

## **KINGS SAS PTY LTD**

### **ABSTRACT**

Kings SAS Pty Ltd has a long-established and mutually beneficial business relationship with a major international automotive parts company, Brock Technologies. Management at Brock has approached Kings with a request to provide additional routes that are important to the efficiency of its supply chain. Kings' management wishes to nurture the business relationship with Brock but is concerned about the available capacity to service the new routes, potential risks, and profitability associated with Brock's request.

### **INTRODUCTION**

Alan James founded Kings SAS Pty Ltd in 1968 and has grown the business into a sizeable operation with 90 trucks and 180 trailers. His largest customer, Brock Technologies, has submitted a proposal to him to add delivery routes that would improve the efficiency of Brock's supply chain. Alan was not certain that Kings could handle the additional routes since the company currently was operating at (or near) full capacity.

Brock offered a total of \$2.15 per kilometre (including fuel service charge and miscellaneous fees) for the new route. But Alan knew that to accept the offer he would have to add more trucks and perhaps incur additional debt. The question was whether the rates offered by Brock were high enough to offset the associated risks of growing the fleet. Although the business had been grown organically through the years by reinvesting profits, it incurred debt from time to time to replace older equipment (usually in blocks of five trucks). Alan knew the slim profit margins associated with trucking, coupled with a downturn in the economy, could spell disaster if saddled with too much debt. See Exhibits 1 and 2 for the company's most recent statement of income from operations and the balance sheet, respectively.

Roger Simmons, Kings' operations manager for the past 16 years, had been reviewing the Brock proposal and approached Alan. "Alan, we need to discuss this offer from Brock. I think it is a great opportunity for our company, and we need to find a way to make it work."

Within 10 minutes Alan and Roger were in a closed-door meeting discussing the pros and cons of Brock's offer. Roger began by stating the obvious: "Alan, this is a huge opportunity for us to grow the business. Not to mention, as Brock becomes more dependent on our services, we will be in a stronger position to negotiate future rate increases. I know you are opposed to debt, and I understand the risks of carrying more debt, but there is more than one way to grow our fleet. If you would consider using independent contract drivers, we could grow the fleet enough to accept Brock's offer without incurring more debt."

Alan cringed at the thought of using independent contract drivers. Although independent contractors owned their own trucks, Alan viewed them as difficult to deal with and not worth the headache. "Roger, I hear you, but this new route will not last a week if we cannot give Brock great service. Independent contractors call the shots, not us. They own the rig and

will sit at home if they want to. I would rather deal with our own company's rigs and drivers. The rewards just do not justify the risks of damaging our relationship with Brock.

"But I am not sure we should take on any more debt at this point to purchase additional rigs. The economy is in the tank, and it is a bad time for us to leverage the balance sheet any further. Roger, my success in this business was not built by jumping on every offer that came along. Sometimes you have to say no, even to your biggest customer. Unless you can find a way to squeeze out more capacity within our current fleet, I just do not think we can accept Brock's offer at this time," Alan concluded.

As the two men left the room, Roger was convinced that Alan was wrong. Roger knew that Alan was leaving money on the table. He just needed to prepare a financial analysis that would prove it. Was it possible to squeeze out more capacity from an already fully utilized fleet? Perhaps they could shift trucks from another account. Was taking on more debt truly "risky" given the profit potential of this new route? Roger knew he had to make a convincing argument before Brock took its offer to another truck line.

## **INDUSTRY TERMS**

- A tractor-trailer rig is a truck that consists of a tractor attached to a trailer. The tractor typically is powered by a diesel engine.
- A flatbed trailer is long flat platform with no sides.
- A dry van trailer is a boxed cargo compartment designed for nonrefrigerated freight.
- Trucking companies often have a revenue-generating load in one direction but need a revenue-generating contract for the return trip. The return trip is known as a backhaul. Often trucking companies contract with freight brokers to acquire backhauls.

## **INDUSTRY BACKGROUND AND COST STRUCTURE**

Trucking firms generate a variety of revenue types from hauling goods for their clients. Presented next is a brief overview of key types of revenues included in the 2017 income from operations of Kings SAS Pty Ltd.

Line haul revenue is earned from hauling freight.

Fuel prices in recent years have been volatile. Because trucking companies are exposed to fuel price volatility when they sign a long-term contract with their customers, they may charge an additional fee associated with fuel costs when prices exceed predetermined levels. Thus, the primary purpose of the fuel surcharge (FSC) revenue is to protect the truck line from fuel price increases during the contract term.

Included in miscellaneous revenue are the following:

Storage fees are collected when Kings stores a loaded trailer on its lot for a customer.

Lumper revenue is collected if a driver assists with unloading a trailer.

Certain flatbed loads, such as gyprock, unpainted steel, and some types of wood products, that would be damaged by rain must be covered. Trucking companies typically charge a tarping fee for such loads.

Additional insurance is required when transporting high-value cargo. Practices vary throughout the industry. If a load is above a company's standard cargo insurance limits, many companies simply will not haul it. Trucking companies that are willing to bind additional cargo coverage normally do so for a fee that covers only the extra cost of insurance. (Alternatively, this revenue line item could have been booked as a reduction to the "Insurance" expense account.)

Loads transported on flatbed trailers must be secured by straps or chains. These types of loads often are associated with higher worker's comp claims. Thus, an extra strapping and chaining fee is charged only for a flatbed load.

If a truck sits idle at the dock for more than two hours, customers can be charged a fee that is classified as detention revenue. Placing a detention revenue clause in the contract encourages customers to load trailers efficiently in order to avoid further constraints on Kings' tractor capacity.

## **TYPES OF BUSINESS ARRANGEMENTS WITH DRIVERS**

Kings has potentially two arrangements with drivers. They are classified as employees or as independent operators. Employees receive traditional employee benefits. These persons are typically engaged in work for the company that is considered "permanent."

Alternatively, independent operators are not considered employees and have to invoice Kings in order to receive payment for work done. These operators typically provide the tractor but generally do not provide the trailer. In addition to driver salaries and depreciation on trucks, expenses incurred by independent contractors include the following on their invoices to Kings:

- Tags (known as International Registration Plan (IRP)) – The independent contractor buys the IRP tag for the tractor, while the shipping company buys the tags for the trailer.

- Heavy Road Use Tax.
- Diesel fuel, engine fluids, and all maintenance-related parts and items.
- Physical damage insurance.
- Non-trucking “bobtail” Liability Insurance (needed for when the truck is not transporting a trailer).
- Tolls and scale fees.

For an example of a publicly traded transportation company that primarily uses independent operators, visit Landstar Trucking Company’s website at:

<https://www.nonforceddispatch.com/landstar>

For a description of a publicly traded transportation company that primarily owns its rigs and employs company drivers, see J. B. Hunt Transportation Services' Form 10K at: [https://www.sec.gov/Archives/edgar/data/728535/000143774914002605/jbht20131231\\_10k.htm](https://www.sec.gov/Archives/edgar/data/728535/000143774914002605/jbht20131231_10k.htm) - read the discussion in Item 1-Business.

Independent contractors generally control their own working hours, unlike an employee. Further, independent contractors' work generally is considered temporary, rather than permanent (unlike for an employee). In the trucking industry, an independent contractor often signs a one-year contract for a temporary job. But an employee is hired permanently under the assumption that he or she will make deliveries until further notice. This arrangement constitutes a permanent job.

## **CAPACITY ISSUES AND INDUSTRY PRACTICES**

Kings Trucking typically assigns one driver to one tractor. But this practice can constrain the available hours the tractor can operate. For example, laws require a driver to take a 10-hour break after 11 hours of driving. Further, a driver cannot work more than 70 hours in an eight-day period without taking a 34-hour break. To improve tractor utilization by avoiding constraints based on legal driving time requirements, some trucking companies use "slip seating." This is a practice that permits greater tractor utilisation by placing a fresh driver behind the wheel at the end of the former driver's shift. Slip seating is similar in practice to an airline company that keeps its planes flying longer by inserting fresh flight crews as the previous crew goes off duty. It also is efficient to utilize "team drivers" that are commonly husband-wife teams. One person drives while the other sleeps. Relative to a single driver, this arrangement basically doubles the number of kilometres driven in a given week. Typically, teams are paid more, but additional line haul revenues offset the extra labour costs.

Another strategy to improve tractor utilisation is to use trailer pools, commonly referred to as "drop and hook" systems. For example, trucking companies will leave an empty trailer with customers, who will load it with products as units are produced. When the trailer is filled, a tractor arrives, drops an empty trailer to replace the trailer just filled, then immediately hooks onto the loaded trailer and departs. Tractor utilization improves because tractors are not sitting idle while a customer loads a trailer. This approach is economically feasible because trailers are far less expensive to purchase and operate than tractors.

Most trucking companies keep some tractors “on the fence” as spares, in case one breaks down. There is considerable disagreement, however, over what constitutes too many spares. Some owners believe a truck line should put all available equipment on the road and rent a tractor if a spare is needed. Others disagree and maintain a small number of tractors in reserve. Currently, Kings SAS Pty Ltd keeps a small number of tractors and trailers out of service but prepared for duty in case a rig breaks down. Some managers believe this policy is an expensive luxury and that some of these idle rigs could be used to add the new routes requested by Brock. When estimating a tractor’s practical capacity, management at Kings use 85% of total potential kilometres driven in a period. Theoretical (or 100%) capacity utilization is virtually impossible in the industry because of factors such as traffic and loading delays.

## **THE PROPOSAL AND RELATED ISSUES**

Management at Brock has asked Kings to consider adding two dry van loads per week; each load would require 1,500 round-trip kilometres. Because Brock is a long-term client with a



strong financial position, the company's management has asked for a very favourable rate of \$2.15 per kilometre including FSC and all miscellaneous fees. Roger believes the potential volume of freight from Brock can be used to grow Kings' business and profitability. There is also risk associated with not taking the new lines. If Kings does not accept the new routes, another trucking line will, thus building loyalty with Brock.

Brock is a stable, solvent company that presents no question of collection, thus ensuring a reliable cash flow. If Brock decides to restructure its supply chain in the future, Kings could find itself in the undesirable position of holding dedicated assets (trucks and trailers) for routes that no longer exist. The owner's aversion to increased debt levels further exacerbates concerns about acquiring additional fixed assets. Perhaps Kings could service the initial demand with existing equipment. But, as additional routes are added in the future, Kings must acquire more tractor-trailer rigs or consider outsourcing the kilometres by using independent contractors.

Exhibit 1 presents Kings' income from operations for the year ending June 30<sup>th</sup>, 2017. This statement is not prepared in accordance with Generally Accepted Accounting Principles (GAAP) but presents costs by behaviour. Exhibit 2 presents Kings' balance sheet for the year ending June 30<sup>th</sup>, 2017.

## **THE DECISION**

Kings's management is considering the proposal from Brock. There are many issues involving strategy, cost, risk, and capacity. Prepare a formal written report to management that analyses this case and makes recommendations to management. Ensure that you provide appropriate and relevant quantitative and qualitative analysis to support your assessments and recommendations. Use the following questions to guide your analysis:

1. Assume Kings could service the contract with existing equipment. Use Exhibit 1 to identify the relevant costs concerning the acceptance of Brock's request to add two additional loads per week. Which costs are not relevant? Why?
2. Calculate the contribution per kilometre and total annual contribution associated with accepting Brock's proposal. What do you recommend? (Use 52 weeks per year in your calculations.)

3. Consider the strategic implications (including risks) associated with expanding (or choosing not to expand) operations to meet the demands of Brock. Analyse this question from a conceptual point of view. Calculations are not necessary.
  
4. After a closer examination of capacity, management believes that they can handle one of two additional loads being with existing capacity but that an additional rig is required to handle the second load. Assume Kings' management chooses to invest in one additional truck and trailer that can serve the needs of Brock (at least initially). Assume the annual incremental fixed costs associated with acquiring the additional equipment is \$50,000. Further, Brock would agree to pay \$2.20 per kilometre for both loads (including FSC and miscellaneous) if Kings would sign a five-year contract. What is the annual number of kilometres required for Kings to break even, assuming the company adds one truck and trailer? What is the expected annual increase in profitability from the Brock contract? (Use 52 weeks per year in your calculations.)

5. Kings has business relationships with independent contractors, though Alan is reluctant to use them. Another possibility for expanding capacity to meet the second load requirement is to outsource the kilometres requested by Brock. One of Kings' most reliable independent contractors has quoted a rate of \$1.65 per kilometre. As with question 4, assume Brock would agree to pay \$2.20 per kilometre if Kings would sign a five-year contract and that Kings would use their own capacity to cover one of the weekly loads. Further, assume Kings would incur incremental fixed costs of \$20,000 annually. These costs would include insurance, rental trailers, certain permits, salaries and benefits of garage maintenance, and office salaries such as billing. How many annual kilometres are required for Kings to break even if the second weekly load is outsourced? What is the expected annual increase in profitability from the Brock contract? What are your conclusions?
6. Why might Kings use an independent operator if the variable cost per kilometre is higher than if the company had purchased a rig and hired a driver?
7. At what point would management be indifferent between the scenarios illustrated in questions 4 and 5? Based on your analysis, would you recommend adding capacity by purchasing an additional rig or by utilizing the services of an independent contractor? Why?
8. The case references J. B. Hunt and Landstar as two publicly traded companies that have two very different cost structures. This is true because the companies practice two different philosophies for using (or not using) owner operators (e.g., independent contractors). Speculate about the company that may produce higher profits in periods of high economic demand. Why? Speculate about the company that may have a less risky cost structure in poor economic times. Why? Identify strategic issues that operators of business' such as these would need to consider when selecting the business model that they adopt. Include in your answer reference to any social or ethical issues that would be relevant to such considerations.
9. All organizations have the potential to perform work, which is determined by the types of resources and the organisation's capacity. Effective use of resources can be critical to a firm in any competitive market. In their efforts to efficiently use capacity, managers may ask questions such as: What portion of the available capacity is in use?

Of the capacity in use, what portion is used productively? How can we increase the productive use of capacity? Why is a portion of available capacity not in use? Can we eliminate unused capacity? Kings' management is no different. In fact, management is not exactly clear about how to view capacity. Discuss the challenges that Kings' management faces with defining and managing capacity. Consider various definitions of capacity, such as theoretical, practical, normal, and actual capacity. Based on the facts presented in the case, prepare an estimate of capacity for Kings (assuming one driver per rig without slip seating or team driving).

**Exhibit 1: Income from Operations**

**Kings SAS Pty Ltd**  
**Income From Operations**  
**For the Year Ended June 30th, 2017**

	<u>Year Ended</u> <u>June 30th, 2017</u>	
	<u>\$</u>	<u>\$</u>
<b>Revenue</b>		
Line Haul	20,925,280	
Fuel Surcharge	4,950,160	
Miscellaneous	<u>450,120</u>	26,325,560
<b>Variable Expenses</b>		
Insurance	675,120	
Fuel	8,775,190	
Oil Lubricants	112,700	
Tolls	112,550	
Parts & Small Tools	787,630	
Hourly Wages - Drivers	4,950,160	
Trailer Pool Expense	<u>255,120</u>	15,668,470
<b>Fixed Expenses</b>		
Insurance:		
General Liability	112,620	
Physical Damage	225,010	
Worker's Compensation	226,000	
Health Insurance	224,500	
Security	111,750	
Depreciation	2,137,500	
Salaries & Benefits - Garage	675,000	
Salaries & Benefits - Office	1,012,520	
Bad Debts Expense	113,500	
Permits	111,520	
Rental Equipment	1,013,000	
Payroll Taxes	562,500	
Accounting Fees & Supplies	112,350	
Miscellaneous	<u>337,510</u>	6,975,280
Income from Operations	<u>\$</u>	<u>\$ 3,681,810</u>

During the twelve months ended June 30th, 2017 billable kilometres totalled 11,250,000

**Exhibit 2: Balance Sheet**

**Kings SAS Pty Ltd**  
**Balance Sheet**  
**As at June 30th, 2017**

	<u>As at</u> <u>June 30th, 2017</u>	
	<u>\$</u>	<u>\$</u>
<b>Assets</b>		
<b>Current Assets</b>		
Cash	200,000	
Accounts Receivable	<u>300,000</u>	500,000
<b>Non-Current Assets</b>		
Land	1,000,000	
Buildings	3,000,000	
Accumulated Depreciation	- 1,250,000	
Tractors, Trailers, and Equipment	18,650,000	
Accumulated Depreciation	<u>- 4,750,000</u>	16,650,000
Total Assets		<u>17,150,000</u>
<b>Liabilities</b>		
<b>Current Liabilities</b>		
Accounts Payable	150,000	
Taxes Payable	65,000	
Current Portion of Long Term Debt	<u>35,000</u>	250,000
<b>Non-Current Liabilities</b>		
Notes Payable	<u>1,865,000</u>	1,865,000
Total Liabilities		<u>2,115,000</u>
<b>Net Assets</b>		<u>\$ 15,035,000</u>
<b>Represented by:</b>		
<b>Owner's Equity</b>		
Issued Shares	3,550,000	
Retained Earnings	<u>11,485,000</u>	<u>\$ 15,035,000</u>

**Management Accounting**

**Assessment Rubric for Assignment – Individual Component 2017**

*Kings SAS Pty Ltd (15% of final grade)*

Criteria	HD (High Distinction)		DN (Distinction)	CR (Credit)	PP (Pass)	NN (Fail)
	90% - 100%	80% - 89%				
Identify and analyse the consumption of physical and human resources in a straight-forward business context. (weight = 10%)	Identifies and analyses numerous elements of consumption of physical and human resources applicable to the case described.		Identifies and analyses many elements of consumption of physical and human resources applicable to the case described.		Identifies and analyses some elements of consumption of physical and human resources applicable to the case described.	Identifies and analyses limited elements of consumption of physical and human resources applicable to the case described.
Use techniques and quantitative data analysis to support management decision making. (weight = 35%)	Selection of appropriate techniques suited to the case requirements with 90% to 100% of calculations correct	Selection of appropriate techniques suited to the case requirements with 80% to 89% of calculations correct	Selection of appropriate techniques suited to the case requirements with 70% to 79% of calculations correct	Selection of appropriate techniques suited to the case requirements with 60% to 69% of calculations correct	Selection of appropriate techniques suited to the case requirements with 50% to 59% of calculations correct.	Selection of inappropriate techniques not suited to the case requirements and/or 0%-49% of calculations incorrect.
Modify information and use qualitative data analysis to explain cost behaviour. (weight = 20%)	Correct modification of all appropriate information and strong qualitative analysis.	Modification of nearly all modifiable information and well supported qualitative analysis relevant to the case.	Modification of nearly all modifiable information with basic qualitative analysis relevant to the case <b>or</b> basic modification of information with well supported qualitative analysis relevant to the case.	Basic modification of information and basic qualitative analysis relevant to the case.	Limited modification of information and limited qualitative analysis relevant to the case.	Inappropriate modification of information and/or limited qualitative analysis relevant to the case.
Recommend courses of action based on analysis. Communicate, in writing, management accounting information that contributes to the effectiveness of management reporting. (weight = 20%)	Recommendations are relevant to the case and are well supported by the quantitative and qualitative analysis.			Recommendations are relevant to the case but do not cover all aspects of the case and not all relevant factors considered.	Recommendations are inappropriate based on the case.	
	Adheres to English conventions making report easy to read.			Mostly adheres to English conventions making report reasonably easy to read.	Occasionally adheres to English conventions - report difficult to read.	
Critically reflect how business value impacts different stakeholders, adopting social, ethical, economic, and global perspectives. (weight = 15%)	Comprehensive discussion of issues raised in the case and clearly articulated discussion of broader issues relevant to the case.		Sound discussion of the possible issues raised in the case. Clear evidence of broader analysis of the issues relevant to the case.	Basic discussion of the possible issues raised in the case. Some evidence of broader analysis of the issues relevant to the case.	Basic discussion of the possible issues raised in the case. Limited evidence of broader analysis of the issues relevant to the case.	Limited discussion of the possible issues raised in the case. Limited evidence of broader analysis of the issues relevant to the case.