

IMAX CORP  
Form 10-K  
February 26, 2019

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C. 20549**

**Form 10-K**

**(Mark One)**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT  
OF 1934**

**For the fiscal year ended December 31, 2018**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934**

**Commission file Number 001-35066**

**IMAX Corporation**

**(Exact name of registrant as specified in its charter)**

**Canada**  
**(State or other jurisdiction of**  
**incorporation or organization)**

**98-0140269**  
**(I.R.S. Employer**  
**Identification Number)**



Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell Company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the common shares of the registrant held by non-affiliates of the registrant, computed by reference to the last sale price of such shares as of the close of trading on June 30, 2018 was \$1,176.8 million.

As of January 31, 2019, there were 61,478,168 common shares of the registrant outstanding.

### **Document Incorporated by Reference**

Portions of the registrant's definitive Proxy Statement to be filed within 120 days of the close of IMAX Corporation's fiscal year ended December 31, 2018, with the Securities and Exchange Commission pursuant to Regulation 14A involving the election of directors and the annual meeting of the stockholders of the registrant (the Proxy Statement) are incorporated by reference in Part III of this Form 10-K to the extent described therein.

**IMAX CORPORATION**

**December 31, 2018**

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**IMAX CORPORATION**
**EXCHANGE RATE DATA**

Unless otherwise indicated, all dollar amounts in this document are expressed in United States ( U.S. ) dollars. The following table sets forth, for the periods indicated, certain exchange rates based on the noon buying rate in the City of New York for cable transfers in foreign currencies as certified for customs purposes by the Bank of Canada (the Noon Buying Rate ). Such rates quoted are the number of U.S. dollars per one Canadian dollar and are the inverse of rates quoted by the Bank of Canada for Canadian dollars per U.S. \$1.00. The average exchange rate is based on the average of the exchange rates on the last day of each month during such periods. The Noon Buying Rate on December 31, 2018 was U.S. \$0.7330.

	<b>Years Ended December 31,</b>				
	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Exchange rate at end of period	0.7330	0.7971	0.7448	0.7225	0.8620
Average exchange rate during period	0.7718	0.7712	0.7558	0.7748	0.9022
High exchange rate during period	0.8138	0.8245	0.7972	0.8527	0.9422
Low exchange rate during period	0.7330	0.7276	0.6854	0.7148	0.8589

**SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION**

Certain statements included in this annual report may constitute forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, references to future capital expenditures (including the amount and nature thereof), business and technology strategies and measures to implement strategies, competitive strengths, goals, expansion and growth of business, operations and technology, plans and references to the future success of IMAX Corporation together with its consolidated subsidiaries (the Company ) and expectations regarding the Company s future operating, financial and technological results. These forward-looking statements are based on certain assumptions and analyses made by the Company in light of its experience and its perception of historical trends, current conditions and expected future developments, as well as other factors it believes are appropriate in the circumstances. However, whether actual results and developments will conform with the expectations and predictions of the Company is subject to a number of risks and uncertainties, including, but not limited to, risks associated with investments and operations in foreign jurisdictions and any future international expansion, including those related to economic, political and regulatory policies of local governments and laws and policies of the United States and Canada; risks related to the Company s growth and operations in China; the performance of IMAX DMR films; the signing of theater system agreements; conditions, changes and developments in the commercial exhibition industry; risks related to currency fluctuations; the potential impact of increased competition in the markets within which the Company operates; competitive actions by other companies; the failure to respond to change and advancements in digital technology; risks relating to recent consolidation among commercial exhibitors and studios; risks related to new business initiatives; conditions in the in-home and out-of-home entertainment industries; the opportunities (or lack thereof) that may be presented to and pursued by the Company; risks related to cyber-security and data privacy; risks related to the Company s inability to protect the Company s intellectual property; general economic, market or business conditions; the failure to convert theater system backlog into revenue; changes in laws or regulations; the failure to fully realize the projected cost savings and benefits from any of the Company s restructuring initiatives and other factors, many of which are beyond the control of the Company. Consequently, all of the forward-looking statements made in this annual report are qualified by these cautionary statements, and actual results or anticipated developments by the Company may not be realized, and even if substantially realized, may not have the expected consequences to, or effects on, the Company. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking information, whether as a result of new information, future events or otherwise.

IMAX<sup>®</sup>, IMAX<sup>®</sup> Dome, IMAX<sup>®</sup> 3D, IMAX<sup>®</sup> 3D Dome, Experience It In IMAX<sup>®</sup>, *The IMAX Experience*<sup>®</sup>, *An IMAX Experience*<sup>®</sup>, *An IMAX 3D Experience*<sup>®</sup>, IMAX DMR<sup>®</sup>, DMR<sup>®</sup>, IMAX nXos<sup>®</sup>, IMAX think big<sup>®</sup>, think big<sup>®</sup> and IMAX Is Believing<sup>®</sup>, are trademarks and trade names of the Company or its subsidiaries that are registered or otherwise protected under laws of various jurisdictions.

## PART I

### Item 1. *Business*

The Company is a Canadian corporation that was formed in March 1994 as a result of an amalgamation between WGIM Acquisition Corp. and the former IMAX Corporation ( Predecessor IMAX ). Predecessor IMAX was incorporated in 1967.

#### GENERAL

The Company, together with its consolidated subsidiaries, is one of the world's leading entertainment technology companies, specializing in motion picture technologies and presentations. IMAX offers a unique end-to-end cinematic solution combining proprietary software, theater architecture and equipment to create the highest-quality, most immersive motion picture experience for which the IMAX® brand has become known globally. Top filmmakers and studios utilize IMAX theaters to connect with audiences in innovative ways, and as a result, IMAX's theater network is among the most important and successful theatrical distribution platforms for major event films around the world.

The Company's core business consists of:

the Digital Re-Mastering ( DMR ) of films into the IMAX format for exhibition in the IMAX theater network in exchange for a certain percentage of contingent box office receipts from both studios and exhibitors; and

the provision of IMAX premium theater systems ( IMAX theater systems ) to exhibitor customers through sales, long-term leases or joint revenue sharing arrangements.

IMAX theater systems are based on proprietary and patented technology developed over the course of the Company's 51-year history. The Company's customers who purchase, lease or otherwise acquire the IMAX theater systems through joint revenue sharing arrangements are theater exhibitors that operate commercial theaters (particularly multiplexes), museums, science centers, or destination entertainment sites. The Company generally does not own IMAX theaters, but licenses the use of its trademarks along with the sale, lease or contribution of the IMAX theater system. The Company refers to all theaters using the IMAX theater system as IMAX theaters.

IMAX theater systems combine:

the ability to exhibit content that has undergone IMAX DMR conversion, which results in higher image and sound fidelity than conventional cinema experiences;

advanced, high-resolution projectors with specialized equipment and automated theater control systems, which generate significantly more contrast and brightness than conventional theater systems;

large screens and proprietary theater geometry, which result in a substantially larger field of view so that the screen extends to the edge of a viewer's peripheral vision and creates more realistic images;

sound system components, which deliver more expansive sound imagery and pinpointed origination of sound to any specific spot in an IMAX theater;

specialized theater acoustics, which result in a four-fold reduction in background noise; and

a license to the globally recognized IMAX brand.

Together these components cause audiences in IMAX theaters to feel as if they are a part of the on-screen action, creating a more intense, immersive and exciting experience than a traditional theater.

As a result of the immersiveness and superior image and sound quality of *The IMAX Experience*, the Company's exhibitor customers typically charge a premium for IMAX DMR films over films exhibited in their other auditoriums. The premium pricing, combined with the higher attendance levels associated with IMAX DMR films, generates incremental box office for the Company's exhibitor customers and for the movie studios releasing their films to the IMAX theater network. The incremental box office generated by IMAX DMR films has helped establish IMAX as a key premium distribution and marketing platform for Hollywood blockbuster films.

As one of the world's leaders in entertainment technology, the Company strives to remain at the forefront of advancements in cinema technology. The Company recently introduced IMAX with Laser, the Company's next-generation laser projection system designed for IMAX theaters in commercial multiplexes. The Company believes that IMAX with Laser delivers increased resolution, sharper and brighter images, deeper contrast as well as the widest range of colors available to filmmakers today. The Company further believes that IMAX with Laser can help facilitate the next major contract renewal and upgrade cycle for the global commercial IMAX network.



To date the Company has signed IMAX with Laser agreements with leading, global exhibitors such as AMC Entertainment Holdings, Inc. ( AMC ), Cineworld Group PLC ( Cineworld ) and Les Cinémas Pathé Gaumont ( Pathé ) (among others) for a total of 59 new theaters, 114 upgrades to existing IMAX theaters, and 30 upgrades to existing backlog arrangements. As at December 31, 2018, the Company's backlog had 73 new IMAX with Laser systems and 98 upgrades to IMAX with Laser systems and expects to have approximately 135 IMAX with Laser systems installed by the end of 2019.

## **IMAX THEATER NETWORK**

The Company believes the IMAX theater network is one of the most extensive premium theater networks in the world with 1,505 theater systems (1,409 commercial multiplex, 14 commercial destination, 82 institutional) operating in 80 countries as at December 31, 2018.

The Company believes that over time its commercial multiplex theater network could grow to approximately 2,855 IMAX theaters worldwide from the 1,409 commercial multiplex IMAX theaters in operation as at December 31, 2018. While the Company continues to grow in the United States and Canada, it believes that the majority of its future growth will come from international markets. As at December 31, 2018, 70.1% of IMAX theater systems in operation were located within international markets (defined as all countries other than the United States and Canada), up from 67.2% as at December 31, 2017, and approximately 86.2% of the new IMAX theater systems in backlog are scheduled to be installed in international markets, compared to 90.2% as at December 31, 2017. Revenues and gross box office derived from outside the United States and Canada continue to exceed revenues and gross box-office from the United States and Canada.

Greater China continues to be the Company's second-largest market, measured by revenues, with approximately 31% of overall revenues generated from the Company's China operations in 2018. As at December 31, 2018, the Company had 639 theaters operating in Greater China and an additional 272 new theaters in backlog that are scheduled to be installed in Greater China by 2022. The Company's backlog in Greater China represents 58.7% of the Company's current backlog for new IMAX theater systems. The Company's largest single international partnership is in China with Wanda Film, formerly Wanda Cinema Line Corporation ( Wanda ). Wanda's total commitment to the Company is for 359 theater systems, of which 344 theater systems are under the parties' joint revenue sharing arrangement.

The Company indirectly owns approximately 67.96% of IMAX China Holding, Inc. ( IMAX China ), whose shares trade on the Hong Kong Stock Exchange. IMAX China remains a consolidated subsidiary of the Company.

## **PRINCIPAL PRODUCTS AND SERVICES**

The Company believes it is the world's largest designer and manufacturer of specialty premium projection and sound system components for large-format theaters around the world, and it is also a significant producer and distributor of large-format films. The Company's theater systems include specialized IMAX projectors, advanced sound systems and specialty screens.

The Company's principal products and services are as follows:

**IMAX DMR:** The Digital Re-Mastering of films into the IMAX format for exhibition in the IMAX theater network.

**IMAX Theater Systems:** The provision of IMAX premium theater systems to exhibitor customers.

**New Business:** IMAX Home Entertainment, and other new business initiatives that are in the development, start-up and/or wind-up phases.

**Other:** The distribution of documentary films, the provision of film post-production, owning and operating certain IMAX theaters, camera rentals and other miscellaneous items.

These product lines do not reflect the nature and sources of revenue, or the manner in which management reviews financial information. The Company's segmented information is provided in Item 7 and note 19 to the accompanying audited consolidated financial statements in Item 8 of this Annual Report on Form 10-K for the Fiscal Year ended December 31, 2018 (this 2018 Form 10-K ), which is incorporated by reference into this Item I.

**Digital Re-Mastering (IMAX DMR)**

The Company has developed a proprietary technology, known as IMAX DMR, to digitally re-master Hollywood films into IMAX digital cinema package format or 15/70-format film for exhibition in IMAX theaters. IMAX DMR digitally enhances the image

resolution of motion picture films for projection on IMAX screens while maintaining or enhancing the visual clarity and sound quality to levels for which *The IMAX Experience* is known.

The IMAX DMR process involves the following:

in certain instances, scanning, at the highest possible resolution, each individual frame of the movie and converting it into a digital image;

optimizing the image using proprietary image enhancement tools;

enhancing the digital image using techniques such as sharpening, color correction, grain and noise removal and the elimination of unsteadiness and removal of unwanted artifacts;

recording the enhanced digital image into an IMAX digital cinema package ( DCP ) format or onto IMAX 15/70-format film; and

specially re-mastering the sound track to take full advantage of the unique sound system of IMAX theater systems.

The original soundtrack of a film to be exhibited in the IMAX theater network is re-mastered for the IMAX digital sound systems in connection with the IMAX DMR release. Unlike the soundtracks played in conventional theaters, IMAX re-mastered soundtracks are uncompressed and full fidelity. IMAX sound systems use proprietary loudspeaker systems and proprietary surround sound configurations that ensure every theater seat is in an optimal listening position.

IMAX films also benefit from enhancements made by individual filmmakers exclusively for the IMAX release, and filmmakers and studios have sought IMAX-specific enhancements in recent years to generate interest in and excitement for their films. Such enhancements include shooting select scenes with IMAX cameras to increase the audience's immersion in the film and taking advantage of the unique dimensions of the IMAX screen by projecting the film in a larger aspect ratio. For example, Marvel's *Avengers: Infinity War*, which was released in April 2018, was shot in its entirety using IMAX cameras, and *Avengers: Endgame*, scheduled for release in April 2019, was also filmed entirely with IMAX cameras. In addition, in July 2018, *Ant-Man and the Wasp* and *Mission: Impossible - Fallout* was released with select scenes specifically formatted for IMAX screens, and in March 2019, *Captain Marvel* will be released with select scenes specifically formatted for IMAX screens. In addition, for Disney's *The Lion King*, scheduled for release in July 2019, director Jon Favreau filmed select scenes with IMAX cameras.

In 2018, 70 films were converted through the IMAX DMR process and released to theaters in the IMAX network by film studios as compared to 60 films in 2017. In addition, in April 2018, the Company, in conjunction with Panda Productions released an IMAX original production, *Pandas*.

To date, the Company has announced the following 29 DMR titles to be released in 2019 to the IMAX theater network. The following dates noted for film release are subject to change and may vary by territory.

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*Free Solo: The IMAX Experience* (National Geographic, January 2019);

*How to Train Your Dragon: The Hidden World: The IMAX Experience* (Universal Pictures, January 2019, select international markets);

*Glass: The IMAX Experience* (Universal Pictures and Walt Disney Studios, January 2019);

*Crazy Alien: The IMAX Experience* (Enlight, February 2019, China only);

*The Wandering Earth: The IMAX Experience* (Beijing Culture, February 2019, China and select international markets);

*Pegasus: The IMAX Experience* (Maoyan, February 2019, China only);

*The Lego Movie 2: The Second Part: The IMAX Experience* (Warner Bros. Pictures, February 2019);

*Alita: Battle Angel: The IMAX Experience* (20<sup>th</sup> Century Fox, February 2019);

*Captain Marvel: The IMAX Experience* (Walt Disney Studios, March 2019);

*Dumbo: The IMAX Experience* (Walt Disney Studios, March 2019);

*Shazam!: The IMAX Experience* (Warner Bros. Pictures, April 2019);

*Hellboy: The IMAX Experience* (Lionsgate, April 2019);

*Disneynature Penguins : The IMAX Experience* (Walt Disney Studios, April 2019);

*The Curse of La Llorona: The IMAX Experience* (Warner Bros. Pictures, April 2019);

*Avengers: Endgame: The IMAX Experience* (Walt Disney Studios, April 2019);

*Godzilla: King of Monsters: The IMAX Experience* (Warner Bros. Pictures, May 2019);

*Aladdin: The IMAX Experience* (Walt Disney Studios, May 2019);

*Dark Phoenix: The IMAX Experience* (20<sup>th</sup> Century Fox, June 2019);

*Men in Black: International: The IMAX Experience* (Sony Pictures, June 2019);

*Toy Story 4: The IMAX Experience* (Walt Disney Studios, June 2019);

*Spider-Man: Far From Home: The IMAX Experience* (Sony Pictures, July 2019);

*Lion King: The IMAX Experience* (Walt Disney Studios, July 2019);

*The New Mutants: The IMAX Experience* (20<sup>th</sup> Century Fox, August 2019);

*Artemis Fowl: The IMAX Experience* (Walt Disney Studios, August 2019);

*IT: Chapter 2: The IMAX Experience* (Warner Bros. Pictures, September 2019);

*VIY 2: Mystery of the Dragon's Seal: The IMAX Experience* (Nashe Kino, September 2019, Russia and select international markets);

*Frozen 2: The IMAX Experience* (Walt Disney Studios, November 2019);

*Jumanji: Welcome to the Jungle Sequel: The IMAX Experience* (Sony Pictures, December 2019); and

*Star Wars: Episode IX: The IMAX Experience* (Walt Disney Studios, December 2019).

In addition, the Company will be releasing an IMAX original production, *Superpower Dogs*, in March 2019.

The Company remains in active negotiations with all of the major Hollywood studios for additional films to fill out its short and long-term film slate for the IMAX theater network in 2019.

## **IMAX Systems**

The Company's primary products are its theater systems. The Company's digital projection systems include a projector that offers superior image quality and stability and a digital theater control system; a digital audio system delivering up to 12,000 watts of sound; a screen with a proprietary coating technology, and, if applicable, 3D glasses cleaning equipment. IMAX's digital projection system also operates without the need for analog film prints. Traditional IMAX film-based theater systems contain the same components as the digital projection systems but include a rolling loop 15/70-format projector and require the use of analog film prints. Since its introduction in 2008, the vast majority of the Company's theater sales have been digital systems. Furthermore, a majority of the Company's existing film-based theater systems have been upgraded, at a cost to the exhibitor, to IMAX digital systems. As part of the arrangement to sell or lease its theater systems, the Company provides extensive advice on theater planning and design and supervision of installation services. Theater systems are also leased or sold with a license for the use of the globally recognized IMAX brand.

The Company's digital projection system provides a premium and differentiated experience to moviegoers that is consistent with what they have come to expect from the IMAX brand, while providing for the compelling economics and flexibility that digital technology affords.

The terms of each arrangement vary according to the configuration of the theater system provided, the cinema market and the film distribution market relevant to the geographic location of the customer.

Revenue from theater business arrangements is recognized at a different time from when cash is collected. See "Critical Accounting Policies and Estimates" in Item 7 and note 4 in Item 8 of this 2018 Form 10-K for further discussion on the Company's revenue recognition policies.

## IMAX Theater Backlog and Network

The Company's sales backlog is as follows:

	December 31, 2018		December 31, 2017	
	Number of Systems	Dollar Value (in thousands)	Number of Systems	Dollar Value (in thousands)
Sales and sales-type lease arrangements	177 <sup>(1)</sup>	\$ 229,027 <sup>(2)</sup>	162	\$ 205,001
Joint revenue sharing arrangements				
Hybrid arrangements	118	67,176	121	64,328
Traditional arrangements	269 <sup>(3)</sup>	8,100 <sup>(4)</sup>	216	11,942 <sup>(4)</sup>
	564 <sup>(5)</sup>	\$ 304,303	499 <sup>(6)</sup>	\$ 281,271

- (1) Includes 20 hybrid sales theater systems which were previously classified under joint revenue sharing arrangements – hybrid sales arrangements.
- (2) Includes a variable consideration estimate of \$16.4 million in accordance with ASC Topic 606. See Critical Accounting Policies and Estimates in Item 7 and note 4 in item 8 of this 2018 Form 10-K for further discussion of the adoption impact of ASC Topic 606 on the Company's revenues.
- (3) Includes 46 theater systems where the customer has the option to convert from a joint revenue sharing arrangement to a sales arrangement.
- (4) Reflects contractual upfront payments. Future contingent payments are not reflected as these are based on negotiated shares of box office results.
- (5) Includes 83 new laser projection system configurations (73 of the 83 new systems are IMAX with Laser projection system configurations) and 100 upgrades of existing locations to laser projection system configurations (98 of the 100 upgrades are for the IMAX with Laser projection system configurations).
- (6) Includes 27 new laser projection system configurations (three of the 27 new systems are IMAX with Laser projection system configurations) and five upgrades of existing locations to laser projection system configurations (three of the five upgrades are for the IMAX with Laser projection system configurations).

The number of theater systems in the backlog reflects the minimum number of commitments under signed contracts. The dollar value fluctuates depending on the number of new theater system arrangements signed from year to year, which adds to backlog and the installation and acceptance of theater systems and the settlement of contracts, both of which reduce backlog. Sales backlog typically represents the fixed contracted revenue under signed theater system sale and lease agreements that the Company believes will be recognized as revenue upon installation and acceptance of the associated theater, as well as a variable consideration estimate, however it excludes amounts allocated to maintenance and extended warranty revenues. The value of sales backlog does not include revenue from theaters in which the Company has an equity interest, operating leases or long-term conditional theater commitments. The value of theaters under joint revenue sharing arrangements is excluded from the dollar value of sales backlog, although certain theater systems under joint revenue sharing arrangements provide for contracted upfront payments and therefore carry a backlog value based on those payments. The Company believes that the contractual obligations for theater system installations that are listed in sales backlog are valid and binding commitments.

From time to time, in the normal course of its business, the Company will have customers who are unable to proceed with a theater system installation for a variety of reasons, including the inability to obtain certain consents, approvals or financing. Once the determination is made that the customer will not proceed with installation, the agreement with the customer is terminated or amended. If the agreement is terminated, once the Company and the customer are



released from all their future obligations under the agreement, all or a portion of the initial rents or fees that the customer previously made to the Company are recognized as revenue.

The following chart shows the number of the Company's theater systems by configuration, opened theater network and backlog as at December 31:

	2018		2017	
	Theater Network	Backlog	Theater Network	Backlog
Flat Screen (2D)	5		5	
Dome Screen (2D)	37		41	
IMAX 3D Dome (3D)	2		2	
IMAX 3D GT (3D)	12		14	
IMAX 3D SR (3D)	7		7	
IMAX Digital: Xenon (3D)	1,346	381	1,250	467
IMAX Digital: Laser (3D)	59	12 <sup>(1)</sup>	51	26 <sup>(3)</sup>
IMAX Digital: IMAX with Laser (3D)	37	171 <sup>(2)</sup>		6 <sup>(4)</sup>
<b>Total</b>	<b>1,505</b>	<b>564</b>	<b>1,370</b>	<b>499</b>

- (1) Backlog includes two upgrades to laser-based digital theater systems
- (2) Backlog includes 98 upgrades to IMAX with Laser digital theater systems
- (3) Backlog includes two upgrades to laser-based digital theater systems
- (4) Backlog includes three upgrades to IMAX with Laser digital theater systems

In 2018, the Company installed 149 IMAX theater systems in new locations. The Company estimates that it will install a similar number of new theater systems (excluding upgrades) in 2019. The Company cautions, however, that theater system installations may slip from period to period over the course of the Company's business, usually for reasons beyond its control.

IMAX theater systems consist of the following configurations:

#### *IMAX Digital: Xenon Theater Systems*

The vast majority of the Company's theater system signings have been for the Company's proprietary xenon-based digital systems. The Company believes that its xenon-based digital projection system delivers high quality imagery compared with other xenon systems. Although the Company has introduced a new laser-based digital projection solution, the Company does not believe this will decrease the number of xenon-based digital theater systems installed in the immediate future. As at December 31, 2018, the Company had installed 1,346 xenon-based digital theater systems and has an additional 381 xenon-based digital theater systems in its backlog.

#### *IMAX Digital: Laser Theater Systems*

At the end of 2014, the Company introduced its laser-based digital projection system. As a result of continued research and development aimed at creating a solution that is more affordable for its commercial multiplex partners, the Company rolled out IMAX with Laser in 2018, the Company's next-generation laser projection system designed for IMAX theaters in commercial multiplexes. The Company believes IMAX laser-based digital projectors present greater brightness and clarity, higher contrast, a wider color gamut and deeper blacks, consume less power and last longer than other digital projection technologies, and are capable of illuminating the largest screens in the IMAX theater network. As at December 31, 2018, the Company had installed 59 laser-based digital systems as compared to

51 as at December 31, 2017. As at December 31, 2018, the Company had installed 37 IMAX with Laser systems.

*IMAX Flat Screen and IMAX Dome Theater Systems*

IMAX flat screen and IMAX dome systems primarily have been installed in institutions such as museums and science centers. Flat screen IMAX theaters were introduced in 1970, while IMAX dome theaters, which are designed for tilted dome screens, were introduced in 1973. There have been several significant proprietary and patented enhancements to these systems since their introduction. As at December 31, 2018, there were 44 IMAX flat screen and IMAX dome theater systems in the IMAX network, as compared to 48 IMAX flat screen and IMAX dome theater systems as at December 31, 2017. With the introduction of the IMAX digital theater systems, there has been a decrease in the number of IMAX flat screen and IMAX dome theater systems in the network. With the introduction of laser-based digital systems, the Company has been able to create a new Laser Dome solution for its institutional customers. As at December 31, 2018, the Company had installed two IMAX with Laser Domes, which are included in the above numbers.

### *IMAX 3D GT and IMAX 3D SR Theater Systems*

IMAX 3D theaters utilize a flat screen 3D system, which produces realistic 3D images on an IMAX screen. As at December 31, 2018, there were 19 IMAX 3D GT and IMAX 3D SR theater systems in operation compared to 21 IMAX 3D GT and IMAX 3D SR theater systems in operation as at December 31, 2017. The decrease in the number of 3D GT and 3D SR theater systems is largely attributable to the conversion of existing 3D GT and 3D SR theater systems to IMAX digital theater systems.

### **New Business Initiatives**

In recent years, the Company has been exploring several new lines of business outside of its core business.

### *IMAX Home Entertainment Technologies and Services*

In September 2018, the Company announced a new home entertainment licensing and certification program called IMAX Enhanced. This initiative was launched along with audio leader DTS (an Xperi subsidiary), capitalizing on the companies' decades of combined expertise in image and sound science. The certification program combines high-end consumer electronics products with IMAX digitally re-mastered 4K high dynamic range (HDR) content and DTS audio technologies to offer consumers immersive sight and sound experiences for the home.

To be accepted into the program, leading consumer electronics manufacturers must design 4K HDR televisions, A/V receivers, sound systems and other home theater equipment to meet a carefully prescribed set of audio and video performance standards, set by a certification committee of IMAX and DTS engineers and some of Hollywood's leading technical specialists.

The program will digitally re-master content to produce more vibrant colors, greater contrast and sharper clarity, and will also deliver an IMAX signature sound experience.

IMAX Enhanced Program launch partners include Sony Electronics, Sony Pictures, Paramount Pictures, Sound United.

In 2013, the Company established a joint venture with TCL Multimedia Technology Holding Limited (TCL) to design, develop, manufacture and sell a premium home theater system. The Company does not intend to invest significant capital into the joint venture going forward, and instead expects any additional funding to be provided through third party capital.

### *Original Content*

The Company has created two film funds to help finance the production of original content. The Company formed the IMAX China Film Fund (the China Film Fund) with its subsidiary IMAX China, its partner CMC and several other large investors to help fund Mandarin language commercial films. The China Film Fund targets productions that can leverage the Company's brand, relationships, technology and release windows in China.

In addition, the Company's IMAX Original Film Fund (the Original Film Fund) was established in 2014 to co-finance a portfolio of 10 original large format films. The initial investment in the Film Fund was committed to by a third party in the amount of \$25.0 million, with the possibility of contributing additional funds. The Company has contributed \$9.0 million to the Original Film Fund since 2014, and has reached its maximum contribution. The Company sees the Original Film Fund as a vehicle designed to generate a continuous, steady flow of high-quality documentary content. As at December 31, 2018, the Original Film Fund has invested \$20.9 million toward the development of original films.

In 2017, the Company partnered with Marvel Television Inc. ( Marvel ) and Disney|ABC Television Group to co-produce and premiere theatrically the television series *Marvel's Inhumans* in IMAX theaters. The first two episodes of the series ran worldwide in IMAX theaters for two weeks in September 2017 and subsequently the series premiered on the ABC network in the U.S. and across other networks internationally.

The Company continues to believe that the IMAX network serves as a valuable platform to launch and distribute a broad variety of original content, especially during shoulder periods. However, the Company does not expect to make meaningful direct investments in original content going forward.

*Virtual Reality*