

9-12 JUNE 2019

SAPICS CONFERENCE

Century City Conference

Centre, Cape Town,

South Africa

**SAPICS**

PROFESSIONAL BODY FOR
**SUPPLY CHAIN
MANAGEMENT**

DISCARD DUE-DATES!

How the largest medical device manufacturer in South Africa discarded due-dates to save the company.

Adolph Vogel

Motus Aftermarket Parts, Head of Analytics



www.sapics.org

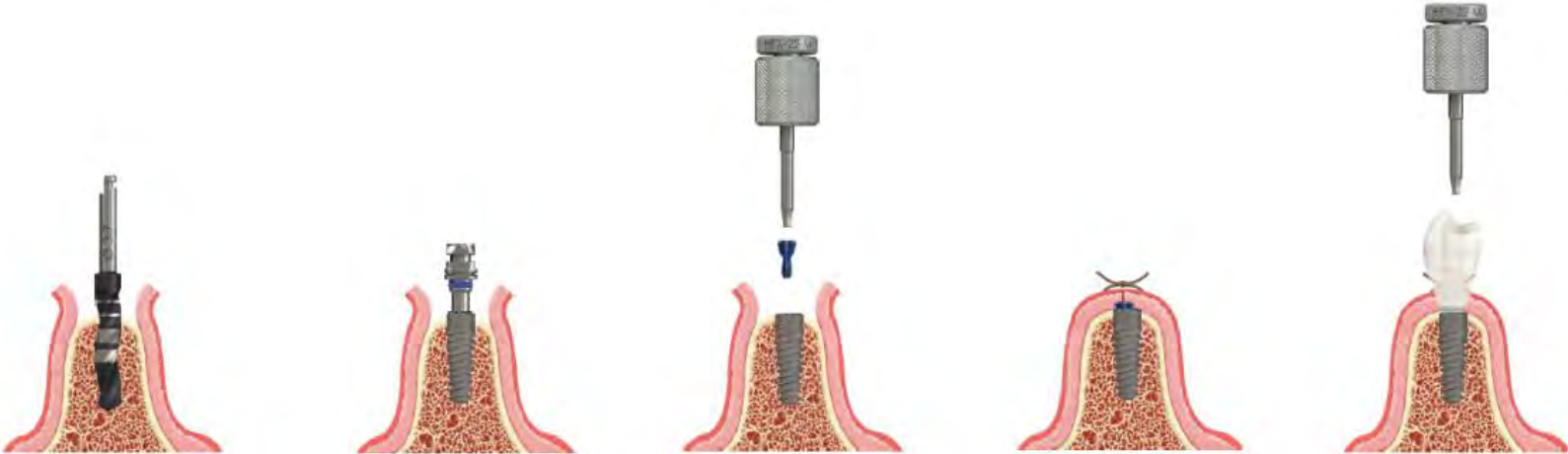
The Leading Event in Africa for Supply Chain Professionals

THE DENTAL IMPLANT SUPPLY CHAIN

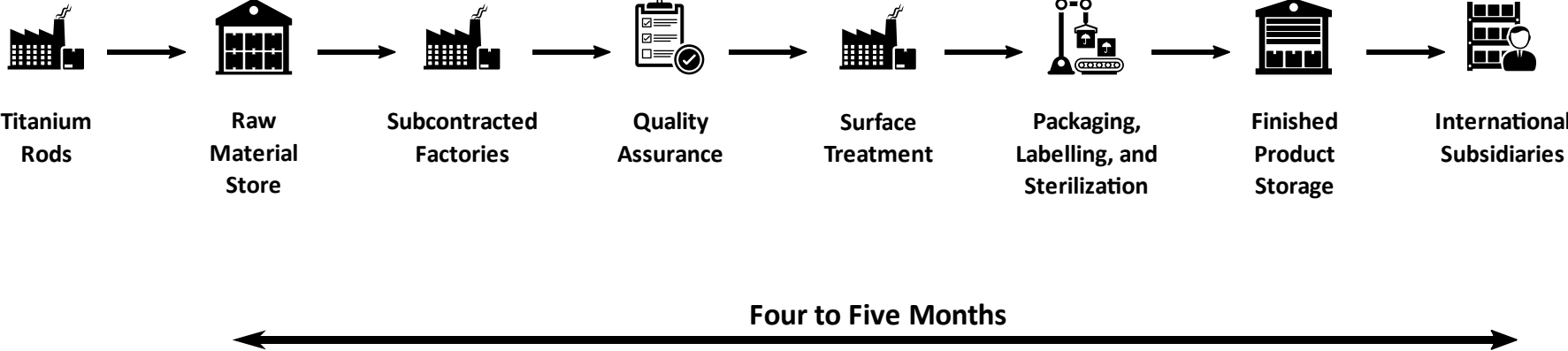
Dental Implants are small screws made from a high-strength and biocompatible Titanium that are placed in patients jaws by trained oral surgeons.



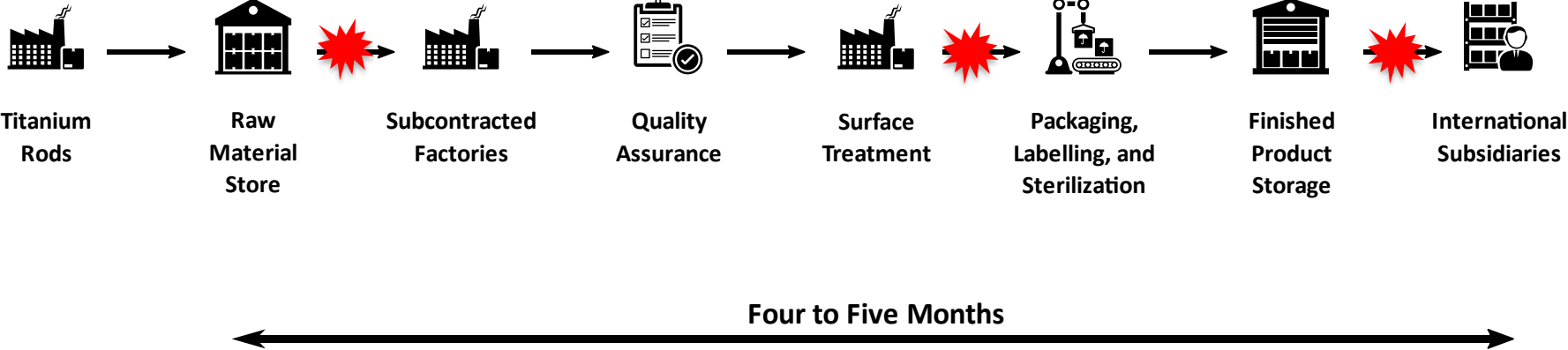
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The Dental Implant Supply Chain starts with raw Titanium Switzerland, passes through local factories, and ends up in 13 different countries.

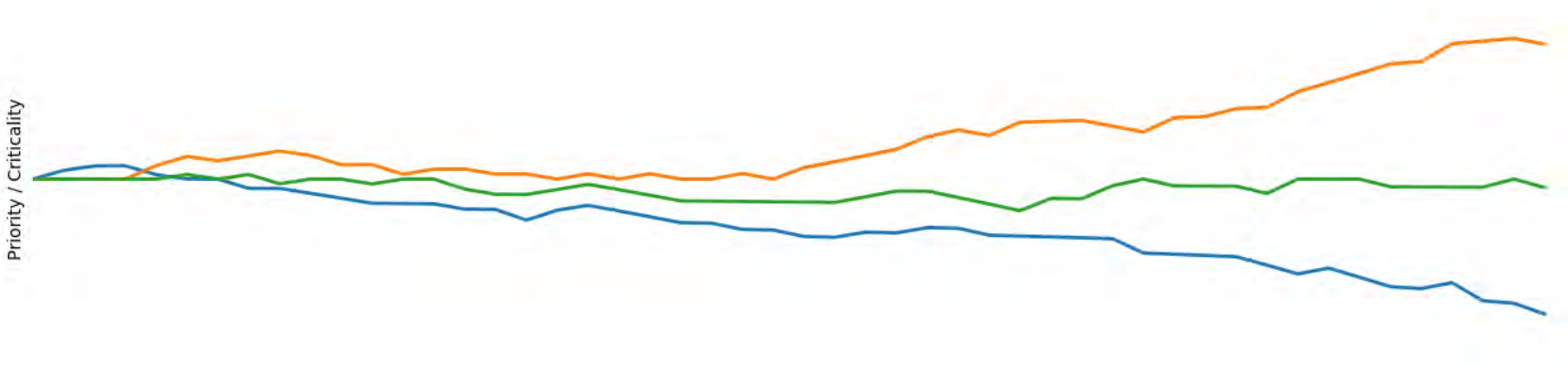


When we took over the management of the Supply Chain it was in crisis.



THE THREE DEFICIENCIES OF DUE-DATES

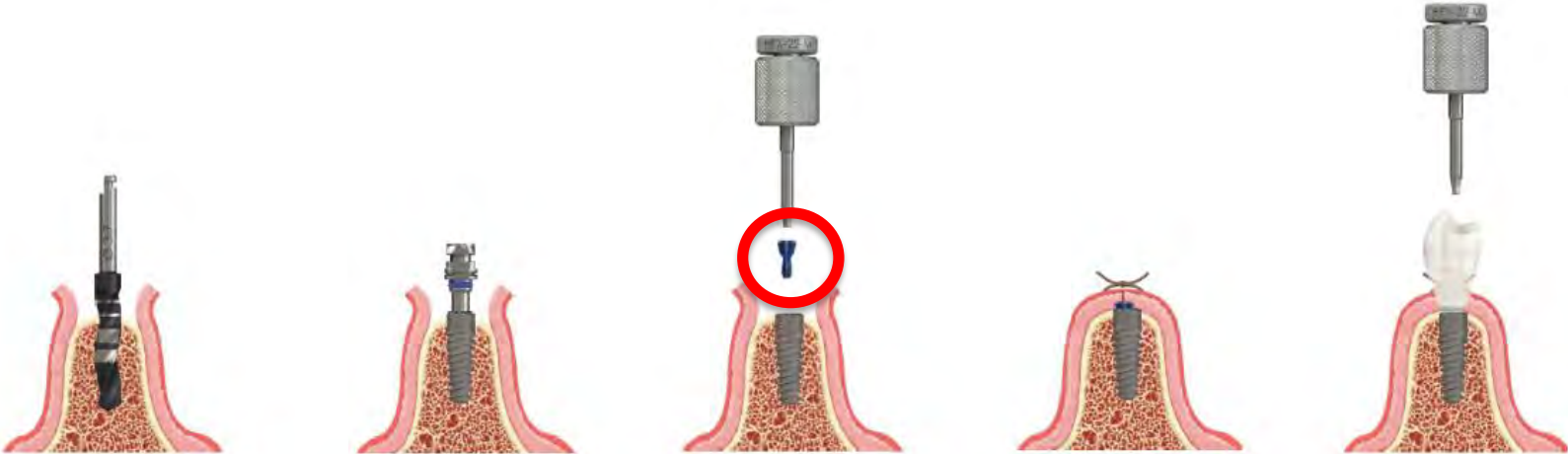
The first due-dates deficiency is that they are static and usually set on the day the order was created.



The second deficiency is that due-dates lack resolution.



The final deficiency is that due-dates don't distinguish the relative importance of items.



DISCARDING DUE-DATES: THE CRITICAL RATIO

In the end we turned to an old production scheduling concept, the Critical Ratio (CR), which you don't even find in textbooks anymore.

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$$CR = \frac{\textit{Downstream Orders + Stock on Hand}}{\textit{Days left in Production} \times \textit{Expected Daily Sales}} \times \textit{Criticality Factor}$$

We hand delivered or emailed a priority list to every step in our supply chain. We called this list the Master Priority List (MPL).

Item	Class	Location	Document	Comments	Qty	SOH	CR
ITEM001	A	Inspection	177864	Next step FIRST INSPECTION (143L00D1)	100	0	0
ITEM003	B	Supplier B	PO014688	REV.3; Orig Del. Date Apr 20 2018 12:00AM	100	0	0
ITEM006	C	Supplier B	PO014860	REV.7; Orig Del. Date Jun 6 2018 12:00AM	100	0	0
ITEM010	A	Supplier A	PO014658	REV.1; Orig Del. Date Jun 5 2018 12:00AM	70	9	0.03
ITEM011	A	Cleaning	177824	Into CLEANING at May 23 2018 5:50AM	150	43	0.06
ITEM012	A	Supplier C	PO014930	REV.1; Orig Del. Date Jul 4 2018 12:00AM	200	36	0.06
ITEM013	B	Supplier C	PO014778	REV.3; Orig Del. Date Jun 11 2018 12:00AM	100	4	0.03
ITEM014	A	Inspection	177887	Next step FIRST INSPECTION (143L04D1)	150	96	0.08
ITEM015	B	Inspection	177861	Out of FIRST INSPECTION at May 23 2018 7:47AM	37	12	0.04
ITEM016	A	Supplier A	PO014658	REV.2; Orig Del. Date Jun 5 2018 12:00AM	100	21	0.09
ITEM017	A	Supplier B	PO014860	LOT: X 131L06; Orig Del. Date Jun 5 2018 12:00AM	600	79	0.09
ITEM018	B	Supplier A	PO014647	REV.5; Orig Del. Date Apr 10 2018 12:00AM	300	24	0.05
ITEM019	B	Supplier C	PO014857	REV.1; Orig Del. Date Jun 4 2018 12:00AM	110	7	0.05
ITEM020	A	Inspection	177114	Into FIRST INSPECTION at Apr 18 2018 12:54PM	56	21	0.11
ITEM022	A	Supplier C	PO014977	REV.1; Orig Del. Date Jul 11 2018 12:00AM	150	14	0.13

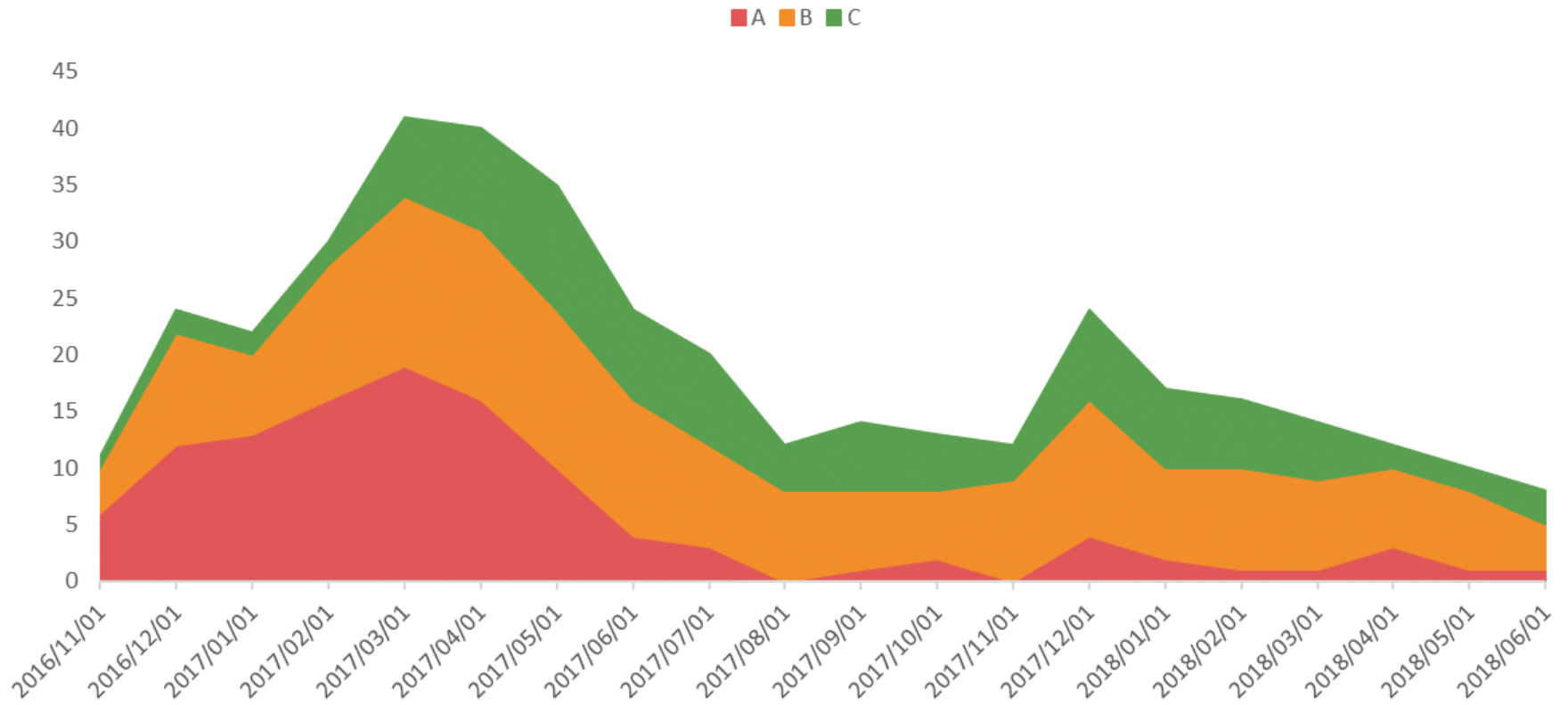
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THE BENEFITS OF DISCARDING DUE-DATES

Stockouts decreased by **39.1%** after eighteen months.

Items out of Stock over Time



Inventory turnover increased **15.9%** after twelve months.

Increased agility with Internal lead-times of critical batches decreasing from **4.3 to 1.7 months!**

“Would you rather be on time or never
stock out?”

Carol Ptak and Chad Smith