



tanglin

Your Outsourced CIO

CASE STUDY 2




WORLD LEADING INNOVATION AND UNRIVALLED USE OF I.T TO TRANSFORM A COMPANY

THE PROBLEM

The new owners of a Campervan Rental company engaged Tanglin to develop its IT infrastructure. The company operated out of four locations in New Zealand. Two in the North Island and two in the South Island. The company had computers in these locations but had no connectivity between the sites. As a result, when a tourist collected a vehicle in one location, their paper based rental agreement would need to be faxed to their drop off location. It was highly inefficient, outdated, and cumbersome. But this is precisely the type of business environment that the intelligent use of IT could significantly transform.

The inefficiencies from administering paper-based documents without any automation were crippling the company. Bookings could only be confirmed by one staff member who scheduled all the bookings using a massive whiteboard. Every new booking received would have the effect of disrupting and throwing into disarray all presently scheduled bookings. The process became a full time responsibility for multiple staff. Mistakes were common, and the vehicle utilisation levels were not even close to optimal levels. In this industry, vehicle utilisation levels are critical.



THE SOLUTION

Tanglin initially analysed the business to document the company's procedures, systems, and competitive edge. Tanglin prioritised areas for automation and optimisation.

Tanglin initiated various projects for the company, including the following:

1. Tanglin deployed a secure network between all the locations. This removed the need for archaic fax machines.
2. Tanglin developed an electronic rental agreement. The code that was developed enforced the company's complex business rules within the agreement. The agreements were centrally stored and were analysed to provide real-time information to manage the hires.

Home Documents and Lists Create Site Settings Help										
Bookings Database										
Infopath Bookings Database Developed by Mark Perratt Tanglin Consultancy Limited										
Merge Forms Filter										
Merge Vehicle		Pickup	Dropoff	Startdate	Enddate	Options	Gross	Discount	Nett	
Count = 9		Count = 9				Sum = 2,480	Sum = 28,244	Average = 0.103333333	Sum = 25,034.93	
Vehicle : Eclipse 2 berth		(2)				Sum = 585	Sum = 6,900	Average = 0.1	Sum = 6,095	
Eclipse 2 berth		Wellington	Auckland	23/02/2005	23/03/2005	220	2,300	0.05	2,185	
Eclipse 2 berth		Wellington	Picton	22/02/2005	12/03/2005	365	4,600	0.15	3,910	
Vehicle : Eclipse 4 + 2 berth		(2)				Sum = 560	Sum = 6,880	Average = 0.1025	Sum = 6,178.58	
Eclipse 4 + 2 berth		Picton	Wellington	22/02/2005	31/03/2005	280	3,356	0.125	2,936.5	
Eclipse 4 + 2 berth		Wellington	Wellington	22/02/2005	31/03/2005	280	3,524	0.08	3,242.08	
Vehicle : Eclipse 4 berth		(1)				Sum = 280	Sum = 3,250	Average = 0.075	Sum = 3,006.25	
Eclipse 4 berth		Wellington	Christchurch	22/02/2005	31/03/2005	280	3,250	0.075	3,006.25	
Vehicle : Eclipse 6 berth		(4)				Sum = 1,055	Sum = 11,214	Average = 0.1125	Sum = 9,755.1	
Eclipse 6 berth		Auckland	Christchurch	22/02/2005	31/03/2005	280	2,800	0.1	2,520	
Eclipse 6 berth		Wellington	Auckland	24/02/2005	30/04/2005	215	2,250	0.25	1,687.5	
Eclipse 6 berth		Auckland	Christchurch	22/02/2005	31/03/2005	280	2,800	0.1	2,520	
Eclipse 6 berth		Christchurch	Christchurch	22/02/2005	31/03/2005	280	3,364	0	3,027.6	

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3. The rental agreements were filled in by staff and clients on ruggedised Tablets (an innovative first for the industry).



4. Tanglin developed a website to handle bookings predominantly originating in Europe in a different time zone to New Zealand. An objective was to provide real-time confirmation of a booking based on scheduled vehicle availability allocated to the booking (another pioneering first for the industry.)
5. The biggest challenge the company faced was to confirm a booking. The decision was dependent on the vehicles available but, more importantly, on where they were located. Every new booking accepted impacted the schedule and profitability.

Tanglin worked with a mathematician to develop an algorithm to schedule bookings on vehicles optimally. The use of this algorithm meant bookings could be confirmed without human intervention. Furthermore, the algorithm would determine whether a booking could be accepted or needed to be declined within a fraction of a second. In addition, bookings were optimally allocated to vehicles to minimise relocations and increase capacity for additional bookings. This unique algorithmic functionality exceeded the capabilities of any other Rental Vehicle Firm anywhere in the world.

											Monday				
13:01	14:01	15:01	16:01	17:01	18:01	19:01	20:01	21:01	22:01	23:01	00:01	01:01	02:01	03:01	04:01
SORTIT10012	SORTIT10013	SORTIT10014	SORTIT10015	SORTIT10016	SORTIT10017	SORTIT10018	SORTIT10019	SORTIT10020	SORTIT10021	SORTIT10022	SORTIT10023	SORTIT10024	SORTIT10025	SORTIT10026	SORTIT10027
B-R	B-R	B-R	B-R	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2	rW(116)@4R2
rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6	rW(70)@6
SORTIT10028	SORTIT10029	SORTIT10030	SORTIT10031	SORTIT10032	SORTIT10033	SORTIT10034	SORTIT10035	SORTIT10036	SORTIT10037	SORTIT10038	SORTIT10039	SORTIT10040	SORTIT10041	SORTIT10042	SORTIT10043
R6[36]5	SORTIT10044 S[34,42]	SORTIT10045	SORTIT10046	SORTIT10047	SORTIT10048	SORTIT10049	SORTIT10050	SORTIT10051	SORTIT10052	SORTIT10053	SORTIT10054	SORTIT10055	SORTIT10056	SORTIT10057	SORTIT10058
SORTIT10059	SORTIT10060	SORTIT10061	SORTIT10062	SORTIT10063	SORTIT10064	SORTIT10065	SORTIT10066	SORTIT10067	SORTIT10068	SORTIT10069	SORTIT10070	SORTIT10071	SORTIT10072	SORTIT10073	SORTIT10074
SORTIT10075	SORTIT10076	SORTIT10077	SORTIT10078	SORTIT10079	SORTIT10080	SORTIT10081	SORTIT10082	SORTIT10083	SORTIT10084	SORTIT10085	SORTIT10086	SORTIT10087	SORTIT10088	SORTIT10089	SORTIT10090
SORTIT10091	SORTIT10092	SORTIT10093	SORTIT10094	SORTIT10095	SORTIT10096	SORTIT10097	SORTIT10098	SORTIT10099	SORTIT10100	SORTIT10101	SORTIT10102	SORTIT10103	SORTIT10104	SORTIT10105	SORTIT10106
SORTIT10107	SORTIT10108	SORTIT10109	SORTIT10110	SORTIT10111	SORTIT10112	SORTIT10113	SORTIT10114	SORTIT10115	SORTIT10116	SORTIT10117	SORTIT10118	SORTIT10119	SORTIT10120	SORTIT10121	SORTIT10122
rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4	rW(48)@4
SORTIT10123	SORTIT10124	SORTIT10125	SORTIT10126	SORTIT10127	SORTIT10128	SORTIT10129	SORTIT10130	SORTIT10131	SORTIT10132	SORTIT10133	SORTIT10134	SORTIT10135	SORTIT10136	SORTIT10137	SORTIT10138

POSITIVE FEEDBACK FROM THE COMPANY

“I will not forget the outstanding job you did in taking our Wellington office only, which was operationally on the brink of failure, with its ‘homemade’ network populated with a mishmash of PC’s and totally transforming it by transitioning it into a New Zealand wide network. This streamlined, efficient and reliable network now provides real-time data and communications to all our locations, anchored around a server group that supports all our functionality. And it was done in a timely way and on budget.” Managing Director

“As you will recall the initial purpose of your involvement was to assist us in transforming many of our manual systems and processes into an IT based platform that removed repetitive manual tasks, streamlined processes, automated the very complex booking and fleet administration systems, and linked this to our customer facing web presence, to give us an online real-time booking and fleet management system (iNZtant).

At the outset we knew this would be very difficult and this proved to be correct. That said, I am extremely grateful for the approach you took in truly getting to understand our business and process map. You carefully analysed what we did at that time and developed a graduated plan that brought the transformational elements together in a logical way, while keeping business risk low. What you delivered to us is exceptional and has now enabled us to do business 24/7 with our clients from around the world. The solution you delivered is world class, not only because it delivered on the objectives (actually more, given the scope stretch we created) but it has also created revenue and cost savings beyond what we expected.” Clients’ Managing Director

