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# The Descartes Systems Group Inc.

DSGX-NASDAQ | DSG-TSX

Steven Li CFA | 416.777.4918 | steven.li@raymondjames.ca

Jonathan Lo (Associate) | 416.777.6414 | jonathan.lo@raymondjames.ca

## Software/IT Services

## Company Report - Initiation of Coverage

### Initiating Coverage of Descartes at Outperform

#### Event

We are initiating coverage of Descartes Systems with an Outperform rating.

#### Recommendation

We see a lot to like about Descartes: it is SaaS (80% of revenues are transaction/subscription); solves increasingly complex transportation logistics problems (customs filings, same-day delivery); and sports an enviable track record of 21% CAGR adj. EBITDA over the last 5 years, with a 29% adj. EBITDA margin. We believe Descartes is poised to benefit from strong organic growth in its markets, which combined with its M&A strategy, should enable Descartes to continue to grow its adj. EBITDA between 15%–20% CAGR for the next few years.

#### Analysis

**\$25 bln TAM:** The transportation logistics/customs compliance market is fragmented and the opportunity is significant, in our opinion. According to industry research firms, Global Trade Management, Fleet Management, and Supply Chain Management add up to around a \$25 bln total addressable market (TAM) driven by increasing government regulations into imports and exports, as well as mounting pressure on suppliers for narrower order-to-fulfillment periods, and greater flexibility in scheduling and rescheduling deliveries.

**Deconstructing Descartes:** Descartes is ~80% recurring revenue (29% adjusted EBITDA margins) with M&A as a key part of its strategy, but also with organic growth to boot. We estimate overall organic growth has averaged between 0%–10% over the past 4 years, with Customs Compliance and Routing, Mobile & Telematics and Transportation Management seeing much faster growth at ~10%–20%. We believe this has valuation implications for Descartes given the healthy valuation multiples SaaS IPOs have seen recently, in some adjacent markets.

**Valuation Risk.** Technology valuations have risen for much of the last 18 months which has increased valuation risk although we note in the report that relatively, technology still compare favourably to other sectors.

**Model.** F2015 estimates include revenues of \$173 mln (+15% y/y) and adjusted EBITDA of \$51 mln (+16% y/y). F2016 estimates include revenues of \$199 mln (+15% y/y) and adjusted EBITDA of \$60 mln (+17% y/y).

#### Valuation

Our \$17.50 target is based on a blended multiple of 18x F2016E/C2015E adjusted EBITDA (see page 23 for discussion). Descartes currently trades at 15.3x 2015E adjusted EBITDA vs. SaaS peers at 18.1x and at 19.7x 2015E EPS at a discount vs. peers at 34.3x. See our Valuation and Recommendation section for details.

EPS	1Q Apr	2Q Jul	3Q Oct	4Q Jan	Full Year	Revenues (mln)	EBITDA (mln)
2014A	US\$0.13	US\$0.13	US\$0.14	US\$0.14	US\$0.54	US\$151	US\$44
2015E	0.14	0.16	0.16	0.16	0.63	173	51
2016E	NA	NA	NA	NA	0.74	199	60

Source: Raymond James Ltd., Thomson One

#### Rating & Target

	Outperform 2
Target Price (6-12 mos):	US\$17.50
Current Price ( Mar-20-14 )	US\$14.62
Total Return to Target	20%
52-Week Range	US\$15.71 - US\$8.98

#### Suitability

Growth

#### Market Data

Market Capitalization (mln)	US\$945
Current Net Debt (mln)	-US\$22
Enterprise Value (mil.)	US\$923
Shares Outstanding (mln, f.d.)	64.7
10 Day Avg Daily Volume (000s)	51
Dividend/Yield	US\$0.00/0.0%

#### Key Financial Metrics

	2014A	2015E	2016E
P/E			
	27.1x	23.3x	19.7x
EV/EBITDA			
	20.7x	17.9x	15.3x
EV/Revenue			
	6.1x	5.3x	4.6x

#### Company Description

Descartes is a global provider of federated network and global logistics technology solutions, delivered on a Software-as-a-Service platform.

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## Investment Thesis

### Market Size and Opportunity

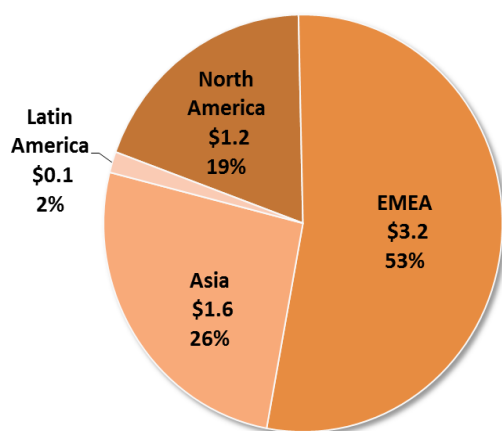
Descartes Systems is a global logistics solutions provider serving a broad range of customers including transportation providers (air, ocean, and truck modes; e.g., American Airlines (AA), The Maersk Group, Con-way Inc.), logistics service providers (including third-party logistics providers, freight forwarders and customs brokers; e.g., DHL International) and distribution-intensive companies (whether they purchase transportation, run their own fleet, operate locally or globally; e.g., The Home Depot, The Coca Cola Company).

At its core, Descartes' solution set is a broad, end-to-end vision of transportation logistics. Descartes has built one of the world's most extensive logistics network covering multiple transportation modes (known as Descartes Global Logistics Network or GLN). This supply chain network (now spanning 160+ countries and with over 172,000 connected parties) connects Descartes customers to their extended supply chain partners, including suppliers, freight forwarders, transportation carriers, and customs brokers. Fused to this network is Descartes' comprehensive solution suite that is comprised of a wide array of logistics management applications targeting three main markets:

- Customs & Regulatory Compliance
- Routing, Mobile and Telematics & Transportation Management
- Forwarder & Broker Enterprise Solutions

We believe that the market opportunity is significant. Descartes software replaces in-house custom supply chain solutions and/or manual processes. According to Arc Research (Addressable Market for Global Trade Management Solutions, June 2013) the total addressable market for Global Trade Management is \$6.1 billion, although the current level of market penetration is only around 6%.

### Exhibit 1: Global Trade Management: Total Addressable Market by Geography (US\$ bln)



Source: Arc Research, Raymond James Ltd.

Fleet management/telematics is pegged at \$10.9 billion in 2013 and expected to grow to \$30 billion by 2018 with a 22.8% CAGR (Markets and Markets November 27, 2013). The global SCM software market totaled \$8.3 billion in 2012, up 7% y/y, according to

Gartner (May 2013 – Gartner Report Market Share Analysis Supply Chain Management Software, Worldwide 2012). That’s a total TAM of close to \$25 billion.

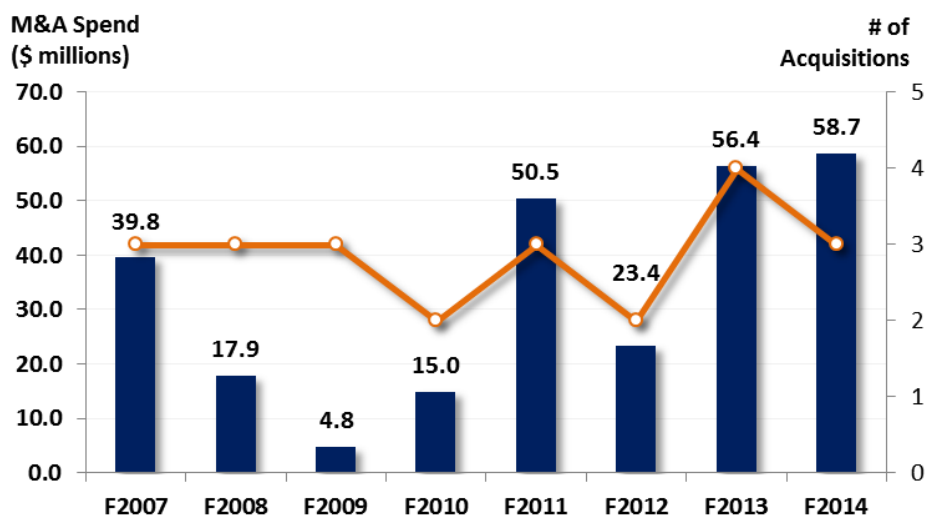
### Deconstructing Descartes

When we look at Descartes, we see many similarities to Open Text, another successful Canadian software company. Descartes is ~80% recurring revenue (29% EBITDA margins) with M&A as a key part of their strategy. Open Text is ~60% recurring (31% EBITDA margins), and M&A also plays a key part of their strategy. Can we justify Descartes trading at a substantial premium to Open Text (15x vs. 9x 2015E EBITDA)?

First, we look at organic growth. Management focuses on adjusted EBITDA growth as their main metric, quite rightly in our view. However, we also believe it is useful to look at organic growth. In this market, we have recently seen several SaaS providers (who play in adjacent markets to Descartes) IPO at healthy revenue multiples, supported (in our view) by similar organic growth trends to what we expect for Descartes.

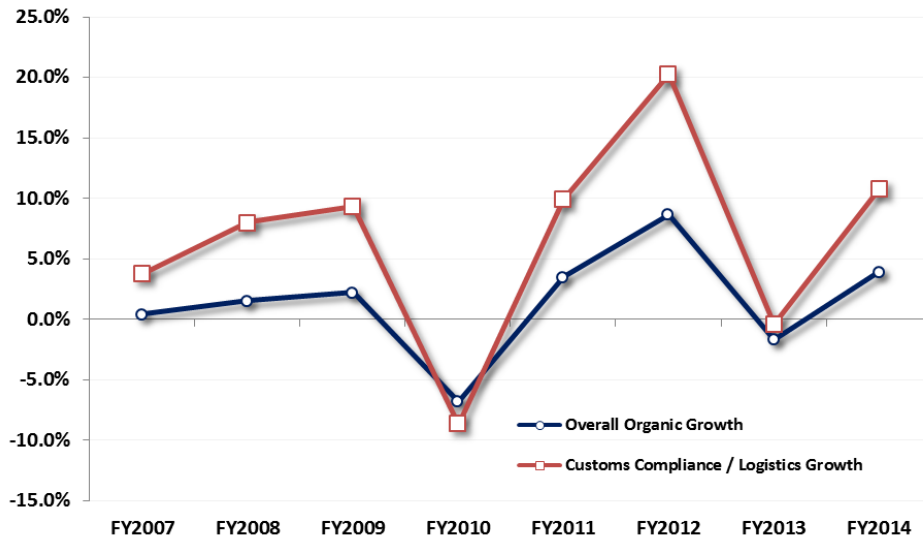
Descartes has spent \$266 million over the last 8 years to acquire 24 companies, averaging ~\$33 million and 3 transactions per year. The majority of these transactions are smaller tuck-in acquisitions to accelerate the time-to-market of delivering new solutions for customers. For instance, every country’s customs compliance has different regulations, languages, and systems, which places greater importance in making country-specific acquisitions for compliance expertise.

### Exhibit 2: Descartes M&A Spend F2007 to F2014



Source: The Descartes Systems Group Inc., Raymond James Ltd.

Using their 10-K disclosures regarding contributions from acquired companies, we have come up with an analysis of Descartes’ organic growth rate over the last 8 years. For acquisitions without valuation disclosures prior to F2010, we applied a 2x revenue multiple. We expect that Descartes’ GLN and Forwarder/Broker Enterprise solutions will likely see an attrition rate at least between ~3%–5% (with the attrition coming primarily from customer bankruptcies linked to economic cycles) which allowed us to further isolate the organic growth rates in Descartes two fastest growing segments: Customs Compliance and Transportation Logistics (Routing, Mobile & Telematics and Transportation Management).

**Exhibit 3: Overall Organic Growth versus Compliance/Logistics Growth**

Source: The Descartes Systems Group Inc., Raymond James Ltd.

We estimate overall organic growth has averaged between 0%–10% over the past 4 years, with Customs Compliance and Routing, Mobile & Telematics and Transportation Management seeing much faster growth at ~10%–20%. We believe this has valuation implications for Descartes given the healthy valuation multiples SaaS IPOs have seen recently, in some adjacent markets. For further discussion, please refer to page 23.

### Customs & Regulatory Compliance

Both imports and exports are expanding. In 2012, US companies imported nearly \$2.3 trillion worth of goods from more than 200 countries. The US Census Bureau identified more than 300,000 exporters and 180,000 importers in the United States in 2011. That's a lot of customs filings to be made. Companies of all sizes and nearly every industry are pursuing low cost country sourcing strategies with suppliers in locations such as China, India and Southeast Asia. Similarly, exports are higher as producers seek new markets to accelerate their growth.

In addition, government regulations also continue to increase – and not just in the US. Since 9/11, governments have imposed additional border security regulations that affect global trade. For example, the US Customs and Border Protection's "10+2" program requires importers to provide 10 data points about international sea cargo destined for the United States two days before the applicable cargo vessel departs the foreign port. Descartes recently announced its solution for Japan's Ocean Advanced Filing Rule (AFR) beginning on March 10, 2014. Japan's AFR mandate requires ocean carriers and NVOCCs to electronically submit data to Japan Customs on maritime container cargo destined for Japan at least 24 hours before departure. It is noteworthy that Descartes does all the export filings for the US government and there has been increasing talk of new export filings that would be required by the US government over the coming years.

## Retail Opportunity

Online shopping is clearly on the rise. According to the Census Bureau of the Department of Commerce, 5.8% of retail sales in the US were made online in 2013 up from 5.2% in 2012 growing 17% y/y with total retail sales growing only 4% y/y. While historically, customers were willing to trade off longer wait times for their online purchases to arrive (several days/weeks) in return for convenience, increasingly, we are seeing same day and next day delivery options either directly from the retailer or through a third party shopping valet service being used as differentiating features. Amazon.com, Inc., Google Inc., and eBay Inc. are now all offering same day or next day shipping and the pressure is mounting for suppliers and retailers alike to follow suit as end customers demand narrower order-to-fulfillment periods, lower prices and greater flexibility in scheduling and rescheduling deliveries.

Descartes same-day delivery solution allows its customers to offer multiple delivery options at the time of purchase. The system instantly assesses logistic parameters including capacity, skills required to provide value added services, and driving time, accounting for the current location of fleet assets through GPS fleet telematics and existing delivery schedules to enable dispatchers to automatically assign and execute new orders throughout the day, rescheduling delivery orders on the routes best suited to meet the existing delivery schedule and the new customer's appointment requirements. One Descartes customer, John Lewis Partnership in the UK (reported over £9.5 billion of sales in 2013 in the UK from 35 John Lewis stores and 274 Waitrose supermarkets) uses Descartes to provide premium delivery service scheduling, where customers who choose a lunch time or Saturday delivery pay an additional fee, while other times during the week which are more cost effective are available for free. They have saved over \$10 million a year, while maintaining a higher level of customer service.

## Investment Risks

### Valuation risk

Technology valuations have risen for much of the last 18 months which has increased valuation risk. We still believe technology valuations compare favourably to other sectors as shown in Exhibit 4 below.

### Exhibit 4: Comparing Tech vs Non-Tech

Company	Dividend Yield	5-Yr CAGR EPS Growth (C10A-C15E) %	5-Yr CAGR Rev Growth (C10A-C15E) %	LTM Gross Margin %	LTM Op Margin %	LTM ROE %	P/E C14E	P/E C15E	P/E/G (C10A-C15E)	LTM EV/FCF	LTM FCF Yield	LTM P/BV
Technology Group Average	1.6%	16%	16%	45%	23%	17%	16.5	14.9	0.8	25.1	4%	3.9
Consumer Group Average	2.1%	12%	8%	34%	8%	11%	19.1	16.5	2.2	43.8	0%	5.0
Transportation Group Average	1.5%	19%	8%	37%	30%	17%	17.4	14.8	1.0	43.9	1%	3.3
Industrials Group Average	1.9%	11%	8%	34%	14%	14%	18.0	15.2	3.2	17.7	4%	2.8
Utilities Group Average	4.3%	7%	4%	38%	37%	22%	15.1	14.2	2.3	27.0	5%	3.5
<b>Average</b>	<b>2.5%</b>	<b>12%</b>	<b>7%</b>	<b>36%</b>	<b>22%</b>	<b>16%</b>	<b>17.4</b>	<b>15.2</b>	<b>2.2</b>	<b>33.1</b>	<b>3%</b>	<b>3.7</b>
S&P/TSX Composite Index							16.0	14.1				

Group Averages Include

Consumer: Aimia, Gildan, Dollarama, Cineplex, Tim Hortons, Loblaw, Shoppers Drug Mart

Transportation: Westjet, CPR, CNR, CAE

Industrials: Finning, Stantec, Aecon, Joy Global, SNC-Lavalin, Ritchie Bros Auctioneers, Toromont Industries, Russel Metal

Utilities: Rogers, BCE, Telus, Shaw

Note: Revenue and EPS estimates for Consumer, Transportation and Industrials are from Raymond James Ltd., estimates for the S&P/TSX Composite Index are from Bloomberg, all other estimates are consensus from Capital IQ

Source: Raymond James Ltd., Capital IQ, Bloomberg

**Lack of accretive acquisitions**

A dearth of attractive acquisition targets could slow Descartes' buy-and-build strategy and EBITDA growth rate.

**Inability to grow acquired businesses**

Descartes typically acquires businesses which add new geographic exposures and expands its solutions offerings. Descartes may have limited experience in these regions or solutions, and may struggle to grow these businesses above typical customer attrition levels.

**Economic Cyclicity**

Descartes success is highly correlated to the level of capital and operating expenditures of its customers. Decreased capital and operational spending could result in lower demand for Descartes products and services, or delayed/cancelled spending decisions to implement Descartes' solutions.

**Disruptions in the movement of freight**

Descartes' business is highly dependent on the movement of freight, especially as 50% of its recurring revenues are generated on a per transaction basis. If freights were disrupted by a natural disaster, terrorism, severe weather, labour disputes, political instability, contagious illness outbreaks, or security activities, Descartes could see many transaction based customer drop down to subscription pricing, negatively affecting overall revenues.

## Company Description & History

Based in Waterloo, Canada, The Descartes Systems Group Inc. is a global logistics solutions provider serving a broad range of customers including transportation providers (air, ocean and truck modes; e.g., AA, Maersk, Conway), logistics service providers (including third-party logistics providers, freight forwarders and customs brokers; e.g., DHL International) and distribution-intensive companies (whether they outsource transportation, run their own fleet, operate locally or globally; e.g., Home Depot, Coca Cola).

At its core, Descartes has built one of the world's most extensive logistics network covering multiple transportation modes (known as Descartes Global Logistics Network or GLN). This supply chain network (now spanning 160+ countries and with over 172,000 connected parties) connects Descartes customers to their extended supply chain partners, including suppliers, freight forwarders, transportation carriers, and customs brokers. Each of these parties requires access to data, documents, messages, and alerts at critical points along the supply chain. As a messaging network with wireless capabilities, the GLN helps manage this flow of documents that track and control inventory, assets and people in motion.

The Descartes solution also comprises of a wide array of logistics management applications (e.g., truck scheduling, route optimization, customs filings) that automate most logistical functions. These integrated software modules not only have rich feature sets and APIs to connect to other enterprise systems but embody Descartes' deep domain expertise (for more details on Descartes suite of solution, please refer to page 16).

Descartes is a SaaS company (software-as-a-service) and delivers its solution primarily over the Internet using an on-demand, cloud-based, delivery model. Approximately 80% of Descartes revenue is sold through subscription/transaction agreements. Descartes has generated an adjusted EBITDA CAGR of 21% over the last 5-year period (\$17 million adjusted EBITDA in F2009 to \$44.5 million in the fiscal year just ended F2014).

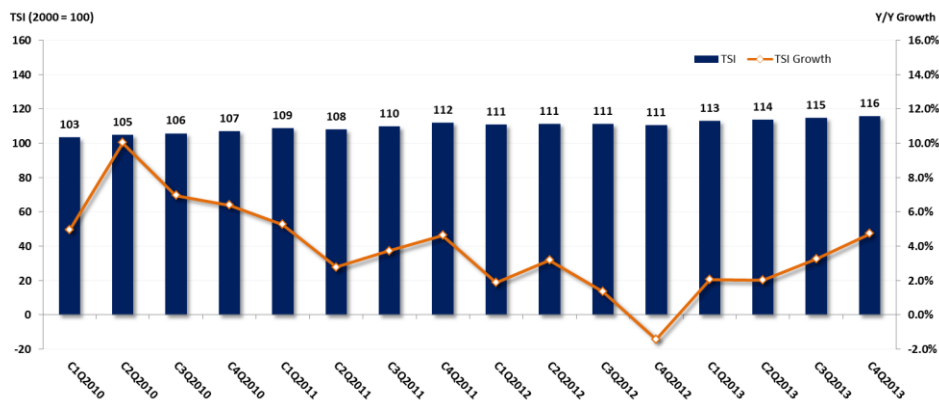
In December 2013, former CEO Arthur Mesher retired and was succeeded by former Chief Commercial Officer, Edward Ryan (with Descartes since 2000) as CEO and former Chief Corporate Officer Scott Pagan (also with Descartes since 2000) as President and COO. Descartes is headquartered in Waterloo, Ontario, with offices across Asia Pacific, EMEA and the Americas. The company employs over 800 logistics employees worldwide.

## Industry Overview & Opportunities

### Transportation – Freight Indices

The Transportation Services Index (TSI) released by the Bureau of Transportation shows freight movement by all modes of transport (air, carrier, rail, ground) through the US. The quarterly data shows growth accelerating again after a period of decline – which arguably bodes well for Descartes.

#### Exhibit 5: Transportation Services Index (Freight Only)

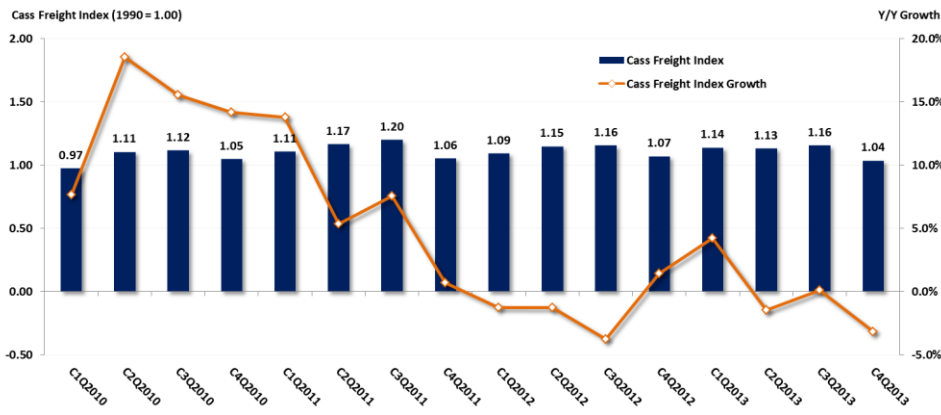


Source: Bureau of Transportation Statistics, Raymond James Ltd.

We also track the Cass Freight Index, which measures North American freight volumes processed by Cass, encompassing over 400 companies and manufacturers. The Cass Index encompasses a more selective sample that is less diversified compared to the TSI, and subsequently exhibits higher volatility.



**Exhibit 6: Cass Freight Index**



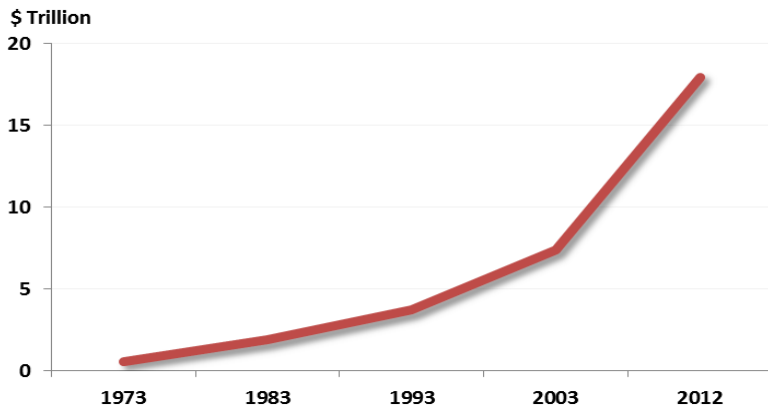
Source: Cass Information Systems, Raymond James Ltd

**Customs & Regulatory Compliance**

Both imports and exports are expanding. In 2012, US companies imported nearly \$2.3 trillion worth of goods from more than 200 countries. The US Census Bureau identified more than 300,000 exporters and 180,000 importers in the United States in 2011. Companies of all sizes and nearly every industry are pursuing low cost country sourcing strategies with suppliers in locations such as China, India and Southeast Asia.

Similarly, exports are higher as producers seek new markets to accelerate their growth. According to the US Department of Commerce, US-based companies increased their exports from 2003 through 2012 to China, Brazil and Hong Kong at a compounded annual growth rate of 14.6%, 14.6% and 10.7%, respectively, and China is now the third largest export market for the United States. Total Merchandise exports of WTO members totaled US\$17.3 trillion in 2012, up almost 3 fold since 2003. According to a recent iPub Compliance report (December 2013), 34% of (361 mid-market) exporting companies in their survey now export to 20 or more countries, up from 18% in 2012 – with the largest increase in the 21 to 50 export destination category. Less than 4% of 114 respondents from SCM World’s global community claim to have fully automated import compliance. We see this as a large opportunity for Descartes.

**Exhibit 7: World Merchandise Exports, 1973–2012: 9.2% CAGR**



Source: World Trade Organization Statistics 2013, Raymond James Ltd.

Government regulations also continue to increase – and not just in the US. Since 9/11, governments have imposed additional border security regulations that affect global trade. For example, the US Customs and Border Protection’s “10+2” program requires importers to provide 10 data points about international sea cargo destined for the United States two days before the applicable cargo vessel departs the foreign port. Further, many government programs, including “10+2”, require companies to share information with them directly via an electronic process. Descartes recently announced its solution for Japan’s Ocean Advanced Filing Rule (AFR) beginning on March 10 2014. According to the World Trade Organization Statistics, in 2012 Japan was the 4<sup>th</sup> largest importer and exporter of merchandise at 4.8% of world trade. Japan’s AFR mandate requires ocean carriers and NVOCCs to electronically submit data to Japan Customs on maritime container cargo destined for Japan at least 24 hours before departure. In many cases, companies must apply for licenses and hold records for filing with or inspection by government agencies. Descartes solutions replace tedious manual processes and the cost savings are significant for customers. It is noteworthy that Descartes does all the export filings for the US government and there has been increasing talk of new export filings that would be required by the US government over the coming years.

Since 2006 Descartes has spent ~\$266 million on 24 tuck-in acquisitions. We note more than half of those acquisitions (14 companies, ~\$197 million; 74% by value) serve to bolster Descartes global trade management and compliance solutions. We estimate this segment is seeing between 10%–20% organic growth annually for Descartes. More details on Descartes Customs Compliance products can be found on page 18.

#### Exhibit 8: Descartes M&A Spend and Acquisition Count F2007–F2014

	M&A spend (in Millions)		Number of Acquisitions	
SCM	\$44	17%	3	13%
MRM	\$25	9%	7	29%
<b>GTC</b>	<b>\$197</b>	<b>74%</b>	<b>14</b>	<b>58%</b>
Total	\$266	100%	24	100%

Note: SCM: Supply Chain Management; MRM: Mobile Resource Management/Fleet Management; GTC: Global Trade Compliance/Management

Source: The Descartes Systems Group Inc., Raymond James Ltd.

#### Retail Opportunity

Online shopping is clearly on the rise. According to the Census Bureau of the Department of Commerce (Quarterly Retail E-Commerce Sales 4<sup>th</sup> Quarter 2013: February 18, 2014), 5.8% of retail sales in the US are now made online up from 5.2% in 2012 growing 17% y/y from 2012 to \$263 billion versus total retail sales growing only 4% y/y from 2012. While historically, customers were willing to trade off longer wait times for their online purchases to arrive (several days/weeks) in return for convenience, increasingly, we are seeing same day and next day delivery options either directly from the retailer or through a third-party shopping valet service being used as differentiating features.

Amazon – For US\$99 per year, Amazon Prime offers free 2-day shipping, a discount for next day delivery, but also includes other bundled services for on-demand videos and e-books. Amazon also has a same day delivery service for groceries called AmazonFresh (in the Los Angeles, San Francisco and Seattle areas), which costs US\$299/year, but includes an Amazon Prime subscription. Last fall during Cyber Monday, Amazon made headline news with its same day delivery prototype Octocopter (drones which fly customer orders to their location within 30 minutes). And earlier this year, Amazon

obtained a patent for anticipatory shipping, which uses a computer algorithm to guess customer orders (before a customer places an order), thereby shipping goods to Amazon distribution centers near those future customers prior to orders being placed, shortening the delivery time for future expected orders.

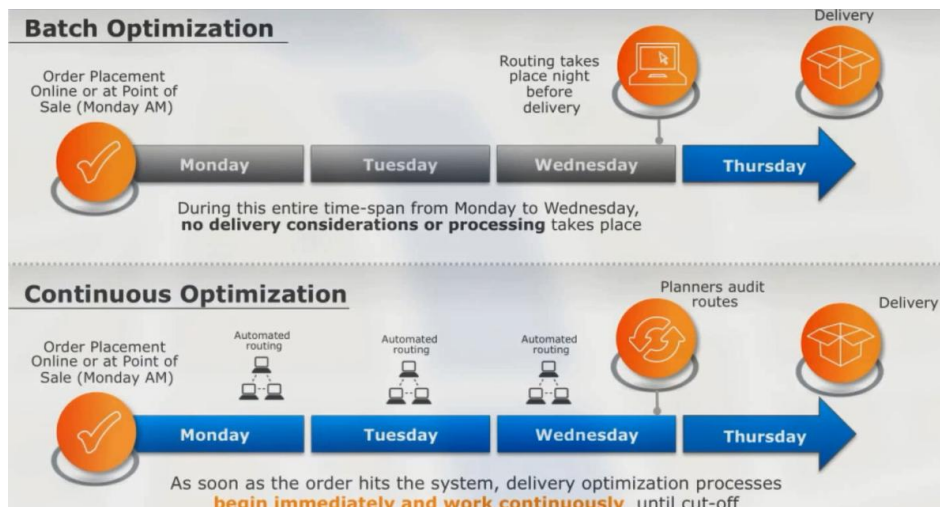
Google – Google Shopping Express is a local shopping service in San Francisco and Silicon Valley, where you can get same day delivery from local stores for \$5/stop. Deliveries take between 3 to 5 hours.

eBay – eBay Now is similar to Google Shopping Express, it provides local shopping service for \$5/order (\$15 minimum order) in Chicago, Dallas, Manhattan, Brooklyn, NYC Queens and San Francisco Peninsula, with delivery times between 1 to 2 hours.

Brick-and-mortar retailers are following suit and widely introducing online versions of their physical stores and in some cases are using their stores as distribution centers. One of Descartes' customers, Home Depot, can now deliver over 100,000 items with same day delivery. Another customer, John Lewis Partners in the UK (reported over £9.5 billion of sales in 2013 in the UK from 35 John Lewis stores and 274 Waitrose supermarkets) uses Descartes continuous optimization solution to provide premium delivery service scheduling, where customers who choose a lunch time or Saturday delivery pay an additional fee, while other times during the week which are more cost effective are available for free. They have saved over \$10 million a year, while maintaining a higher level of customer service. The pressure is mounting for suppliers and retailers alike as end-customers demand narrower order-to-fulfillment periods, lower prices and greater flexibility in scheduling and rescheduling deliveries. We estimate this segment is seeing between 10%–20% organic growth annually for Descartes.

#### **How Descartes Same-Day Continuous Optimization Works**

Historically and for the vast majority of retailers, deliveries of purchases made online or in-store by consumers have been processed for delivery 2 to 3 days after the original purchase date, while many are made several days or weeks after. While consumers can more easily plan to be available on the same day or day after a purchase, scheduling a date further out creates a suboptimal experience. Traditional batch delivery optimization technologies are designed to plan deliveries before the day of delivery, and several days after the original purchase. Traditional technology is limited from making same-day deliveries or even next day deliveries.

**Exhibit 9: Illustration of Descartes Continuous Optimization vs Batch Optimization**

Source: The Descartes Systems Group Inc., March 2014 Corporate Presentation

With Descartes same-day delivery solution (Route Planner On-Demand) enabled retailers can offer their customers delivery options at the time of purchase. The system instantly assesses logistic parameters including capacity, skills required to provide value added services, and driving time, accounting for the current location of fleet assets through GPS fleet telematics and existing delivery schedules to enable dispatchers to automatically assign and execute new orders throughout the day, rescheduling delivery orders on the routes best suited to meet the existing delivery schedule and the new customer's appointment requirements.

**Exhibit 10: Example of Descartes Same Day Delivery Scheduling**

**Your Store**  
Where Your Delivery Options Are Infinite!

**Your Account**  
Items in Shopping Cart: 1  
Subtotal (before tax): \$56.01  
\$40.00  
\$250.78

**Item Detail**  
Our items can be delivered to you with a number of delivery options.

**The Your Store Ultimate**  
(Please see delivery options)  
In Stock.  
Ships from and sold by Your Store - Where Your Delivery Options Are Infinite!  
Ventless Cyclonic Action drying technology;  
Built-in water heater; Unique textured workspace top  
15 lbs. wash capacity; 7.71 lbs. dry capacity;  
Seven (7) wash cycles;  
Adjustable spin time (9 min. max);  
Front-mounted control panel  
[Click for Delivery Options](#)

A customer places a **new order** online and has clicked **delivery options'**

	Free Standard Delivery		Premium Delivery (\$10.00)		Same Day Delivery (\$25.00)	
	Wednesday 24 April 2013	Thursday 25 April 2013	Friday 26 April 2013	Saturday 27 April 2013	Sunday 28 April 2013	Monday 29 April 2013
7am-9am		●		●		
9am-11am		●	●			●
11am-1pm		●	●	●		●

Source: The Descartes Systems Group Inc., March 2014 Corporate Presentation

Exhibit 10 provides an example of a customer’s delivery options when placing an order using the continuous optimization tool. The order is placed on Wednesday, with premium next day and longer options available at a premium price (\$10 in this example), while same day is also available at an even higher price (\$25). These delivery options take into account logistic parameters including drive time, capacity, skills required to provide value added services and more.

**Forwarder & Broker Enterprise Solutions**

Freight forwarders are businesses which assist manufacturers or producers in shipping goods to retailers and end consumers. Brokers are businesses which assist in the clearing of goods through customs barriers for importers and exporters. These businesses do not physically move the goods, but are instrumental in the scheduling, documentation (security, customs, etc.), and financial management required for goods to travel smoothly. Descartes’ forwarder & broker enterprise systems enable freight forwarders, NVOCC’s and third party logistics service providers to manage bookings, security filings, customs entries, shipment and financial management. These businesses are able to move more freight through any mode (air, truck, ocean, and rail) with fewer resources, have more visibility of import/export logistics, and provide customers real-time tracking information. This is a slower growth business for Descartes (flat to slight decline) as customers are trending towards bringing the job of freight forwarders and customs brokers in-house with easy software solutions like Descartes. The recent acquisition of Impatex Freight Software in December 2013 added customs filing solutions in the UK and freight forwarding solutions in the UK and US.

## Customers & Markets Served

Descartes serves over 10,000 customers in transportation and logistics services, manufacturing, retail, distribution, business services, and the public sector.

The scale of customers range widely with 10–30 very large companies with over 2,000 vehicle fleets, shipping over 500,000 packages per year, to thousands of SME's with less than 100 vehicle fleets, and shipping less than 100,000 shipments per year. Some of these large customers include CVS Pharmacy, British Airways PLC, Mondelez International Inc., The Home Depot, and DHL International.

### Exhibit 11: Descartes Major Customers

<b>Air</b>	Virgin Atlantic	Delta Air Lines	American Airlines	Air Canada	British Airways	Etihad Airways	
<b>Ocean</b>	Maersk	CMA CGM Group	Mitsui O.S.K. Lines	Hamburg Süd Group	Hapag-Lloyd		
<b>Truck</b>	Con-way	Schneider National	Estes Express Lines	Day & Ross Transportation	England Logistics		
<b>Intermediaries</b>	DHL International	KUEHNE + NAGEL	Crowley Maritime	Panalpina World Transport	DB Schenker		
<b>Retailers</b>	CVS Pharmacy	The Home Depot	John Lewis Partnership	Jumbo Supermarkten	Hallmark Cards	Crate and Barrel	Sears Brands, LLC
<b>Manufacturers</b>	BASF	Coca Cola	Mondelez International	SABMiller	Del Monte	Hasbro	Volvo
<b>Distributers</b>	Ferrellgas	Deli-XL	Edward Don & Company	Core-Mark International			

Source: The Descartes Systems Group Inc., March 2014 Corporate Presentation

### Customers – Industries

**Transportation and Logistics Services** use cloud-based solutions for freight brokerage, supply chain management, GPS fleet tracking, route planning, transportation management and global trade compliance. Compliance solutions are also of significant importance to these customers as any non-compliance can affect business continuity and have significant penalties.

Key verticals include: air carriers, ocean carriers, less than truckload (LTL) and truckload (TL) carriers, third party logistics providers (3PLs), freight forwarders, customs brokers, and non-vessel operating common carriers (NVOCCs)

**Manufacturers** need to manage the flow of goods, inbound from suppliers, through manufacturing facilities, outbound to distribution centers and to end customers. Logistic precision is essential to reduce bottlenecks and remain competitive, especially with a global supply chain and distribution channels.

Key verticals include: building products, chemicals, consumer products, food and beverage, and high tech/electronics.

**Retailers** use Descartes solutions to reduce inventory carrying costs while meeting customer demand by managing flow of inventory to distribution centers, to stores or direct to customers. Descartes' solutions include purchase transportation management, fleet management, customs and regulatory compliance, connecting and collaborating with trading partners, supply chain visibility for managing inventory flow, and measuring performance across suppliers and carriers for ongoing optimization of preferred vendors.

Key verticals include: mass merchants and retailers in apparel, consumer electronics, furniture and appliances, grocery, convenience and pharmacy, and specialty retail.

**Distribution operators** compete in a very competitive environment, and as a result are seeing increasingly slim margins. Descartes' solutions enable automated management

of inventory, assets, personnel, and the related business documents all in motion to minimize costs while also providing an enhanced customer experience. Descartes' solutions provides trading partner connectivity and messaging, supply chain visibility for managing inventory flow, regulatory and customs compliance as well as telematics solutions.

Key verticals include: automotive, foodservice, beverage and hospitality, medical supplies and labs, propane, oil and gas, and wholesale distribution.

**Business services providers** require their field operators and mobile assets to operate at optimal levels. Descartes enables this with its telematics and mobile resource management solutions.

Key verticals include: equipment rental and leasing services, recycling services, document retention and securing destruction services, inspection and maintenance services, uniform and linen services, clinical/medical pick-up and delivery, and security and armored transport services.

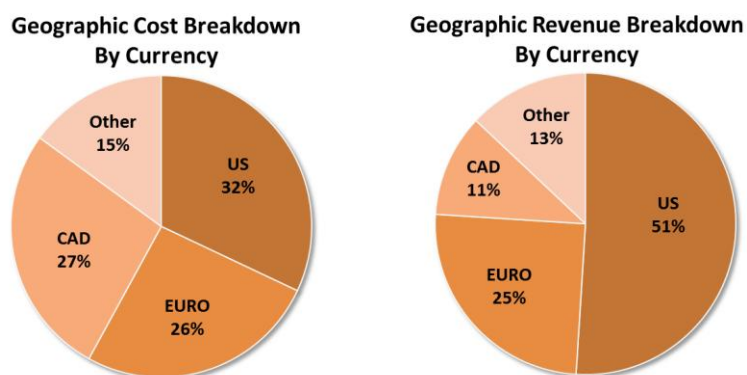
**Public sector** customers span a broad spectrum of verticals which include agencies that manage trade and transportation filing data and public transit authorities tracking and optimizing mobile fleets (buses, trains, etc.). In fleet management Descartes solutions can reduce idling and improve fuel efficiency by optimizing route planning, driver and vehicle performance, and compliance.

## Geographic Breakdown

Descartes has made acquisitions globally with a significant presence in the US, Canada, and EMEA, with noteworthy operations in Belgium and the Netherlands. They also generate a small portion of their revenues from Asia Pacific and the Americas region, excluding Canada and the US. Exhibit 12, breaks down the revenues and cost by currency.

Based on the cost and revenue breakdowns by currency, if the Canadian dollar appreciates by 1 penny against the US dollar, this would decrease EBITDA by \$170,000, while a 1 penny appreciation of the Euro against the US dollar would decrease EBITDA by \$29,000.

**Exhibit 12: Geographic Cost and Revenue Breakdown by Currency F2014**



Source: The Descartes Systems Group Inc., Raymond James Ltd.

## Products

**Route, Mobile, and Telematics:** Unifying critical fleet management processes and supporting the full, closed-loop process associated with route planning, route execution, driver and vehicle performance. A single-integrated platform to help deliver command of operations by uniting optimized route planning, dispatching and GPS tracking, mobile applications, telematics, fleet/driver, compliance and performance analytics.

What It Does	Details
<b>Strategic Planning for recurring pickups or deliveries or highly variable pickups and deliveries</b>	<p><b>Descartes Sales &amp; Territory Planner for recurring pickups or deliveries</b> performs complex service scheduling that simultaneously considers daily, weekly and multiweek deliveries, as well as holidays and other non-working days. It also evaluates geographic distribution and sales potential for each customer to help establish optimal territories and opportunities across members of the sales team.</p> <p><b>Descartes Area Planner for highly variable pickups and deliveries</b> utilizes historical demand with algorithms to create models of demand density patterns used to create territory and route plans and generates multiple plans to fit daily, seasonal or business cycle driven demand variability.</p>
<b>Daily Planning</b>	<p><b>Descartes Route Planner, Descartes Route Planner RS, Descartes Route Planner On-demand and Winroute</b> re-optimize in real-time as each new order is placed, allocating resources to help maximize operating efficiencies, deliver priority service to the most profitable accounts and routes, and maintain overall customer service objectives. It helps companies reduce costs as a result of shorter routes, reduced fuel consumption and enhanced fleet utilization.</p>
<b>Pickup/Delivery Reservations</b>	<p><b>Descartes Reservations</b> facilitates on-line scheduling of deliveries or service confirming that requests can be met and automatically schedules in the appointment.</p>
<b>Dispatch Mobile Solutions</b> bridge the gap between plan versus actual performance and is core to continuous logistics improvement.	<p><b>Descartes MobileLink</b> provides integrated two-way wireless communication and supports active and passive monitoring capabilities for enhanced logistics execution, extending the traditional route planning process and providing real-time visibility into the execution of the plan. <b>Descartes Dispatch and Descartes Dispatch RS</b> facilitate the assignment and execution of pre-planned and same-day pick-ups and deliveries. <b>Descartes Automated Vehicle Locator (AVL)</b> helps improve customer responsiveness through real-time status updates, forward predictability and enhanced exception alerting, which can reduce the need to track every aspect of a schedule and instead emphasize the implications of service interruptions and exceptions.</p>
<b>Reporting and Measuring</b>	<p><b>Descartes Reporting Services</b> helps companies create and distribute reports within an organization or to suppliers, vendors, sub-contractors or carriers to help identify best practices.</p>
<b>Sales and Merchandiser Management</b> improves sales and merchandising productivity, cuts costs and improves customer service.	<p><b>Sales and Merchandiser Management</b> enables resource planning, route building and optimization, and tracking across delivery operations and mobile workforces, including sales representatives, territory managers and merchandisers, facilitating weekly activity planning, delivery status visibility for merchandisers and sales representatives, actual distance driven, in-store time calculation and work data collection, and consolidated performance reporting, to ensure appropriate payments are being made for resource performance</p>
<b>Telematics and Compliance</b> automates driver logs and hours of service (HOS) regulatory compliance reporting to increase workforce productivity.	<p><b>Telematics and Compliance</b> offer next generation electronic on-board recorder (EOBR) devices that can continuously monitor performance of vehicles and drivers.</p>

Source: The Descartes Systems Group Inc., Raymond James Ltd.



**Transportation Management:** Descartes' solutions support transportation professionals 1) Manage carriers and transportation contracts, 2) Configure route guides and quote/rate shipments, 3) Plan and optimize shipments, 4) Evaluate and select the right mode and carrier combinations including private/dedicated fleet integration, 5) Streamline warehousing operations with dock appointment scheduling and yard management, 6) Track shipments to improve visibility and manage performance, 7) Support supplier and carrier compliance programs, and 8) Audit and settle freight bills to improve the "financial supply chain"

What It Does	Details
<b>Descartes Transportation Manager</b> provides up-to-date rates that allow the customer to make efficient shipment decisions and comply with carrier manifesting and labeling requirements.	<b>Descartes Transportation Manager</b> facilitates efficient planning and execution of shipping and warehouse activities at multiple touch-points in the distribution process. It helps logistics managers, shippers and third parties simultaneously evaluate shipment alternatives to find efficient shipping methods.
<b>Descartes Dock Appointment Scheduling</b> optimizes receiving operations for inbound shipments to a warehouse.	<b>Descartes Dock Appointment Scheduling</b> is a collaborative solution that enables shippers, carriers and consignees to schedule dock door appointments, streamlining the dock appointment process.
<b>Descartes Yard Management</b> provides command and control of yards of all sizes.	<b>Descartes Yard Management</b> enables shipping and receiving staff, gate guards and yard jockeys to more effectively manage the movement of trailers and identify inventory in the yard.
<b>Descartes eCellerate</b> is a collaborative solution that helps to simplify the complexities of managing international trade.	<b>Descartes eCellerate</b> helps customers better manage shipments and where multiple parties can view and collaborate to manage purchase orders, commercial invoices, ship orders, bookings, shipments, customs compliance and other regulatory and security filings.
<b>Descartes Rate Builder</b> helps carriers and non-vessel operating common carriers (NVOCCs) manage global rates, contracts and rate agreements more efficiently and meet regulatory obligations.	<b>Descartes Rate Builder</b> enables companies to create, revise, store and distribute rates via the Internet. NVOCCs can effectively manage a global rate network and help enable logistics service providers (LSPs) to create and manage both buy-side and sell-side rates digitally, enforce a standardized global pricing policy and implement a global rate request process.
<b>Descartes Ocean Freight Audit</b> helps eliminate the manual audit processes for ocean freight invoices.	<b>Descartes Ocean Freight Audi</b> takes bills of lading messages and automatically audits them against the digitized ocean contracts in Descartes Rate Builder.
<b>Descartes WebSimon and MyWebSimon</b> enables ocean carriers to securely manage their own rate and look up rates for additional connected rail or road movement	<b>Descartes WebSimon and MyWebSimon</b> enables ocean carriers to securely manage their own rate (pricing information across a global enterprise) and retrieve ocean transportation rules, inland charges, locations, service contracts, rates and all related surcharges. Users can look up a rate for a specific ocean movement, and any additional connected rail or road movements.
<b>Descartes Bookings and Reservations</b> Integration of cost tables with contracts allows for deeper analysis to improve asset utilization and overall margins.	<b>Descartes Bookings and Reservations</b> portals provide visibility into rates, contracts, and shipment details from global locations to enable more informed decision-making and contract development. Carriers can distribute product, routing, capacity and rate information to forwarders 24/7 in real-time, while forwarders can access carrier information and make electronic bookings via a simple web browser

Source: The Descartes Systems Group Inc., Raymond James Ltd.

**Customs & Regulatory Compliance:** With the Descartes GLN, these solutions help to 1) Gather data from multiple parties and integrate it for filings, 2) Move goods across borders without disruption, 3) Reduce the risks of penalties or fines, 4) Meet a wide range of safety, security and commercial compliance mandates, and 5) Store data for all filings and compliance agency responses to enable complete audit and reporting capabilities

What It Does	Details
<b>Descartes Advanced Manifest Service</b> for carriers, freight forwarders, NVOCCs and shippers	<b>Descartes Advanced Manifest Service</b> enable firms to comply with US, Canadian, European, Chinese, Mexican, Colombian and Peruvian customs security initiatives. Accommodates customers' varying technical capabilities, and includes options that range from a user-friendly web form that permits manual entry of cargo manifest information to a tightly integrated system-to-system electronic data interchange (EDI) connection.
<b>Descartes Export Compliance</b> screens parties for acceptability for receipt of product and the proper use of export licenses - essential to avoid fines, penalties and potentially imprisonment	<b>Descartes Export Compliance</b> offers denied party screening, license validation and audit for all international trading partners. This service operates to support the US and EU requirements for export.
<b>Descartes Border Compliance</b> provides customs compliance services to assist transportation providers and LSPs with imports and/or exports to Canada, the US, India and the Netherlands.	<b>Descartes Border Compliance</b> through the Viatrade Service, the GLN helps carriers and LSPs negotiate increasingly complex document exchange requirements brought about by new international security initiatives and tightened borders and enable customs brokers to receive electronic manifests and invoices from carriers so the manifest can be mapped to the Canadian and US customs release systems.
<b>Descartes Importer Security Filing</b> electronically manage shipment information to comply with US customs	<b>Descartes Importer Security Filing</b> helps carriers, importers and their customs brokers easily and electronically manage shipment information and comply with US customs requirements to electronically submit shipment information for inbound ocean cargo.
<b>Descartes Ocean Tariff Compliance</b> helps ocean carriers comply with US Federal Maritime Commission requirements	<b>Descartes Ocean Tariff Compliance</b> helps manage the rate information for cargo that moves according to the terms of a privately-negotiated service contract or NVOCC Service Arrangement rather than the public rates of a tariff.
<b>Descartes Electronic In-Bond</b> help carriers complete the requirements for filing, and receive in-bond movement authorization within minutes instead of hours or even days.	<b>Descartes Electronic In-Bond</b> helps transmit the necessary advance electronic cargo information to the US Custom Boarder Protection regarding inbound shipments prior to their arrival in the US
<b>Descartes EDItrade Compliance</b> enables the importer / exporter community to remain compliant with US customs laws.	<b>Descartes EDItrade Compliance</b> enables the importer/exporter community to complete necessary audits, correct data, keep a modification history and report on the data integrity necessary to remain compliant with US customs laws.
<b>Descartes Global Security Compliance</b> monitor, audit and correct securities filings and declarations.	<b>Descartes Global Security Compliance</b> is a single platform for the monitoring, audit and corrections of security filings and declarations made on a global basis.
<b>Descartes ACAS Solution</b> performs security threat threshold targeting via pre-departure review of air cargo information.	<b>Descartes Air Cargo Advance Screening (ACAS) Solution</b> The GLN collects house bill information directly from forwarders' enterprise systems to file directly to Customs and Border Protection (CBP) without manual intervention thereby increasing data quality.
<b>Descartes Customs Warehouse Management</b> can play an integral role in simplifying procedures associated with customs warehousing, while taking advantage of the maximum available benefits.	<b>Descartes Customs Warehouse Management</b> is specifically designed to allow users to manage goods stored under the customs warehouse procedure, by storing information on imported goods and accounts, tracking all movement and activity, and enabling a more accurate and timely electronic declaration processing. It is an effective and efficient means of enabling importers to choose an optimum time to clear goods and pay duties or re-export them outside of the EU.

Source: The Descartes Systems Group Inc., Raymond James Ltd.

**Global Logistics Network (GLN):** The standard for multimodal, inter-enterprise electronic data and document exchange providing customers with 1) Industry leading electronic management of a rich set of commercial, logistics and regulatory documents, including air, ocean and truck messaging standards, 2) High-speed, real-time message transfer, 3) Interconnectivity with 26 general and industry specific Value-Added Networks (VANs), 4) Support of “high-tech”, “low-tech” and “no-tech” connectivity, 5) Connections to the most extensive logistics community in the world, 6) Ad hoc connectivity to non-registered parties, 7) Wireless device connectivity, and 8) Message management dashboard and data quality solutions

What It Does	Details
<p><b>Descartes LogiMan</b> simplifies cargo management by providing comprehensive global visibility and statistical monitoring services of air, truck and ocean freight shipments.</p>	<p><b>Descartes LogiMan</b> links the cargo transportation chain from cargo booking to final delivery confirmation, helping to improve freight management efficiency, reduce costs for participants and improve customer responsiveness.</p>
<p><b>Descartes CargoAssist (formerly Descartes PC Pro)</b> provide freight forwarders with access that connects them with their customers and logistics partners.</p>	<p><b>Descartes CargoAssist (formerly Descartes PC Pro)</b> improves freight booking, send electronic waybills and ensure that consignments are handled quickly and efficiently at freight terminals around the world.</p>
<p><b>Descartes e-Pouch</b> provides users with the functionality to facilitate the sharing of information with approved parties, automate routine interactions, help flag problems at an early stage and provide a repository for retrieval of completed deliveries.</p>	<p><b>Descartes e-Pouch</b> integrates with applications for bookings, shipment monitoring, quality performance reporting and customs filing to provide a central repository that enhances electronic document exchange connections between back-office systems and trading partners.</p>
<p><b>Descartes webDocs</b> help improve air freight booking processes, send electronic waybills and distribute freight messages with the required information directly to the air carriers.</p>	<p><b>Descartes webDocs</b> gives forwarders access to electronic web forms that enables quick and easy creation of the various documents and electronic messages that are dictated by the industry, such as the International Air Transport Association’s (IATA) e-freight requirements. The solution also provides forwarders with the ability to easily create messaging documents such as master airway bill, house airway bill and labels and transmit these documents electronically to the air carrier.</p>
<p><b>Descartes Message Quality Monitor</b> connect to major airlines and monitor the message flow to and from back-office systems.</p>	<p><b>Descartes Message Quality Monitor</b> displays error messages and received status events, enabling users to take immediate action for any discrepancies.</p>
<p><b>Descartes Data Integrity Services</b> identifies errors in messages and automatically notifies trading partners to coordinate the correction.</p>	<p><b>Descartes Data Integrity Services</b> continuously monitors messages and their delivery to trading partners to identify and report errors and also provides periodic summary reports by trading partner, message type and error type.</p>
<p><b>Descartes Cargo 2000</b> enables better decision-making for fulfilling customer expectations and ensures standardized processes for improved service levels.</p>	<p><b>Descartes Cargo 2000</b> monitors shipments at a master air waybill level from airport to airport, assisting customers in complying with IATA Cargo 2000 certification process.</p>
<p><b>Descartes Highway Carrier Portal</b> help carriers without electronic data interchange (EDI) capabilities, shippers, and freight payment agencies (FPAs) realize all the benefits of EDI capabilities without the complexity of in-house solutions.</p>	<p><b>Descartes Highway Carrier Portal</b> is a web-based information service that facilitates the collaboration and automation of load tendering and freight payment between highway carriers and shippers (or FPAs representing them). The carrier portal bridges the gap between EDI-enabled back office systems of shippers and FPAs and less automated carriers.</p>
<p><b>Descartes GLN eArchiving</b> enables customers to store and archive electronic documents in an “electronic safe”.</p>	<p><b>Descartes GLN eArchiving</b> electronic safe is accessible from the GLN via which relevant documents can be forwarded to customer’s data warehouse to company with standards and document retention policies.</p>
<p><b>Descartes Port Community Services</b> assist in improving cargo clearance and management operations for local port communities and their trading partners</p>	<p><b>Descartes Port Community Services</b> connects and streamlines information exchange between ocean carriers, inland carriers, forwarders, shippers, terminal operators, and port and customs authorities.</p>

Source: The Descartes Systems Group Inc., Raymond James Ltd.

**Broker & Forwarder Enterprise Systems:** On-demand solutions enable large and small organizations to take advantage of robust capabilities for bookings, security filings and customs entries, shipment and financial management. Customers benefit from 1) Enhanced productivity and ability to move more freight with fewer resources, 2) Better collaboration between regional offices and supply chain stakeholders, 3) Facilitate compliance with fiscal and security requirements, 4) Improved planning, execution and end-to-end visibility of import/export logistics, and 5) The ability to provide value-added, real-time transit information to customers.

What It Does	Details
<b>Descartes ITMR4 Canadian Customs Brokerage Suite</b> is an on-demand, enterprise level software solution that handles functions that a customs broker, freight forwarder or self-filing importer typically uses to manage its operations.	<b>Descartes ITMR4 Canadian Customs Brokerage Suite</b> is an enterprise level software use to manage documentation filing, accounting, financial reports, imaging, e-billing and web tools for tracking and tracing, reporting and data entry.
<b>Descartes EDItrade Customs Link</b> allows custom brokers and self-filing importers to collect data and prepare it for US customs automated broker interface entries	<b>Descartes EDItrade Customs Link</b> collects and prepares data for remote location filing and post-entry compliance and supportive modules, to streamline the process and create transparency.
<b>Descartes European Brokerage and Declaration</b> simplify the complexities of customs clearance in the European market.	<b>Descartes European Brokerage and Declaration</b> is Authorized Economic Operator compliant. It has a variety of modules to handle export management, import management, creation of the Single Administrative Document for normal or simplified procedures, incoming and outgoing transit declarations, connectivity to the New Computerized Transit System and facilitates compliance with different member state customs authorities' requirements.
<b>Descartes OneView Forwarder Enterprise Solution</b> coordinates air, truck and ocean import/export shipments	<b>Descartes OneView Forwarder Enterprise Solution</b> is a powerful application that allows freight forwarders, NVOCC's and third party logistics service providers to effectively coordinate air, truck and ocean import/export shipments.
<b>Descartes Forwarder Management</b> provides back-office functionality and real-time information exchange for logistics service providers (LSPs)	<b>ForwarderLogic</b> is a cloud-based solution that provides comprehensive back-office functionality and real-time information exchange for LSPs handling all modes (air, ocean, truck), inland/international import and export shipments from purchase orders all the way to warehousing and final delivery.

Source: The Descartes Systems Group Inc., Raymond James Ltd.

## Competition

The market for transportation logistics and custom compliance solutions is broad and very fragmented. A report from Gartner (May 2013 – Gartner Report: Market Share Analysis Supply Chain Management Software, Worldwide 2012) indicates at least 75 vendors competing in some way.

### Main Competitors in Supply Chain Management (SCM)

Core SCM functionality has been incorporated into the functionality offered by ERP suites from vendors such as SAP AG and Oracle Corporation. There are also a number of best-of-breed software vendors offering more advanced SCM optimization, logistics and other functionality. Some vendors service mainly the supplier and customer while others provide logistics industry intermediaries.

Some of the competitors in the SCM space include:

**SAP – Ariba:** The market share leader (SAP: 20.8% and Ariba: 3.8% in 2012 according to Gartner) in SCM for over a decade with a focus on procurement. In 2012 SAP acquired Ariba, a SCM procurement leader, to add to its product offering. SAP also offers fleet management and global trade management solutions, however its scale and many other software and services makes it difficult to compare to Descartes.

**Oracle:** The second largest by market share of the aggregate SCM market. Oracle's focus is on supply chain execution (SCE) involving warehousing, transportation and global trade management solutions. It also delivers a procurement and fleet management solution.

**JDA Software Group, Inc. – RedPrairie:** JDA competes in all the same industry verticals as Descartes including manufacturing, retail, distribution, services and transportation and logistics. RedPrairie is best-of-breed (i.e., specialized solutions) in supply chain, workforce, and all-channel retail solutions.

**Manhattan Associates:** Manhattan is a SCM pure-play with strength in SCE, warehouse management systems (WMS), transportation management systems (TMS), distributed order management (DOM), supply chain planning (SCP), and store commerce activation. Manhattan has less of a focus on global trade management.

Other SCM competitors/comparables would include **Basware Corporation, Epicor Software Corporation, Infor Global Solutions, SPS Commerce, Inc., E2open Inc.**

Some competitors in Fleet Management:

**Fleetmatics IRL Limited:** Fleetmatics is a pure play GPS fleet management solution for the enterprise.

**Ortec:** Ortec is a provider of routing, pallet and load building optimization software for the oil, gas, chemical, retail, transportation, consumer goods and waste recycling industries. Its routing and scheduling solutions are similar to Descartes.

**RoadNet Technologies, Inc.:** RoadNet provides fleet management solutions for over 3,400 customers and over 200,000 vehicles. As a comparable to Descartes, RoadNet has a limited range of solutions, not serving global trade management or logistics management.

**Paragon Software Systems plc:** Paragon provides route and schedule optimization software for fleet management and strategic transportation planning. Its solutions do not provide the full scope of logistics and global trade management.

Some competitors/comparables in Customs Compliance:

**Integration Point Inc.:** Integration Point provides regulatory information for import/export capabilities for 160+ countries and connectivity to supply chain partners and government agencies across the world.

## Financial Model Highlights

### Seasonality

Descartes Services revenue has some seasonality to it. The first fiscal quarter (ending April 30) has historically seen lower shipment volumes by air and truck impacting the number of transactions processed over its GLN exchange. The second fiscal quarter (ending July 31) typically sees increased volumes from ocean carriers. The third fiscal quarter (ending October 31) is usually the strongest as shipments and transactional volumes reach their peak before the holidays. And the fourth fiscal quarter (ending January 31) sees a parade of international holidays impacting the number of transactions processed in the period.

**Guidance – Baseline Calibration**

Every quarter, Descartes provides the Street with some baseline calibration.

**Baseline revenues** are anticipated revenues excluding anticipated or expected new sales for a period beyond the date of measure.

**Baseline operating expenses** are anticipated expenses excluding anticipated or expected costs of goods sold or other expenses related to anticipated or expected new sales.

**Baseline calibration** is the difference between the baseline revenue and baseline operating expenses, and subsequently excludes anticipated or expected new sales and their associated costs of goods sold or other expenses.

**Exhibit 13: Descartes Baseline Calibration****Baseline Calibration**

Figures per Qtr	Beginning of Q4 FY10	Beginning of Q4 FY11	Beginning of Q4 FY12	Beginning of Q4 FY13	Beginning of Q4 FY14	Beginning of Q1 FY15
Baseline Revenues	\$18.0	\$25.0	\$27.5	\$31.6	\$36.5	\$37.5
Baseline Operating Costs	\$13.9	\$19.2	\$21.0	\$24.0	\$27.9	\$28.4
Baseline Calibration	\$4.1	\$5.8	\$6.5	\$7.6	\$8.6	\$9.1
Baseline Calibration as a % of Baseline Revenues	23%	23%	24%	24%	24%	24%

- Baseline revenues = visible, contracted and recurring revenues. Baseline revenues is not a revenues projection as it excludes sales concluded in the period.
- Baseline operating costs = operating costs, less stock-based compensation, restructuring and acquisition-related costs, depreciation and amortization. Baseline operating costs are not a cost projection as they exclude expenses associated with new sales in the period.

Source: The Descartes System Group Inc., March 2014 Corporate Presentation

**Revenue**

Revenues consist of Services revenues and License revenues.

**Services revenues** are generated from 1) transactional fees for use of services and products (message processing); 2) professional services from consulting, implementation and training services; 3) maintenance, subscription and other related revenues; and, 4) hardware revenues (telematics).

**License revenues** are generated from perpetual licenses granted to customers for use of software products.

## Financial Model Forecasts

### F2015 Forecast (C2014)

We are modeling \$173.3 million in revenue, representing 15% y/y growth, in-line with the consensus growth of its logistics software peer group, as global logistics becomes increasingly automated. We are modeling \$158.5 million in Services revenues up 15% y/y from \$137.8 million in F2014, and \$14.8 million in License revenues up 10% y/y from \$13.5 million in F2014, as Descartes completes the integration of KSD, Impatex and Computata. Our estimates bake in some acquisitions during F2015 depending on the timing, ease of integration and subsequent valuations. We forecast adjusted EBITDA of \$51.4 million in F2015 (+16% y/y) and \$0.63 adjusted EPS.

### F2016 Forecast (C2015)

We are modeling \$198.6 million in revenue, representing 15% y/y growth. We are modeling \$182.2 million in Services revenues up 15% y/y from \$158.5 million in F2015, and \$16.3 million License revenues up 10% y/y from \$14.8 million in F2015. We forecast adjusted EBITDA of \$60.3 million in F2016 (+17% y/y) and \$0.74 adjusted EPS.

## Valuation & Recommendation

Because some segments of Descartes are growing faster than others, we have used a weighted average EBITDA multiple to set our target price. For Descartes Customs Compliance / Transportation Logistics that are seeing organic growth in the 10%–20% range, we use SCM SaaS comps as well as other small cap SaaS growing below 20% as comps. These net us a range of 15x to 23x 2015 EBITDA which we apply to 50% of Descartes. For the flattish GLN and Forwarder/Broker business, we use some of the slower organic growth Canadian comparables trading range (between 9x to 13x). Our blended range for Descartes comes in between 12x to 18x 2015 EBITDA. We use an 18x EBITDA multiple, at the higher end of the range, as we believe the company is poised to benefit from strong organic growth opportunities in its markets, which combined with their M&A strategy should enable Descartes to continue to grow its adjusted EBITDA between 15%–20% CAGR for the next few years (better than guidance of 10%–15% EBITDA growth). Our \$17.50 target is based on a blended multiple of 18x C2015E adjusted EBITDA and represents 23x C2015E adjusted EPS. Descartes currently trades at 15.3x 2015E adjusted EBITDA vs peers at 18.1x and at 19.7x 2015E EPS at a discount vs. peers at 34.3x.

### Exhibit 14: Blended Valuation Multiples

	% of Total	Organic Growth Profile	EBITDA Range	
Customs Compliance / Logistics	50%	10-20%	15.0x	23.0x
Forwarder & Broker Solutions / GLN	50%	flattish	9.0x	13.0x
Blended Descartes			12.0x	18.0x

Source: Raymond James Ltd.

**Exhibit 15: Comparable Companies****Descartes Comparable Companies**

All values in US\$ mlns, except per share data or otherwise stated.

Company	Ticker Symbol	Price 20-Mar-14	Mkt. Cap. (\$ mlns)	EV/Sales			EV/EBITDA			P/E			Growth (13A-15E)		EBITDA Margin	Gross Margin
				C13A	C14E	C15E	C13A	C14E	C15E	C13A	C14E	C15E	Rev.	EPS	TTM	TTM
<b>SCM SaaS Companies</b>																
Fleetmatics	FLTX	\$35.02	\$1,342	7.0	5.4	4.3	22.5	19.9	15.0	41.2	42.2	30.2	27%	17%	25%	75%
SPS Commerce	SPSC	\$64.32	\$1,053	8.9	7.3	6.1	69.3	53.2	40.3	n.m.	n.m.	80.4	20%	24%	9%	70%
E2open	EOPN	\$24.71	\$656	9.2	7.5	6.2	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	22%	n.m.	n.m.	61%
Manhattan Associates	MANH	\$38.09	\$2,943	6.9	6.2	5.7	24.5	21.5	19.2	41.9	37.5	33.7	10%	11%	26%	56%
SciQuest	SQI	\$31.12	\$739	7.6	6.3	5.3	40.3	31.2	22.4	88.9	72.4	55.6	21%	26%	n.m.	70%
<b>Group Average</b>				<b>7.9</b>	<b>6.5</b>	<b>5.5</b>	<b>39.1</b>	<b>31.4</b>	<b>24.2</b>	<b>57.3</b>	<b>50.7</b>	<b>50.0</b>	<b>20%</b>	<b>20%</b>	<b>20%</b>	<b>66%</b>
<b>Small Cap SaaS Software Providers &gt;20% Growth</b>																
Benefitfocus	BNFT	\$51.93	\$328	2.4	1.9	1.5	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	27%	30%	n.m.	43%
Demandware	DWRE	\$74.00	\$2,584	22.8	16.1	11.3	n.m.	100+	100+	n.m.	n.m.	n.m.	42%	n.m.	n.m.	73%
LogMeIn	LOGM	\$46.80	\$1,132	5.7	4.7	4.0	28.0	21.6	18.3	86.7	51.4	42.2	19%	43%	9%	89%
Marin Software	MRIN	\$10.95	\$359	3.4	2.7	2.3	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	23%	n.m.	n.m.	60%
Marketo	MKTO	\$36.36	\$1,391	13.5	9.4	7.2	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	37%	n.m.	n.m.	60%
Rally Software	RALY	\$18.05	\$440	4.7	3.7	3.0	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	25%	n.m.	n.m.	78%
Textura	TXTR	\$29.11	\$718	15.5	9.6	6.3	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	57%	n.m.	n.m.	69%
<b>Group Average</b>				<b>9.7</b>	<b>6.9</b>	<b>5.1</b>	<b>n.m.</b>	<b>n.m.</b>	<b>n.m.</b>	<b>n.m.</b>	<b>n.m.</b>	<b>n.m.</b>	<b>33%</b>	<b>n.m.</b>	<b>n.m.</b>	<b>67%</b>
<b>Small Cap SaaS Software Providers &lt;20% Growth</b>																
Bazaarvoice	BV	\$8.32	\$633	3.2	3.0	2.9	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	6%	n.m.	n.m.	68%
Brightcove	BCOV	\$10.35	\$299	2.4	2.0	1.8	58.3	n.m.	n.m.	n.m.	n.m.	n.m.	16%	n.m.	n.m.	67%
Constant Contact	CTCT	\$27.16	\$869	2.6	2.3	2.0	16.2	12.6	10.5	37.2	28.3	23.2	13%	27%	9%	71%
Jive Software	JIVE	\$8.84	\$608	3.5	2.9	2.5	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	18%	n.m.	n.m.	62%
LivePerson	LPSN	\$12.52	\$679	3.3	2.9	2.5	29.3	27.4	21.1	59.6	54.4	46.4	14%	13%	4%	76%
ServiceSource	SREV	\$8.69	\$703	2.0	1.7	1.5	32.8	n.m.	46.6	n.m.	n.m.	n.m.	14%	n.m.	n.m.	40%
Tangoe	TNGO	\$18.45	\$761	3.8	3.2	2.8	24.2	19.2	15.6	28.4	23.0	19.5	17%	21%	9%	55%
Vocus	VOCS	\$14.56	\$294	1.8	1.9	1.8	14.1	13.6	11.9	72.8	44.1	40.4	2%	34%	0%	80%
<b>Group Average</b>				<b>2.8</b>	<b>2.5</b>	<b>2.2</b>	<b>29.1</b>	<b>18.2</b>	<b>21.1</b>	<b>49.5</b>	<b>37.5</b>	<b>32.4</b>	<b>13%</b>	<b>24%</b>	<b>5%</b>	<b>65%</b>
<b>Other Canadian Software Comparables</b>																
Open Text	OTEX	\$48.57	\$5,789	4.2	3.1	2.9	13.8	9.7	8.8	17.6	14.0	12.2	20%	20%	31%	73%
Constellation Software	TSX:CSU	\$263.50	\$5,584	5.0	3.5	3.0	26.1	17.7	15.3	29.3	20.6	17.6	29%	29%	13%	32%
Enghouse Systems	TSX:ESL	\$34.77	\$932	4.5	4.0	3.7	17.7	15.1	13.1	35.7	30.0	n.m.	10%	n.m.	21%	71%
Absolute Software	TSX:ABT	\$7.12	\$315	2.9	2.5	2.2	18.4	16.4	14.3	78.2	73.4	n.m.	15%	n.m.	20%	77%
<b>Group Average</b>				<b>4.2</b>	<b>3.3</b>	<b>3.0</b>	<b>19.0</b>	<b>14.7</b>	<b>12.9</b>	<b>40.2</b>	<b>34.5</b>	<b>14.9</b>	<b>18%</b>	<b>24%</b>	<b>21%</b>	<b>63%</b>
<b>Overall Average (excl. Hi/Lo)</b>				<b>5.6</b>	<b>4.4</b>	<b>3.6</b>	<b>27.1</b>	<b>19.6</b>	<b>18.1</b>	<b>51.1</b>	<b>40.4</b>	<b>34.3</b>	<b>20%</b>	<b>24%</b>	<b>14%</b>	<b>66%</b>
Descartes	DSGX	\$14.62	\$945	6.1	5.3	4.6	20.7	17.9	15.3	27.1	23.3	19.7	15%	17%	29%	68%

Note: Estimates for DSGX are from Raymond James Ltd., all other estimates are consensus from Capital IQ

Source: Company Reports, Capital IQ, Raymond James Ltd.



## Appendix: Acquisitions

Date	Target	Transactional Details	Description	Geographical Market	Business Focus
April 10, 2006	ViaSafe	\$8.9 mln (\$7.8 mln in cash, \$1.1 mln in stocks)	Secure electronic logistics services for regulatory compliance for global trade across all modes of transportation	Canada	GTC
June 30, 2006	Flagship Customs Services	\$29.3 mln (\$25.3 mln in cash + \$4 mln in stock)	Electronic filing technology to help shippers, transportation providers, freight forwarders and other logistics intermediaries securely and electronically file shipment information with customs authorities	US	GTC
December 6, 2006	Cube Route Inc	\$1.6 mln (all in cash)	On-demand logistics management solutions including planning, routing, sequencing and optimization of delivery routes, real-time driver and vehicle tracking, and delivery route analysis	Canada	MRM
March 6, 2007	Blue Pacific Services	\$1.85 mln (\$1.0 mln in cash; \$0.85 mln earnout over 2.5 years)	Helps ocean intermediaries acquire financial bonds and sureties required by the US Federal Maritime Commission to ship cargo in/out of US waters	US	GTC
March 6, 2007	Ocean Tariff Bureau		Tariff filing and contract publishing services to ocean intermediaries involved in the shipping of cargo in/out of US waters	US	GTC
August 17, 2007	Global Freight Exchange	\$12.5 mln (\$5.4 mln in cash, \$1.9 mln in stock, \$5.2 mln earnout over 4 years)	Electronic freight booking for air cargo industry	UK	SCM
December 20, 2007	RouteView Technologies	\$3.5 mln (\$3 mln in cash; \$0.5 mln earnout)	Map-based routing software to help SMBs manage their delivery operations	US	MRM
January 9, 2008	Pacific Coast Tariff Bureau	\$2.1 mln (all in cash)	Tariff and contract publishing services for ocean carriers to help them comply with US regulations for shipping trades and also manage ocean contracts and apply correct freight rates for ocean shipments	US	GTC
January 10, 2008	Mobitrac Fleet Management Business	\$0.65 mln (all in cash)	SaaS routing and scheduling technology	US	MRM
October 1, 2008	Dexx	EUR 1.4 mln (\$2 mln in cash)	European-based customs filing and logistics messaging platform	Europe	GTC
February 5, 2009	Oceanwide	\$8.4 mln (all in cash)	Customs filing solutions, automated customs broker interface, trade compliance solutions and logistics management software, adding more than 700 participants to the GLN	US/Canada	GTC
March 11, 2009	Scancode	C\$8.5 mln (\$6.6 mln in cash)	Developer and integrator of carrier compliant parcel and less-than-truckload shipping solutions	Canada	GTC
March 19, 2010	Porthus	EUR 29.7 mln (\$40.5 mln in cash)	Provider of global trade management solutions to manage complex business processes across the supply chain	Europe	GTC
April 20, 2010	Imanet	C\$6 mln (\$5.9 mln in cash)	Provider of enterprise and SaaS solutions to customs brokers, freight forwarders, exporters and self-clearing importers in managing shipments and interactions with Canada Border & Security Agency (CBSA)	Canada	GTC
June 16, 2010	Routing International	EUR 3.3 mln (\$4.1 mln in cash)	Developer and distributor of optimized route planning solutions, adding 200 customers.	Europe	MRM
June 12, 2011	Telargo Inc.	\$9.6 mln (all in cash)	Software as a service provider of mobile resource management telematics solutions and help fleet owners comply with domestic transportation regulations	US/Europe	MRM
November 2, 2011	IntercommIT BV	EUR 10.1 mln (\$13.8 mln in cash)	B2B integration-as-a-service provider, adding 800 customers.	Europe	SCM
January 22, 2012	GeoMicro Inc.	\$2.2 mln (all in cash)	Geographic information systems and commercial turn-by-turn navigation for mobile resource management	US	MRM
June 4, 2012	Infodis BV	EUR 3 mln (\$3.7 mln in cash)	Transportation management network-based solution that handles specific European logistics requirements., adding 200 trading partners	Europe	MRM
June 13, 2012	Integrated Export Systems	\$33.9 mln (all in cash)	Provider of a SaaS based regulatory compliance solution for freight forwarders, non-vessel operating common carriers, and customs brokers primarily originating in Asia Pacific, adding 600 customers	Asia Pacific	GTC
November 14, 2012	Exentra	GBP 10.7 mln (\$16.6 mln in cash)	UK-based SaaS solution provider that help European fleet operators meet government regulations for driver compliance	Europe	GTC
May 2, 2013	KSD Software Norway AS	NOK 190 mln (\$32.4 mln: \$12.6mln cash, \$19.8mln debt)	Leading provider of electronic customs filing solutions for the European Union, adding 1300 customers and \$10 million in recurring revenue run rate.	Europe	GTC
December 23, 2013	Impatex Freight Software	£5.1 mln (\$8.2mln debt)	UK based electronic customs filing and freight forwarding solutions, adding 200 freight forwarder customers	Europe	GTC
December 23, 2013	Compudata	\$18.1 mln (all in cash)	B2B supply chain integration and e-invoicing solution in Switzerland, adding 500 customers	Europe	SCM

Note: SCM: Supply Chain Management; MRM: Mobile Resource Management/Fleet Management; GTC: Global Trade Compliance/Management  
Source: The Descartes Systems Group Inc., Raymond James Ltd.

## Appendix: Financial Statements

<b>Descartes Systems Group</b> (US\$ mln)	31-Jan-12	31-Jan-13	31-Jan-14	31-Jan-15	31-Jan-16	30-Apr-14	31-Jul-14	31-Oct-14	31-Jan-15
<b>Income Statement Summary</b>	<b>F2012A</b>	<b>F2013A</b>	<b>F2014A</b>	<b>F2015E</b>	<b>F2016E</b>	<b>1Q15E</b>	<b>2Q15E</b>	<b>3Q15E</b>	<b>4Q15E</b>
<b>Revenue</b>	<b>\$114.0</b>	<b>\$126.9</b>	<b>\$151.3</b>	<b>\$173.3</b>	<b>\$198.6</b>	<b>\$40.9</b>	<b>\$42.9</b>	<b>\$44.3</b>	<b>\$45.3</b>
Service Revenues	\$105.6	\$116.8	\$137.8	\$158.5	\$182.2	\$37.3	\$39.2	\$40.4	\$41.5
License Revenues	\$8.3	\$10.1	\$13.5	\$14.8	\$16.3	\$3.5	\$3.7	\$3.9	\$3.8
Cost of sales	\$38.3	\$42.4	\$49.0	\$54.2	\$61.6	\$13.0	\$13.5	\$13.7	\$14.0
<b>Gross Profit</b>	<b>\$75.7</b>	<b>\$84.5</b>	<b>\$102.3</b>	<b>\$119.1</b>	<b>\$137.0</b>	<b>\$27.8</b>	<b>\$29.4</b>	<b>\$30.6</b>	<b>\$31.3</b>
Sales & Marketing	\$13.0	\$13.8	\$16.7	\$20.8	\$23.8	\$4.9	\$4.9	\$5.1	\$5.9
General & Administrative	\$14.3	\$15.7	\$20.5	\$23.4	\$26.6	\$5.7	\$5.8	\$6.0	\$5.9
Research & Development	\$19.0	\$21.3	\$25.9	\$28.6	\$31.8	\$6.7	\$6.9	\$7.1	\$7.9
Amortization of Intangibles	\$12.0	\$14.2	\$18.0	\$18.3	\$15.7	\$4.8	\$4.8	\$4.8	\$4.0
Restructuring Charges	\$2.1	\$2.4	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Contingent Acquisition Considerations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Other Charges	\$0.0	\$0.0	\$6.5	\$1.3	\$1.3	\$0.0	\$0.4	\$0.4	\$0.4
<b>EBIT</b>	<b>\$15.2</b>	<b>\$17.2</b>	<b>\$14.7</b>	<b>\$26.6</b>	<b>\$37.8</b>	<b>\$5.6</b>	<b>\$6.6</b>	<b>\$7.2</b>	<b>\$7.2</b>
<b>Extraordinary items</b>									
Interest Expenses	(\$0.0)	(\$0.0)	(\$1.0)	(\$1.0)	(\$1.0)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)
Investment Income	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0
Other Loss (Gain)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
FX Loss (Gain)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>EBT</b>	<b>\$15.4</b>	<b>\$17.2</b>	<b>\$13.7</b>	<b>\$25.7</b>	<b>\$36.8</b>	<b>\$5.4</b>	<b>\$6.4</b>	<b>\$7.0</b>	<b>\$7.0</b>
Income Taxes (Recovery)	\$3.4	\$1.2	\$4.1	\$7.7	\$11.0	\$1.6	\$1.9	\$2.1	\$2.1
<b>Net Earnings</b>	<b>\$12.0</b>	<b>\$16.0</b>	<b>\$9.6</b>	<b>\$18.0</b>	<b>\$25.8</b>	<b>\$3.8</b>	<b>\$4.5</b>	<b>\$4.9</b>	<b>\$4.9</b>
<b>EPS</b>									
Basic EPS	\$0.19	\$0.26	\$0.15	\$0.28	\$0.41	\$0.06	\$0.07	\$0.08	\$0.08
Diluted EPS	\$0.19	\$0.25	\$0.15	\$0.28	\$0.40	\$0.06	\$0.07	\$0.08	\$0.08
<b>Adjusted Net Income</b>	<b>\$26.7</b>	<b>\$30.5</b>	<b>\$34.9</b>	<b>\$40.5</b>	<b>\$47.9</b>	<b>\$9.2</b>	<b>\$10.1</b>	<b>\$10.6</b>	<b>\$10.6</b>
Basic Adjusted EPS	\$0.43	\$0.49	\$0.55	\$0.64	\$0.76	\$0.15	\$0.16	\$0.17	\$0.17
<b>Diluted Adjusted EPS</b>	<b>\$0.42</b>	<b>\$0.48</b>	<b>\$0.54</b>	<b>\$0.63</b>	<b>\$0.74</b>	<b>\$0.14</b>	<b>\$0.16</b>	<b>\$0.16</b>	<b>\$0.16</b>
<b>Weighted Average # of Shares (mln)</b>									
Basic	62.2	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2
Diluted Shares	63.4	63.9	64.7	64.7	64.7	64.7	64.7	64.7	64.7
<b>Adjusted EBITDA</b>	<b>33.0</b>	<b>37.9</b>	<b>44.5</b>	<b>51.4</b>	<b>60.3</b>	<b>11.8</b>	<b>12.8</b>	<b>13.4</b>	<b>13.4</b>
<b>Adjusted EBITDA/Share</b>	<b>\$0.52</b>	<b>\$0.59</b>	<b>\$0.69</b>	<b>\$0.80</b>	<b>\$0.93</b>	<b>\$0.18</b>	<b>\$0.20</b>	<b>\$0.21</b>	<b>\$0.21</b>
<b>Adjusted EBITDA %</b>	<b>29%</b>	<b>30%</b>	<b>29%</b>	<b>30%</b>	<b>30%</b>	<b>29%</b>	<b>30%</b>	<b>30%</b>	<b>30%</b>
<b>y/y</b>	<b>24%</b>	<b>15%</b>	<b>17%</b>	<b>16%</b>	<b>17%</b>	<b>14%</b>	<b>18%</b>	<b>18%</b>	<b>12%</b>
<b>Metrics</b>									
<b>Revenue Growth</b>									
y/y	15%	11%	19%	15%	15%	20%	12%	14%	12%
q/q						1%	5%	3%	2%
<b>Service Revenue Growth</b>									
y/y	13%	11%	18%	15%	15%	24%	10%	14%	13%
q/q						2%	5%	3%	3%
<b>License Revenue Growth</b>									
y/y	52%	21%	34%	10%	10%	-10%	37%	21%	3%
q/q						-5%	5%	5%	-2%
<b>Adjusted EBITDA Growth</b>									
y/y	24%	15%	17%	16%	17%	14%	18%	18%	12%
q/q						-1%	8%	5%	0%
<b>Margin Analysis</b>									
Gross Margin%	66.4%	66.6%	67.6%	68.7%	69.0%	68.1%	68.6%	69.1%	69.1%
Services Gross Margin	65.6%	64.8%	65.4%	66.7%	67.0%	66.0%	66.5%	67.0%	67.2%
License Gross Margin	76.0%	87.1%	90.4%	90.5%	91.0%	90.0%	91.0%	91.0%	90.0%
Sales & Marketing	11.4%	10.8%	11.0%	12.0%	12.0%	12.0%	11.5%	11.5%	13.0%
General & Administrative	12.5%	12.4%	13.6%	13.5%	13.4%	14.0%	13.5%	13.5%	13.0%
Research & Development	16.7%	16.8%	17.1%	16.5%	16.0%	16.5%	16.0%	16.0%	17.5%
Adjusted EBITDA%	29.0%	29.9%	29.4%	29.7%	30.4%	29.0%	29.8%	30.3%	29.6%
EBIT%	13.4%	13.5%	9.7%	15.4%	19.0%	13.8%	15.4%	16.3%	15.9%
Tax Rate	21.9%	7.1%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Net Margin %	10.6%	12.6%	6.4%	10.4%	13.0%	9.3%	10.4%	11.0%	10.8%

Source: The Descartes Systems Group Inc., Raymond James Ltd.

<b>Balance Sheet Summary</b>	<b>F2012A</b>	<b>F2013A</b>	<b>F2014A</b>	<b>F2015E</b>	<b>F2016E</b>
(US\$ mln)					
Cash & ST Investments	65.5	37.6	62.7	29.9	12.9
Accounts Receivable	22.5	26.3	29.0	28.5	32.6
Prepaid Expenses	2.8	3.4	3.7	4.2	4.8
Deferred Taxes & Charges	43.7	36.9	33.1	33.1	33.1
Investments in Affiliates	0.0	0.0	0.0	0.0	0.0
Capital Assets	9.3	10.2	8.8	31.4	56.6
Goodwill & Intangibles	114.7	159.6	205.8	210.0	219.3
Other Assets	0.4	0.8	1.4	1.4	1.4
<b>Total Assets</b>	<b>258.9</b>	<b>274.9</b>	<b>344.5</b>	<b>338.5</b>	<b>360.8</b>
Debt	0.0	0.0	40.4	31.8	23.2
Accounts Payable	5.3	6.1	7.0	8.2	9.3
Accrued Liabilities	12.2	12.4	16.8	19.2	22.0
Deferred Revenue	8.4	7.6	9.2	9.2	9.2
Income Taxes Payable	14.3	11.7	20.9	0.0	0.0
Other Liabilities	0.2	0.0	0.0	0.0	0.0
Preferred Equity	0.0	0.0	0.0	0.0	0.0
Common Equity	218.6	237.0	250.2	270.1	297.1
<b>Liabilities + Equity</b>	<b>258.9</b>	<b>274.9</b>	<b>344.5</b>	<b>338.5</b>	<b>360.8</b>

Source: The Descartes Systems Group Inc., Raymond James Ltd.

<b>Cash Flow Summary</b>	<b>F2012A</b>	<b>F2013A</b>	<b>F2014A</b>	<b>F2015E</b>	<b>F2016E</b>
(US\$ mln)					
Net Income	12.0	16.0	9.6	18.0	25.8
+ Depreciation & Amortization	14.5	17.1	21.4	22.2	20.1
+ Deferred Taxes	2.1	(0.7)	2.4	0.0	0.0
- Equity Income Less Dividends	0.0	0.0	0.0	0.0	0.0
+ Minority Interest Less Dividends	0.0	0.0	0.0	0.0	0.0
+/- Stock-Based Comp	1.2	1.3	2.5	1.9	1.2
+/- Other Adjustments	0.0	0.0	0.0	0.0	0.0
+/- Unrealized FX Gain (Loss)	0.0	0.0	0.0	0.0	0.0
<b>Operating Cash Flow</b>	<b>29.8</b>	<b>33.7</b>	<b>35.9</b>	<b>42.1</b>	<b>47.1</b>
+ Change in W/C	-5.9	(3.4)	6.7	(17.4)	(0.8)
- Capex	4.7	3.5	2.4	4.0	4.6
<b>Free Cash Flow</b>	<b>19.2</b>	<b>26.8</b>	<b>40.2</b>	<b>20.8</b>	<b>41.7</b>
+ Addition to Intangibles	0.0	0.0	0.0	0.0	0.0
+ Sale of (Purchase) ST Investments	0.0	0.0	0.0	0.0	0.0
+ Acquisitions of Subsidiaries	(21.3)	(54.7)	(58.7)	(45.0)	(50.0)
<b>Investing Cash Flow</b>	<b>-26.0</b>	<b>(58.2)</b>	<b>(61.1)</b>	<b>(49.0)</b>	<b>(54.6)</b>
- Common Dividends	0.0	0.0	0.0	0.0	0.0
+ Equity Raised	1.8	(0.8)	2.3	0.0	0.0
+ Debt Increase (Decrease)	-4.3	(0.1)	41.8	(8.6)	(8.6)
+ Preferred Share Increase	0.0	0.0	0.0	0.0	0.0
<b>Financing Cash Flow</b>	<b>-2.6</b>	<b>(0.9)</b>	<b>44.1</b>	<b>(8.6)</b>	<b>(8.6)</b>
FX Effect on Cash	0.6	0.9	(0.5)	0.0	0.0
<b>Change in Cash</b>	<b>(4.097)</b>	<b>(27.9)</b>	<b>25.1</b>	<b>(32.8)</b>	<b>(16.9)</b>

Source: The Descartes Systems Group Inc., Raymond James Ltd.

## Appendix: Management & Board of Directors

### Management Team

<b>Edward J. Ryan</b>	CEO	Ryan joined Descartes in February 2000 in connection with the acquisition of E-Transport Incorporated. Since then, Ryan has occupied various senior management positions within Descartes, with particular focus on network and recurring business. Ryan was appointed General Manager, Global Logistics Network in June 2004, Executive Vice President, Global Field Operations in July 2007, and Chief Commercial Officer in June 2011. In December 2013, former CEO Arthur Mesher retired and was succeeded by Ryan as CEO.
<b>J. Scott Pagan</b>	President and COO	Pagan joined Descartes legal department in May 2000. Pagan was appointed Corporate Secretary in May 2003, General Counsel & Corporate Secretary in June 2004, Executive Vice President, Corporate Development in July 2007, and Chief Corporate Officer in June 2011. With the retirement of Arthur Mesher in 2013, Pagan was promoted to President and Chief Operating Officer. Prior to joining Descartes, Pagan was in private legal practice.
<b>Stephanie Ratza</b>	CFO	Ratza joined Descartes in April 2007. From November 2005 until joining Descartes Ratza served as Chief Financial Officer of iPico Inc., a firm which designs, develops, manufactures and markets a broad range of radio frequency identification solutions. Her other public company finance experience includes over 6 years at Waterloo, Ontario-based MKS Inc., serving as Vice-President, Finance for 5 years and as Director of Finance for 1 year, and as Controller for more than 3 years at Open Text Corporation.
<b>Raimond Diederik</b>	EVP - Information Services	Diederik joined Descartes in 1993. As Executive Vice President, Information Services, Diederik is responsible for Research and Development, Customer Support, IT Operations and Data Management solutions for Descartes. Diederik has over 20 years of experience managing logistic information systems. Prior to Descartes, Raimond worked as an Infrastructure Consultant with the Research & Development group of P&O Nedlloyd's Information Technology Division.
<b>Chris Jones</b>	EVP - Marketing and Services	Jones joined Descartes in May 2005 and served as Executive Vice President, Solutions & Markets until his appointment to Executive Vice President, Solutions & Services in September 2006. Jones was appointed Executive Vice President, Services in February 2011 and Executive Vice-President, Marketing & Services in June 2011. From November 2003 until he joined Descartes, Jones was Senior Vice President in Aberdeen Group's Value Chain Research division where he was responsible for creating a market-leading supply chain and manufacturing research and advisory research practice. Prior to Aberdeen, from September 1998 to January 2003, Jones was Executive Vice President of Marketing and Corporate Development for SynQuest, Inc., a provider of supply chain planning solutions. Before joining SynQuest, from May 1994 to September 1998, Jones was Vice President and Research Director for Enterprise Resource Planning Solutions at the Gartner Group.

Source: The Descartes Systems Group Inc., Raymond James Ltd.

**Board of Directors**

<b>Dr. Stephen Watt</b>	Chairman of the Board	Serving the board since 2001, Watt served as Chairman of the Board from September 2003 to May 2007. Watt was appointed Lead Director in June 2011, and returned as Chairman in 2013. Watt has been a professor at the University of Western Ontario (UWO) since 1997. There, he was chair of the department of Computer Science and directed the Ontario Research Centre for Computer Algebra. Prior to joining UWO, Watt held positions at IBM T.J. Watson Research (USA), the University of Nice and INRIA (France). Watt's research is in the areas of mathematical computing and software, for which he has received several awards, including the 1999 Ontario Premier's Research Excellence Award and the 2002 Distinguished Research Professorship from the University of Western Ontario. In 2011, Watt was named Distinguished University Professor of the University of Western Ontario, the university's highest recognition for academics. Watt has also served as a director of Waterloo Maple Inc. and of the Fields Institute for Research in Mathematical Sciences. In 2012, Watt joined the board of directors of Waste Diversion Ontario, a corporation that oversees Ontario's recycling programs.
<b>Dr. David Anderson</b>	Director	Anderson has been a Directors since June 2011. Anderson is a managing director of Supply Chain Ventures, LLC, a venture capital and consulting company specializing in marketing, sales and operations software investing. Prior to founding Supply Chain Ventures, Anderson was a managing partner at Accenture, where he was instrumental in building Accenture's supply chain management practice in North America, Asia and Europe. He also served as a vice president in charge of logistics consulting of Temple, Barker & Sloane, Inc. (now Oliver Wyman) and a vice president of Data Resources, Inc. (now part of IHS/Global Insights, Inc.). Anderson is a Fellow of the Chartered Institute of Logistics and Transport in the United Kingdom and a Member of the Supply Chain Management Professionals in the United States. Anderson serves on the board of Aiko Biotechnology and Steelwedge Software, Inc., Control Group, Inc. and ActualMeds Corp.
<b>David Beatson</b>	Director	Beatson has held several senior financial roles prior to joining Descartes. Beatson served as CEO of GlobalWare Solutions and Regional CEO, North America and Member of the Executive Board of Panalpina, Inc. He was also President, CEO and Chairman of Supply Links, Inc., President and CEO of Emery Worldwide and Chairman, President and CEO of Circle International Group, Inc. Beatson currently serves as a director and on the audit committee of PFSweb, Inc. (NASDAQ: PFSW).
<b>Eric Demirian</b>	Director	Demirian is a seasoned business executive with a unique blend of financial, operational and board governance experience. He is currently president of Parklea Capital, Inc., an investment banking and corporate finance firm. Demirian was executive vice president of Group Telecom, Inc. and for 17 years Demirian was with PricewaterhouseCoopers LLP where he was a partner and head of Information and Communication Practice. Demirian serves on the board and is chair of the audit committee of Enghouse Systems Ltd. (TSX:ESL), and is a director and chair of the audit committee of Imax Corporation (NYSE:IMAX) (TSX:IMX). Demirian is a former director and chair of the audit committee of a number of public companies, including Menu Foods Income Fund (2005-2010) and Keystone North America Inc. (2007-2010).
<b>Chris Hewat</b>	Director	Hewat is a partner in the law firm of Blake, Cassels & Graydon LLP, advising companies and investment dealers with respect to securities and business law matters, with particular focus on private and public offerings of securities, mergers and acquisitions, and securities regulatory requirements. Hewat has served as a director of a number of private and public companies, and is a director of The Arthritis Society, Ontario Division. Hewat has been a member of the Board of Directors at Descartes since 2000. Hewat serves as a Member of the Corporate Governance Committee.
<b>John J. Walker</b>	Director	Walker is a Certified Public Accountant and a Chartered Global Management Accountant with experience as a Chief Financial Officer with public companies, including Bowne & Company, a New York Stock Exchange-listed company and Loews Cineplex Entertainment Corporation. Prior to Loews, Walker served as Controller of Corporate Property Investors.

Source: The Descartes Systems Group Inc., Raymond James Ltd.

**Exhibit 16: Share Ownership and Insider Holdings (as at Mar-21-14)**


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Top 5 Holder	Shares	% Holding
Mawer Investment Management	7,021,280	11.03%
Jarislowky Fraser Limited	5,808,291	9.12%
Primecap Management Company	5,020,590	7.89%
Pembroke Management LTD	4,643,100	7.29%
FMR LLC	4,336,950	6.81%

Insider Holdings	Shares
David Anderson	5,000
David Beatson	5,252
Eric Demirian	10,000
Chris Hewat	5,000
Stephen Watt	7,932

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Source: Bloomberg, Raymond James Ltd.

Company Citations						
Company Name	Ticker	Exchange	Currency	Closing Price	RJ Rating	RJ Entity
Aecon Group	ARE	TSX	C\$	16.85	2	RJ LTD.
AIMIA	AIM	TSX	C\$	17.70	2	RJ LTD.
Amazon.com Inc.	AMZN	NASDAQ	US\$	368.97	1	RJ & Associates
American Airlines Group, Inc.	AAL	NASDAQ	US\$	36.56	2	RJ & Associates
Benefitfocus, Inc.	BNFT	NASDAQ	US\$	51.93	1	RJ & Associates
Brightcove Inc.	BCOV	NASDAQ	US\$	10.35	1	RJ & Associates
CAE Inc.	CAE	TSX	C\$	14.97	3	RJ LTD.
Canadian National Railway	CNR	TSX	C\$	62.84	2	RJ LTD.
Canadian Pacific Railway	CP	TSX	C\$	170.12	2	RJ LTD.
Cineplex Inc.	CGX	TSX	C\$	42.10	2	RJ LTD.
Con-way Inc.	CNW	NYSE	US\$	40.31	2	RJ & Associates
Constant Contact, Inc.	CTCT	NASDAQ	US\$	27.16	3	RJ & Associates
CVS Caremark Corporation	CVS	NYSE	US\$	73.99	2	RJ & Associates
Demandware	DWRE	NYSE	US\$	74.00	2	RJ & Associates
Dollarama	DOL	TSX	C\$	86.73	2	RJ LTD.
eBay Inc.	EBAY	NASDAQ	US\$	57.12	2	RJ & Associates
Finning International	FTT	TSX	C\$	29.96	2	RJ LTD.
Gildan Activewear	GIL	NYSE	US\$	49.34	2	RJ LTD.
Google Inc.	GOOG	NASDAQ	US\$	1197.16	2	RJ & Associates
Joy Global Inc.	JOY	NYSE	US\$	55.15	3	RJ LTD.
Loblaw Companies Ltd.	L	TSX	C\$	46.22	2	RJ LTD.
Manhattan Associates, Inc.	MANH	NASDAQ	US\$	38.09	2	RJ & Associates
Marketo, Inc.	MKTO	NASDAQ	US\$	36.36	2	RJ & Associates
McKesson Corporation	MCK	NYSE	US\$	185.35	1	RJ & Associates
Open Text	OTEX	NASDAQ	US\$	48.57	2	RJ LTD.
Oracle Corp.	ORCL	NYSE	US\$	38.37	2	RJ & Associates
Ritchie Bros. Auctioneers	RBA	NYSE	US\$	23.31	3	RJ LTD.
Russel Metals	RUS	TSX	C\$	30.32	2	RJ LTD.
SciQuest	SQI	NASDAQ	US\$	31.12	2	RJ & Associates
Shoppers Drug Mart	SC	TSX	C\$	60.61	3	RJ LTD.
SNC-Lavalin	SNC	TSX	C\$	46.96	3	RJ LTD.
Stantec Inc	STN	TSX	C\$	68.99	2	RJ LTD.
Tangoe Inc.	TNGO	NASDAQ	US\$	18.45	1	RJ & Associates
The Home Depot Inc.	HD	NYSE	US\$	80.09	2	RJ & Associates
Tim Hortons	THI	TSX	C\$	61.70	2	RJ LTD.
Toromont Industries	TIH	TSX	C\$	25.45	3	RJ LTD.
United Parcel Service	UPS	NYSE	US\$	96.91	2	RJ & Associates
Vocus Inc.	VOCS	NASDAQ	US\$	14.56	3	RJ & Associates
WestJet Airlines	WJA	TSX	C\$	23.50	3	RJ LTD.

Notes: Prices are as of the most recent close on the indicated exchange and may not be in US\$. See Disclosure section for rating definitions. Stocks that do not trade on a U.S. national exchange may not be registered for sale in all U.S. states. NC=not covered.

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<b>Underperform (Sell)</b>	2%	6%	0%	14%	33%	0%	0%	0%

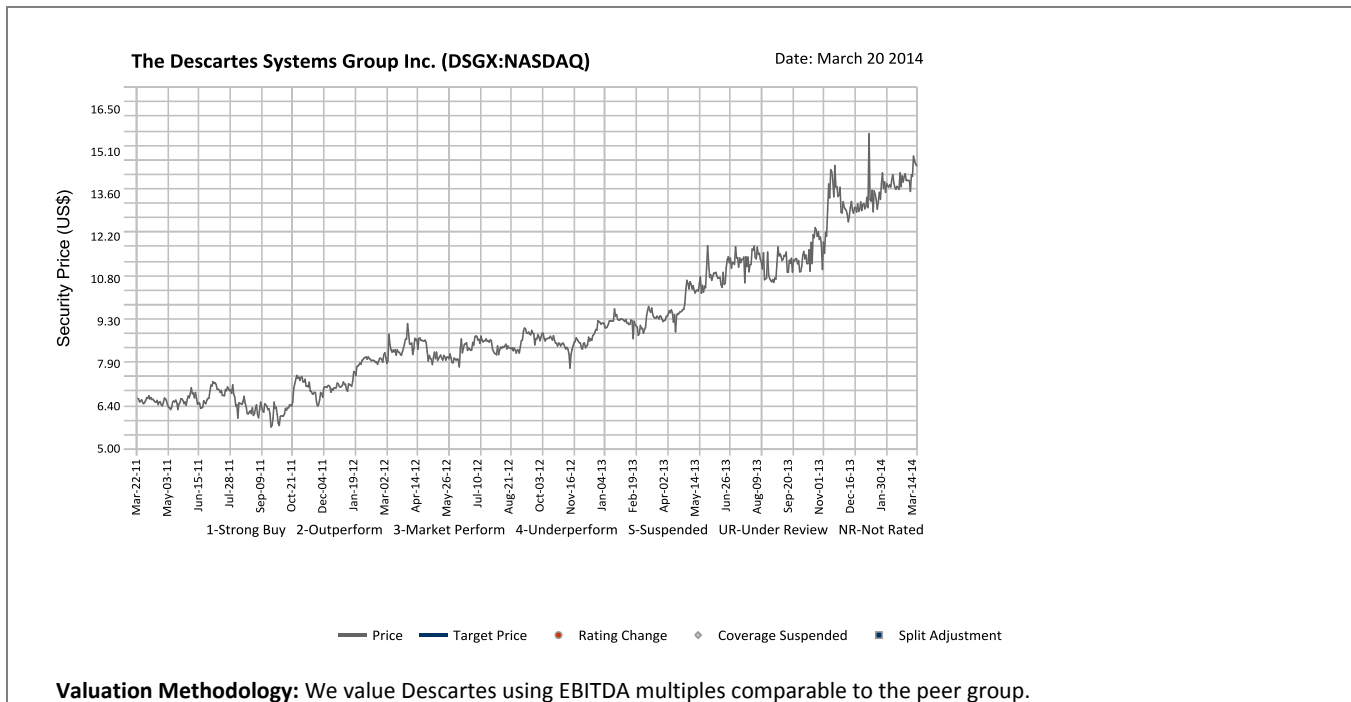
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### Technology & Communications - Software/IT Services

#### Information Security Markets Are Highly Competitive

The market for information security software, hardware, and services is highly competitive, with a number of suite vendors, best-of-breed vendors, and small niche vendors often present in each sales opportunity. Remaining competitive requires continual research and development and strong sales execution.

#### Information Security Companies Are Exposed to Rapidly Changing Technologies

The markets for information security products are relatively new and are marked by a rapid pace of change. Moreover, many companies in the space have short operating histories, making historical comparisons challenging.

### Risks - The Descartes Systems Group Inc.

#### Valuation risk

Technology valuations have risen for much of the last 18 months which has increased valuation risk. We still believe technology valuations compare favourably to other sectors.

#### Lack of accretive acquisitions

A dearth of attractive acquisition targets could slow Descartes' buy-and-build strategy and EBITDA growth rate.

#### Inability to grow acquired businesses

Descartes typically acquires businesses which add new geographic exposures and expands its solutions offerings. Descartes may have limited experience in these regions or solutions, and may struggle to grow these businesses above typical customer attrition levels.

#### Economic Cyclicity

Descartes success is highly correlated to the level of capital and operating expenditures of its customers. Decreased capital and operational spending could result in lower demand for Descartes products and services, or delayed/cancelled spending decisions to implement Descartes' solutions.

#### Disruptions in the movement of freight

Descartes' business is highly dependent on the movement of freight, especially as 50% of its recurring revenues are generated on a per transaction basis. If freights were disrupted by a natural disaster, terrorism, severe weather, labour disputes, political instability, contagious illness outbreaks, or security activities, Descartes could see many transaction based customer drop down to subscription pricing, negatively affecting overall revenues.

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EQUITY RESEARCH	
HEAD OF EQUITY RESEARCH	
DARYL SWETLISHOFF, CFA	604.659.8246
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