts as the bridge between your ERP or WMS and the world of serialization so that your systems are tracking all your warehouse changes digitally and making sure each container is reaching the right customer.

Watch this two-minute video to learn how Edge Track complies with global regulations, and also improves the end-user experience—with serialization as the focus.

### **United States**

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**More Serialization and Compliance Resources**



### **Improving Healthcare Operations and Patient Safety with Edge Data**

Find out how hospitals and pharmacies can use edge data capture to improve both inventory management and patient outcomes.

**[View More](#)**

Learn how Merck implemented TraceLink's Smart Inventory Tracker to ensure easy and fast verification at the edge.

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**HOW TO BUILD AN EMPIRE WITH SERIALIZATION**

*Jordan Morris-Catharina, Validation Leader & Julia Robert, Supply Chain Officer at Mithro*

**Business Challenge & Solution**

**What are we in?**

We're a customer-centric, digital, & service-oriented company in the Supply Chain & Logistics space. We're a technology-driven company. We're a company that is building the next generation of supply chain & logistics solutions. We're a company that is building the next generation of supply chain & logistics solutions. We're a company that is building the next generation of supply chain & logistics solutions.

**Business Challenges**

- Fragmented data across different systems
- Lack of visibility into the supply chain
- Lack of transparency in the supply chain
- Lack of collaboration between different stakeholders
- Lack of standardization in the supply chain

**Solution**

We're building a centralized platform that connects all the stakeholders in the supply chain & logistics space. We're building a platform that provides a single source of truth for all the stakeholders in the supply chain & logistics space. We're building a platform that provides a single source of truth for all the stakeholders in the supply chain & logistics space.

**Key Activities and Resources**

**MARK**

**ACQUISITION**

**CONVERSION**

**Key Activities**

- Product development
- Marketing & sales
- Customer support
- Operations
- Finance & HR

**Key Resources**

- Human capital
- Financial capital
- Physical capital
- Intellectual capital
- Organizational capital

**Team**

Name	Role
Benjamin Buehler	Co-Founder & CEO
Julia Robert	Supply Chain Officer
Stefanie Buehler	Co-Founder & COO
Oliver Buehler	Co-Founder & CTO
Andreas Buehler	Co-Founder & CFO
Michael Buehler	Co-Founder & CMO
Christian Buehler	Co-Founder & CDO
Markus Buehler	Co-Founder & CIO
Thomas Buehler	Co-Founder & CTO

**Outcomes**

**Business Metrics**

- Revenue
- Profit
- Customer satisfaction
- Employee satisfaction
- Market share

**Key Milestones**

- Product launch
- Market entry
- Customer acquisition
- Revenue growth
- Profitability

**Business Model Canvas**

**Revenue Model**

- Subscription
- Transaction
- Advertising
- Commission
- Licensing

**Customer Segments**

- Manufacturers
- Logistics providers
- Retailers
- Government
- Academia

## Case Study: Mithra | Serializing Across Multiple Business Cases

Learn how Mithra used a multidisciplinary approach for a successful EU FMD go-live.

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## UNIQUE IDENTIFICATION CODE FOR DERMOMESTHETIC PRODUCTS

### IBSA's Internal Serialization Procedure for Medical Device Products

*Authors: Maddalena Rizzo, Production Manager at IBSA Italy  
Carmen Vigorelli, Sr. Sales Manager, IBSA Switzerland*



#### Case Challenge & Solution

IBSA, a leading manufacturer of dermomesothetic products, faced a significant challenge in ensuring product integrity and preventing counterfeiting. The company's internal serialization procedure was outdated and inefficient, leading to delays and errors in the production process. The solution involved implementing a new internal serialization procedure that integrated with the company's existing production process, ensuring that each product was uniquely identified and tracked throughout its lifecycle.

#### Key Activities and Resources

**Key Activities:**

- 1. Conduct a thorough audit of the current internal serialization procedure to identify areas for improvement.
- 2. Develop a new internal serialization procedure that integrates with the company's existing production process.
- 3. Implement the new internal serialization procedure across all production lines.
- 4. Train production staff on the new internal serialization procedure.
- 5. Monitor the implementation of the new internal serialization procedure to ensure it is working effectively.

**Resources:**

- 1. Production staff
- 2. IT support
- 3. Quality control
- 4. Customer support

#### Outcomes

**Success Metrics & Results & Feedback:**

- 1. Increased product integrity and prevented counterfeiting.
- 2. Improved internal serialization procedure efficiency.
- 3. Reduced production delays and errors.
- 4. Increased customer satisfaction.
- 5. Improved internal serialization procedure accuracy.

**Success:**

IBSA's internal serialization procedure is now working effectively, ensuring that each product is uniquely identified and tracked throughout its lifecycle. This has resulted in increased product integrity, improved internal serialization procedure efficiency, reduced production delays and errors, increased customer satisfaction, and improved internal serialization procedure accuracy.

#### Recommendations

IBSA should continue to monitor the implementation of the new internal serialization procedure to ensure it is working effectively. The company should also consider implementing additional measures to further improve product integrity and prevent counterfeiting, such as implementing a new internal serialization procedure that integrates with the company's existing production process.

## Case Study: IBSA | Using Serialization to Ensure Product Integrity

Learn how IBSA used serialization to protect their product from counterfeiting.

[View More](#)



**Master Product Data Strategy for EU-FMD implementation:  
the key of success in serialization**

**Author(s):** Christine Benschel, Christine Dell, Lisa Gifford, PhD, Christine Dell, and Maria Sanchez, Clinical PhD

[View all Mathematics & Statistics](#)

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to get classified among the managers of these cars is almost as difficult as it is to make sure that the car is not a negative example. Identifying up to 1000 good examples per car class is a nontrivial task, and requires a number of iterations.

is to the effect of the company's capital funds and the responsibility through shareholders' trust with respect to the company's financial management and the fact that the company's management



### Key Authors and Researchers

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

1. **Microarray** - When gene expression is measured in thousands of genes simultaneously (10,000s) by using a technology that uses tiny spots of DNA on a glass slide or microarray chip to measure gene expression.
2. **Gene** - A unit of heredity that is transferred from a parent to offspring and is held to determine some characteristic of the offspring.
3. **Genome** - All of the genetic material contained in the chromosomes of an organism.
4. **Protein** - A large molecule made up of amino acids that performs a specific function in the body.
5. **Metabolic pathway** - A series of chemical reactions that occur in the body to produce energy and build molecules.

The authors thank Dr. Robert G. Anderson for his critical review of the manuscript.

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What do you think the relationship is?



### Statistical Analysis

- 1) Stages of product testing and development
- 2) An example of how a market can protect itself
- 3) Relative importance of products with



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### Discussion

1. Is the study statistically valid, accurate, and reliable?  
2. Is the study statistically valid, accurate, and reliable?

[illegible]

Account	Debit	Credit	Balance
Accounts receivable	100.00		100.00
Accounts payable		100.00	100.00
Inventory	100.00		100.00
Equity		100.00	100.00
Assets	200.00		200.00
Liabilities		100.00	100.00
Equity		100.00	100.00

Modeling and updating systems will

- <sup>1</sup> There are two 'frontier' measurement issues: (i) the choice of a suitable reference point for the data; and (ii) the choice of the frontier.



## Summary & Conclusions

- 1999: Higher Productivity than most countries in the world
- 1999: Higher Productivity than most countries in the world
- 1999: Higher Productivity than most countries in the world

1. <b>Introduction</b>	10
2. <b>Background</b>	15
3. <b>Methodology</b>	20
4. <b>Results</b>	25
5. <b>Conclusion</b>	30



**Figure 1. Summary of the study design.**

**Abstract**

- One key credit facility source is the company which grants the loan (e.g. banks)
- There is also capacity for work under international treaties, which is a common practice
- Foreign banks also have to fulfil licensing and other standards that international banks operating in the United States face
- High net banks at the world level are therefore all the same (different national laws apply)

### References

1. The list of activities under the group of "Other" is the most important for the respondents.
2. Major Physical Tasks performed by all workers in the construction sector include:
  - a. Carrying heavy loads (up to 100 kg) over long distances.
  - b. Digging, shoveling, and moving earth and debris.
  - c. Lifting and lowering materials and equipment.
  - d. Climbing ladders and scaffolding.
  - e. Working in confined spaces.
  - f. Handling and mixing concrete and mortar.
  - g. Operating heavy machinery (excavators, bulldozers, etc.).
  - h. Welding and cutting metal.
  - i. Painting and applying finishes.
  - j. Installing and removing formwork.
  - k. Tying and setting reinforcement bars.
  - l. Drilling and boring holes.
  - m. Measuring and marking out work.
  - n. Transporting materials and equipment.
  - o. Cleaning and maintaining tools and equipment.
  - p. Working in adverse weather conditions.
  - q. Handling hazardous materials.
  - r. Performing emergency repairs.
  - s. Operating power tools (saws, drills, etc.).
  - t. Mixing and pouring concrete.
  - u. Laying bricks and blocks.
  - v. Installing windows and doors.
  - w. Finishing walls and ceilings.
  - x. Painting and staining.
  - y. Installing insulation.
  - z. Operating cranes and hoists.
3. Measurement of activities is based on the duration of the activity.
4. The list of activities is grouped into three categories: physical, mental, and social. Physical activities are those that require significant physical effort, mental activities are those that require significant mental effort, and social activities are those that require significant social interaction.

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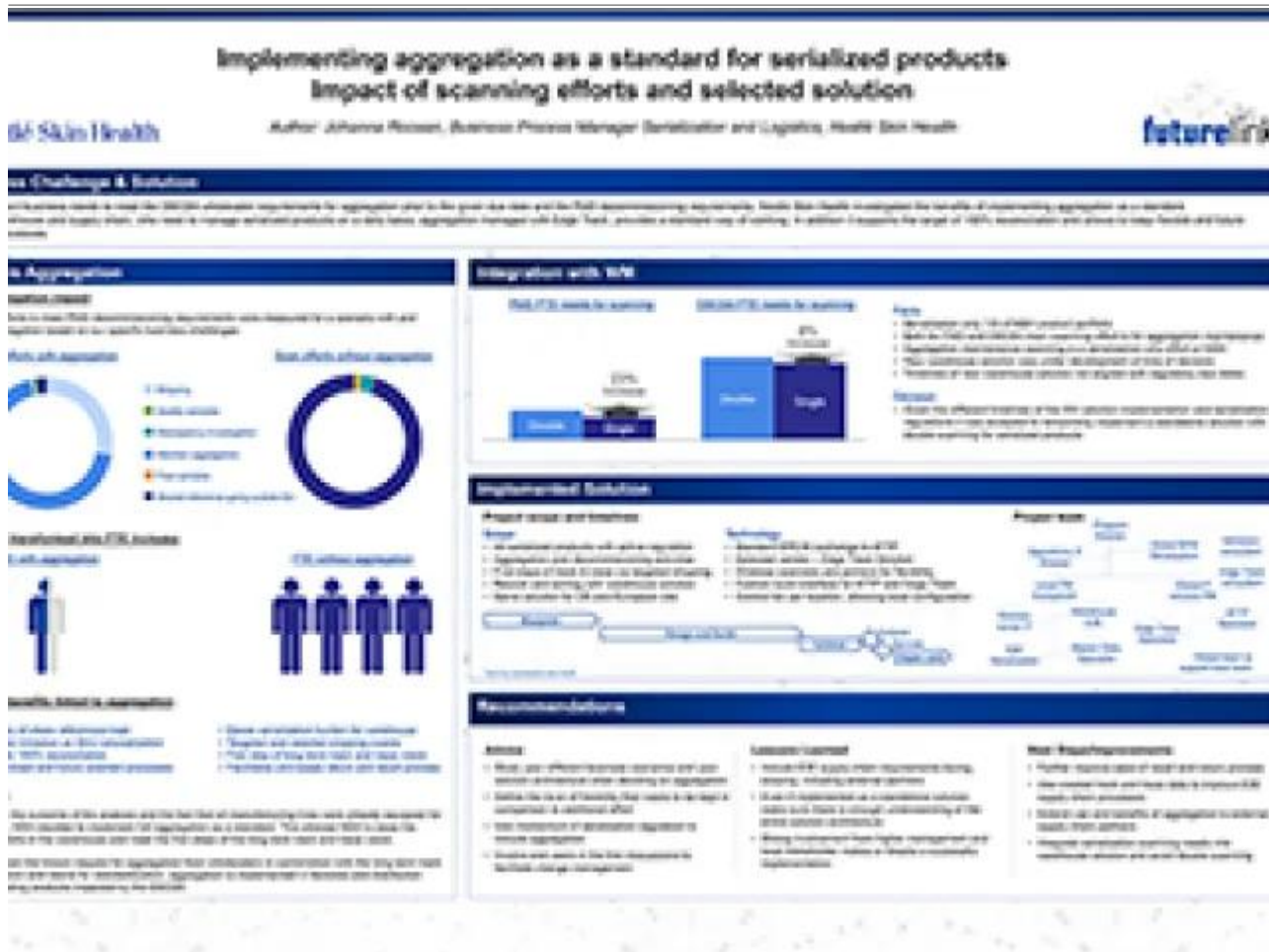
- A new life insurance is being built using the information gathered in graduation
- Double-check that it is not writing any, if more changes are possible, significant in



## Case Study: Ferrer | Building a Master Data Strategy for EU FMD

Learn how Ferrer worked with TraceLink to manage its master data for EU FMD compliance.

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