
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities
Exchange Act of 1934 (Amendment No. 1)*

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to Rule 14a-12

INTEGRITY APPLICATIONS, INC.

(Name of Registrant as Specified in Its Charter)

N/A

(Name of Person(s) Filing Proxy Statement, if Other than the Registrant)

Payment of Filing Fee (check the appropriate box):

- No fee required
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - 1) Title of each class of securities to which transaction applies:

 - 2) Aggregate number of securities to which transaction applies:

 - 3) Per unit price of other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

 - 4) Proposed maximum aggregate value of transaction:

 - 5) Total fee paid:

- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing:
 - 1) Amount Previously Paid:

 - 2) Form, Schedule or Registration Statement No.:

 - 3) Filing Party:

 - 4) Date Filed:

* *Explanatory Note: The purpose of this Amendment is to correct the security ownership table at page 8 of the Schedule 14A filed on March 1, 2018 (the "Schedule 14A"). This Amendment supersedes and replaces the Schedule 14A.*



INTEGRITY APPLICATIONS, INC.
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Ashdod, Israel L3 7760049
(972) (8) 675-7878

**NOTICE OF 2018 SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON MARCH 23, 2018**

To the Stockholders of Integrity Applications, Inc.:

The 2018 Special Meeting of Stockholders (the "Special Meeting") of Integrity Applications, Inc., a Delaware corporation (the "Company"), will be held on Tuesday, March 23, 2018 at 10:30 a.m., Eastern Standard Time, at Hyatt Regency Morristown, 3 Speedwell Ave, Morristown, New Jersey 07960, USA, for the following purposes:

1. to approve and ratify the increase of the total number of shares authorized for issuance under the Company's 2010 Incentive Compensation Plan ("Incentive Plan") to 7,000,000 shares, including an amendment to the Incentive Plan on April 7, 2017 to increase from 1,000,000 shares to 5,625,000 shares and another amendment on February 15, 2018 to increase from 5,625,000 shares to 7,000,000 shares; and
2. to transact such other business as may properly be brought before the Special Meeting, and at any adjournments or postponements of the Special Meeting.

Holders of record of the Company's Common Stock, Series A 5% Convertible Preferred Stock, Series B 5.5% Convertible Preferred Stock and Series C 5.5% Convertible Preferred Stock at the close of business on February 16, 2018 (the "Record Date") are entitled to notice of and to vote at the Special Meeting and at any adjournments or postponements of the Special Meeting. In the event that there are insufficient shares present in person or represented by proxy at the Special Meeting in order to obtain a quorum, the Special Meeting may be adjourned or postponed in order to permit further solicitation of proxies.

Stockholders as of the Record Date may attend the meeting in person or telephonically by dialing in:

Israel Dial in number : +972-3-9180699; or USA Dial in number : +1-866-297-0242 or +1-868-545-1212

Participants access number: 14550#

ALL STOCKHOLDERS AS OF FEBRUARY 16, 2018 ARE CORDIALLY INVITED TO ATTEND THE MEETING IN PERSON. HOWEVER, EVEN IF YOU PLAN TO ATTEND THE MEETING, PLEASE VOTE YOUR SHARES OVER THE INTERNET, BY TELEPHONE OR BY MAIL FOLLOWING THE INSTRUCTIONS ON THE PROXY CARD SO THAT YOUR SHARES WILL BE REPRESENTED WHETHER OR NOT YOU ARE ABLE TO ATTEND THE MEETING. THE PROMPT RETURN OF PROXIES WILL SAVE US THE EXPENSE OF FURTHER REQUESTS FOR PROXIES TO ENSURE A QUORUM AT THE MEETING. VOTING OVER THE INTERNET, BY TELEPHONE OR BY MAILING A PROXY CARD WILL NOT LIMIT YOUR RIGHT TO ATTEND THE SPECIAL MEETING AND VOTE YOUR SHARES IN PERSON.

By Order of the Board of Directors,

John Graham, Chief Executive Officer

March 2, 2018



PROXY STATEMENT

FOR THE 2018 SPECIAL MEETING OF STOCKHOLDERS TO BE HELD ON MARCH 23, 2018

QUESTIONS AND ANSWERS ABOUT THE SPECIAL MEETING

Why did I receive this proxy?

The Board of Directors of Integrity Applications, Inc. ("Integrity") is furnishing this proxy statement to solicit proxies on its behalf to be voted at the 2018 Special Meeting of Stockholders of Integrity (the "Special Meeting") or at any adjournment or postponement thereof. The Special Meeting is scheduled to be held on Friday, March 23, 2018 at 10:30 a.m., Eastern Standard Time, at Hyatt Regency Morristown, 3 Speedwell Ave, Morristown, New Jersey 07960, USA. The information you need to know to vote by proxy or in person at the Special Meeting is included in this Proxy Statement and the documents referred to or incorporated by reference in this Proxy Statement. You do not need to attend the Special Meeting in person in order to vote.

When is this proxy statement first being sent or given to security holders?

We will begin mailing this Proxy Statement on or about March 6, 2018 to holders of record of Integrity's common stock, par value \$0.001 per share (the "Common Stock"), Series A 5% Convertible Preferred Stock, par value \$0.001 per share (the "Series A Preferred Stock"), Series B 5.5% Convertible Preferred Stock, par value \$0.001 per share (the "Series B Preferred Stock"), and Series C 5.5% Convertible Preferred Stock, par value \$0.001 per share (the "Series C Preferred Stock," and together with the Series A Preferred Stock and Series B Preferred Stock, the "Preferred Stock") at the close of business on February 16, 2018.

Who is entitled to vote at the Special Meeting?

Holders of record of Integrity's Common Stock and/or Preferred Stock (collectively, the "Voting Stock") at the close of business on February 16, 2018, the record date for the Special Meeting, are entitled to notice of and to vote at the Special Meeting or any adjournment or postponement of the Special Meeting. On the record date, there were issued and outstanding: (1) 6,905,424 shares of Common Stock; (2) 376 shares of Series A Preferred Stock; (3) 15,031.130 shares of Series B Preferred Stock; and (4) 12,003.80 shares of Series C Preferred Stock. As of the date of this Proxy Statement, shares of Series A Preferred Stock convertible into an aggregate of 83,556 shares of Common Stock, shares of Series B Preferred Stock convertible into an aggregate of 3,340,251 shares of Common Stock and shares of Series C Preferred Stock convertible into an aggregate of 2,667,511 shares of Common Stock are entitled to vote at the Special Meeting.

What is the quorum for the meeting?

The presence, in person or by proxy, of a majority of the outstanding shares of Voting Stock entitled to vote at the Special Meeting is necessary to constitute a quorum at the Special Meeting. Abstentions and broker non-votes (described below) will be counted as present for purposes of determining the presence of a quorum at the meeting but will not be counted as present for any other purpose. No business may be conducted at the Special Meeting if a quorum is not present. If less than a majority of outstanding shares of Voting Stock entitled to vote are represented at the Special Meeting, a majority of the shares so represented may adjourn the Special Meeting to another date, time or place. Notice need not be given of the new date, time or place if announced at the meeting before an adjournment is taken, unless a new record date is fixed for the Special Meeting (in which case a notice of the adjourned meeting will be given to each stockholder of record entitled to vote at the meeting).

How many votes do I have?

Each share of Common Stock entitles its owner to one vote on all matters brought before the Special Meeting. Each share of Preferred Stock entitles its owner to one vote for each share of Common Stock into which such share of Preferred Stock is convertible. As of the record date, each issued and outstanding share of Preferred Stock was convertible into approximately 222.22 shares of Common Stock.

How do stockholders of record vote?

If you are a record holder, which means your shares are registered in your name, you may vote or submit a proxy:

1. *Over the Internet* — If you have Internet access, you may authorize the voting of your shares by following the internet voting instructions set forth in the proxy card. You must specify how you want your shares voted, or your vote will not be registered and you will receive an error message. Your shares will be voted according to your instructions.
2. *By Telephone* — You may authorize the voting of your shares by following the telephone voting instructions set forth in the proxy card. You must specify how you want your shares voted, or your vote will not be registered and you will receive an error message. Your shares will be voted according to your instructions.
3. *By Mail* — You may mail the proxy card using the postage prepaid envelope provided. Your shares will be voted according to your instructions. If you sign your proxy card but do not specify how you want your shares voted, they will be voted in accordance with the recommendations of the Board. Unsigned proxy cards will not be voted.
4. *In Person at the Meeting* — If you attend the Special Meeting, you may deliver a completed and signed proxy card in person or you may vote by completing a ballot, which Integrity will provide to you at the Special Meeting. To vote in person, you will need to bring proof of identity to be allowed entry into the meeting.

How do I vote my shares in person if they are held by my broker?

If you hold your shares of Voting Stock through a broker, bank or other financial institution, you are considered the beneficial owner of shares held in “street name,” and you will receive instructions on how to vote from your broker, bank or other institution. If you hold shares of Voting Stock in street name and wish to vote in person at the meeting, you must present a recent proxy validating your ownership of the shares of Voting Stock that you intend to vote from your bank, broker or other nominee that held your shares of Voting Stock as of the record date. You will also need proof of identity for entrance to the meeting.

What am I voting on?

At the Special Meeting, Integrity's stockholders will be asked:

1. to approve and ratify the increase of the total number of shares authorized for issuance under the Company's 2010 Incentive Compensation Plan (“Incentive Plan”) to 7,000,000 shares, including an amendment to the Incentive Plan on April 7, 2017 to increase from 1,000,000 shares to 5,625,000 shares and another amendment on February 15, 2018 to increase from 5,625,000 shares to 7,000,000 shares; and
2. to transact such other business as may properly be brought before the Special Meeting, and at any adjournments or postponements of the Special Meeting.

What vote is required for the proposals?

Proposal 1 - Increase of the total number of shares authorized for issuance under the Incentive Plan

If a quorum is present, the approval and ratification of the increase of the total number of shares authorized for issuance under the Incentive Plan to 7,000,000 shares will require the affirmative vote of a majority of the shares of Voting Stock present in person or represented by proxy at the Special Meeting.

How are abstentions and broker “non-votes” treated?

Abstentions

Pursuant to Delaware law, abstentions are counted as present for purposes of determining the number of shares of Voting Stock present in person or represented by proxy and entitled to vote at the Special Meeting. As a result, abstentions will have the same effect as a vote AGAINST Proposal 1 - the approval and ratification of the increase of the total number of shares authorized for issuance under the Incentive Plan to 7,000,000 shares.

Broker “non-votes”

Broker non-votes occur when a beneficial owner of shares held in street name does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed “non-routine.” Generally, if shares are held in street name, the beneficial owner of the shares is entitled to give voting instructions to the broker or nominee holding the shares. If the beneficial owner does not provide voting instructions, the broker or nominee can still vote the shares with respect to matters that are considered to be “routine,” but may not vote those shares with respect to “non-routine” matters.

Pursuant to Delaware law, broker non-votes will be counted as present for purposes of determining the presence of a quorum at the meeting but will not be counted as present for any other purpose.

Proposal No. 1 (the approval and ratification of the increase of the total number of shares authorized for issuance under the Incentive Plan to 7,000,000 shares) is considered a “non-routine” matter. As a result, a broker or nominee will not be able to vote your shares with respect to Proposal No. 1 absent your voting instructions. For this reason, **we urge you to give voting instructions to your broker.** If any “routine” matters are properly brought before the Special Meeting, then brokers and nominees holding shares in street name will be permitted to vote those shares in their discretion for any such routine matters.

Will there be any other items of business on the agenda?

The Board of Directors does not know of any other matters that may be brought before the Special Meeting nor does it foresee or have reason to believe that any other matters will be brought before the Special Meeting. In the event that any other matter should come before the Special Meeting, the persons named in the proxy that is submitted via the Internet or mail will have discretionary authority to vote all proxies unless otherwise specified to the contrary with respect to such matters in accordance with the recommendation of the Board of Directors.

What happens if I submit or return my proxy card without voting?

If you properly submit your proxy via the Internet or mail, the shares it represents will be voted at the Special Meeting in accordance with your directions. If you properly submit your proxy with no direction, the proxy will be voted “FOR”:

- the approval and ratification of the increase of the total number of shares authorized for issuance under the Incentive Plan to 7,000,000 shares, including an amendment to the Incentive Plan on April 7, 2017 to increase from 1,000,000 shares to 5,625,000 shares and another amendment on February 15, 2018 to increase from 5,625,000 shares to 7,000,000 shares; and
- such other business as may properly be brought before the Special Meeting, and at any adjournments or postponements of the Special Meeting.

Can I change my vote after I have voted?

If you have submitted a proxy pursuant to this solicitation, you may revoke such proxy at any time prior to its exercise by:

- written notice delivered to Integrity’s Chief Financial Officer at Integrity Applications, Inc., 19 Ha’Yahalomim St., P.O. Box 12163, Ashdod, Israel L3 7760049;
- executing and delivering a proxy with a later date;

- submitting an Internet or telephone vote with a later date; or
- attending the Special Meeting and voting in person.

With respect to Internet and telephone votes, the last vote transmitted will be the vote counted. Attendance at the Special Meeting will not, in itself, constitute revocation of a proxy.

If you are the beneficial owner of shares held in street name, you must submit new voting instructions to your stockbroker, bank or other nominee pursuant to the instructions you have received from them.

Will anyone contact me regarding this vote?

No arrangements or contracts have been made with any proxy solicitors as of the date of this proxy statement. However, Integrity may retain a proxy solicitor if it appears reasonably likely that it may not obtain a quorum to conduct the Special Meeting. In addition, Integrity's directors, officers and employees may solicit proxies in person and by telephone or facsimile; however, these persons will not receive any additional compensation for any such solicitation efforts.

Brokerage firms, nominees, custodians and fiduciaries also may be requested to forward proxy materials to the beneficial owners of shares held as of the record date by them.

Who has paid for this proxy solicitation?

All expenses incurred in connection with the solicitation of proxies, including the printing and mailing of this Proxy Statement, will be borne by Integrity.

How do I obtain a list of Integrity's stockholders?

A list of Integrity's stockholders as of February 16, 2018, the record date for the Special Meeting, will be available for inspection at Integrity's corporate headquarters, located at 19 Ha'Yahalomim St., P.O. Box 12163, Ashdod, Israel L3 7760049, during normal business hours during the 10-day period immediately prior to the Special Meeting.

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**PROPOSAL NO. 1: INCREASE OF THE TOTAL NUMBER OF SHARES AUTHORIZED FOR ISSUANCE
UNDER THE INCENTIVE PLAN**

BACKGROUND

The Company's Incentive Plan was adopted by the Board of Directors of the Company on September 8, 2015, and approved by the shareholders of the Company at an annual meeting of the Company's shareholders on the same date. 529,555 shares of common stock of the Company were initially available for awards under the Incentive Plan. On March 17, 2016, the Board of Directors approved an amendment to the Incentive Plan to increase the number of shares of Common stock reserved for issuance under the Incentive Plan from 529,555 shares to 1,000,000 shares (the "First Amendment"). On April 7, 2017, the Board of Directors approved an amendment to the Plan to further increase the number of shares of common stock reserved for issuance under the Incentive Plan from 1,000,000 shares to 5,625,000 shares (the "Second Amendment"). On February 15, 2018, the Board of Directors approved another amendment to the Plan to further increase the number of shares of common stock reserved for issuance under the Incentive Plan from 5,625,000 shares to 7,000,000 shares (the "Third Amendment").

The purposes of the Incentive Plan are to attract, motivate, retain and reward high-quality executives, officers, directors, consultants, employees and other persons who provide services to the Company or its related entities by enabling such persons to acquire or increase a proprietary interest in the Company and providing such persons with performance incentive to expand their maximum efforts in the creation of shareholder value. Prior to the Third Amendment, the number of shares available for issuance under future awards under the Incentive Plan was less than 500,000 shares. The Board of Directors of the Company did not believe that the number of shares available for issuance under the Incentive Plan was sufficient in light of the purposes of the Incentive Plan.

The amendments to the Incentive Plan are intended to ensure that the Company can continue to provide an incentive to its officers, directors, employees, and consultants by enabling them to share in the Company's future growth. The First Amendment to the Incentive Plan adopted by the Board of Directors on March 17, 2016 was not approved by shareholders within 12 months; therefore, any issuances of shares in connection with the First Amendment, if any, will be deemed invalid. We are seeking the approval and ratification from shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan to 7,000,000 shares, which includes the Second Amendment on April 7, 2017 and the Third Amendment on February 15, 2018. If approved by the shareholders, all of the additional shares under the Second Amendment and the Third Amendment will be available for grant as incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), or as nonqualified stock options, restricted stock awards, stock appreciation rights, or other kinds of equity based compensation available under the Incentive Plan. If the shareholders do not approve the amendments, no shares will be added to the number of shares available for issuance under the Incentive Plan and any issuances in excess of the 529,555 shares of common stock initially reserved under the Incentive Plan will be deemed invalid.

SUMMARY OF THE 2010 INCENTIVE COMPENSATION PLAN

The following description of the principal terms of the Incentive Plan is a summary and is qualified in its entirety by the full text of the Incentive Plan, which was attached as Exhibit 10.1 to the Registration Statement on Form S-1 filed on August 22, 2011.

Administration. The Compensation Committee has been designated by the Board of Directors as the committee (the "Committee") to administer the Incentive Plan; however, if the Board of Directors does not designate a committee or if there are no longer any members on the committee so designated by the Board of Directors, the Board of directors shall serve as the Committee. The Committee shall consist of at least two directors, each of whom shall be a "non-employee director", an "outside director", and "independent director". The Committee has full and final authority, subject to the provisions of the Incentive Plan, to select eligible persons to become participants under the Incentive Plan, grant awards, determine the type, number and other terms and conditions, and all other matters relating to the awards, prescribe award agreements and rules and regulations of the administration of the Incentive Plan, and make all other decisions and determinations as the Committee may deem necessary or advisable for the administration of the Incentive Plan.

Eligibility. Persons eligible to receive awards under the Incentive Plan are officers, directors, employees, consultants and other persons who provide services to the company or any of its related entity.

Term of Awards. In no event shall the term of any award made under the Incentive Plan exceed a period of ten years.

Shares Subject to the Incentive Plan. As amended, the aggregate number of shares of common stock available for issuance under the Incentive Plan is 7,000,000. If any awards are forfeited, expire or otherwise terminate without issuance of such shares, or any award is settled for cash or otherwise does not result in the issuance of all or a portion of the shares subject to such award, the shares to which those awards were subject shall, to the extent of such forfeiture, expiration, termination, cash settlement or non-issuance, again be available for delivery with respect to awards under the Incentive Plan.

Form of Awards:

(a) **Options.** Options granted under the Incentive Plan could be “incentive stock options” that are intended to meet all the requirements of Section 422 of the Internal Revenue Code of 1986, as amended (the “Code”). The Board of Directors will determine the exercise price of options granted under the Incentive Plan. The exercise price of stock options may not be less than the fair market value, on the date of grant, per share of our common stock issuable upon exercise of the option (or 110% of fair market value in the case of incentive options granted to a ten-percent stockholder), and shall not, in any event, be less than the par value of a share of common stock of the Company.

The Committee shall determine the time or times at which or the circumstances under which an option may be exercised in whole or in part, the time or times at which options shall cease to be or become exercisable following termination of service of the participant or upon other conditions, the methods by which the exercise price may be paid or deemed to be paid (including a cashless exercise procedure), the form of such payment, and the methods by or forms in which shares will be delivered or deemed to be delivered to participants.

The incentive stock options granted under the Incentive Plan shall not be exercisable for more than ten years after the date such incentive stock options are granted; provided, however, that if a participant is a ten-percent stockholder, the term of the incentive stock options shall not be more than five years from the date of grant.

The aggregate fair market value of the shares with respect to which incentive stock options granted under the Incentive Plan and all other option plans of the Company that become exercisable for the first time by a participant during any calendar year shall not exceed \$100,000.

(b) **Stock Appreciation Rights.** The Committee may grant stock appreciation rights independent of or in connection with an option. A stock appreciation right shall confer on a participant to whom it is granted a right to receive, upon exercise thereof, the excess of (a) the fair market value of one share on the date of exercise over (b) the grant price of the stock appreciation right as determined by the Committee. The grant price of a stock appreciation right shall not be less than the fair market value of a share on the date of grant, in the case of a freestanding stock appreciation right, or less than the associated option exercise price, in the case of a tandem stock appreciation right.

The Committee shall determine the time or times at which or the circumstances under which a stock appreciation right may be exercised in whole or in part, the time or times at which a stock appreciation right shall cease to be or become exercisable following termination of service of the participant or upon other conditions, the method of exercise, method of settlement, form of consideration payable in settlement, the methods by or forms in which shares will be delivered or deemed to be delivered to participants, whether or not a stock appreciation right shall be in tandem or in combination with any other award, and any other terms and conditions of any stock appreciation right.

(c) **Restricted Stock Awards.** The Committee is authorized to grant restricted stock awards to participants under the Incentive Plan. Restricted stock awards shall be subject to such restrictions on transferability, risk of forfeiture and other restrictions as the Committee may impose. Except to the extent restricted under the terms of the Incentive Plan and any award agreement relating to a restricted stock award, a participant granted restricted stock shall have all the rights of a shareholder, including the right to vote the restricted stock and the right to receive dividends thereon. During the period that a restricted stock award is subject to a risk of forfeiture, the restricted stock may not be sold, transferred, pledged, hypothecated, margined or otherwise encumbered by the participant.

Upon termination of a participant’s service to the Company during the applicable restriction period, the participant’s restricted stock that is at that time subject to a risk of forfeiture that has not lapsed or otherwise been satisfied shall be forfeited and reacquired by the Company; provided, that, the Committee may provide, by the rule or regulation or in any award agreement, or may determine in any individual case, that forfeiture conditions relating to restricted stock awards shall be waived in whole or in part.

(d) **Deferred Stock Awards.** The Committee is authorized to grant deferred stock awards to participants under the Incentive Plan. Satisfaction of a deferred stock award shall occur upon expiration of the deferral period specified for such deferred stock award by the Committee. A deferred stock award shall be subject to such restrictions (which may include a

risk of forfeiture) as the Committee may impose, if any, which restrictions may lapse at the expiration of the deferral period or at earlier specified times, separately or in combination, in installments or otherwise, as the Committee may determine. A deferred stock award may be satisfied by delivery of shares, cash equal to the fair market value of the specified number of shares covered by the deferred stock, or a combination thereof, as determined by the Committee. Prior to satisfaction of a deferred stock award, a deferred stock award carries no voting or dividend or other rights associated with share ownership.

Upon termination of a participant's service to the Company during the applicable deferred period, the participant's deferred stock award that is at that time subject to a risk of forfeiture that has not lapsed or otherwise been satisfied shall be forfeited; provided, that, the Committee may provide, by the rule or regulation or in any award agreement, or may determine in any individual case, that forfeiture conditions relating to deferred stock award shall be waived in whole or in part.

(e) Bonus Stock and Awards in Lieu of Obligations. The Committee is authorized to grant shares to participants as a bonus, or to grant shares or other awards in lieu of obligations to pay cash or deliver other property under the Incentive Plan or other plans or compensatory arrangements of the Company; provided that, in the case of participants subject to Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the amount of such grants remains within the discretion of the Committee to the extent necessary to ensure the acquisition of the shares or other awards under the Incentive Plan are exempt from liability under Section 16(b) of the Exchange Act.

(f) Dividend Equivalents. The Committee is authorized to grant dividend equivalents in connection with another award granted to any participant entitling the participant to receive cash, shares, other awards, or other property equal in value to the dividends paid with respect to a specified number of shares, or other periodic payments. Dividend equivalents may be awarded on a free-standing basis or in connection with another award.

(g) Performance Awards. The Committee is authorized to grant performance awards to any participant payable in cash, shares, or other awards, on terms and conditions established by the Committee. The performance criteria to be achieved during any performance period and the length of the performance period shall be determined by the Committee upon the grant of each performance award; provided, however, that a performance period shall not be shorter than twelve months nor longer than five years. The performance goals to be achieved for each performance period, the amount of the award and the procedures of payment shall be conclusively determined by the Committee.

(h) Other Stock-Based Awards. The Committee is authorized, subject to limitations under applicable law, to grant to any participant such other awards that may be denominated or payable in, value in whole or in part by reference to, or otherwise based on, or related to, shares, as deemed by the Committee to be consistent with the purposes of the Incentive Plan.

Amendment, Termination. The Board of Directors may amend, alter, suspend, discontinue or terminate the Incentive Plan, or the Committee's authority to grant awards under the Incentive Plan, without the consent of shareholders or participants under the Incentive Plan, except that any amendment or alternation to the Incentive Plan shall be subject to the approval of the shareholders of the Company within twelve months.

Tax Withholding. The Company and related entities are authorize to withhold from any award granted, any payment relating to an award under the Incentive Plan, including from a distribution of shares, or any payroll or other payment to a participant, amounts of withholding and other taxes due or potentially payable in connection with any transaction involving an award, and to take such other action as the Committee may deem advisable to enable the Company or any related entity and participants to satisfy obligations for the payment of withholding taxes and other tax obligations relating to any award.

APPROVAL REQUIRED

The amendments to the Incentive Plan to increase the total number of shares authorized for issuance thereunder are subject to approval by shareholders at the Special Meeting by majority consent. The Board of Directors believes that the approval of the amendments to the Incentive Plan is in the best interests of the Company and recommends that shareholders vote in favor of the amendments.

The Board of Directors recommends that you vote "FOR" the approval and ratification of the increase of the total number of shares authorized for issuance under the Incentive Plan to 7,000,000 shares.

**SECURITY OWNERSHIP OF
CERTAIN BENEFICIAL OWNERS, DIRECTORS AND EXECUTIVE OFFICERS**

The following table sets forth information known to us regarding the beneficial ownership of shares of our Common Stock and Preferred Stock as of February 16, 2018 (Record Date) by: (i) each person known by us to be the beneficial owner of more than 5% of the outstanding shares of Common Stock and/or Preferred Stock; (ii) each of our executive officer and director; and (iii) all executive officers and directors as a group. In accordance with the rules and regulations of the SEC, in computing the number of shares of Common Stock or Preferred Stock (as applicable) beneficially owned by a person and the percentage ownership of that person, shares issuable through the exercise of any option, warrant or right, through conversion of any security held by that person that are currently exercisable or that are exercisable within 60 days are included. These shares are not, however, deemed outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, we believe that all persons named in the table below have sole voting and investment power with respect to all securities that they beneficially own (within the meaning of Rule 13d-3 of the Exchange Act). Holders of shares of our Preferred Stock are entitled to vote such shares on an as converted to Common Stock basis; the Preferred Stock does not entitle the holders thereof to separate voting rights.

Name of Beneficial Owner	Class of Security	Number of Shares Beneficially owned	Percent of Class (1)
John Graham (2)	Common Stock	2,231,217	17.17%
Dr. Robert Fischell (3)	Common Stock	76,285	0.59%
Angela Strand (4)	Common Stock	50,961	0.39%
Leslie Seff (5)	Common Stock	36,516	0.28%
Revan Schwartz (6)	Common Stock	25,405	0.20%
Michael Hauck (7)	Common Stock	6,516	0.05%
David Malka (8)	Common Stock	323,754	2.49%
Sami Sassoun (9)	Common Stock	56,957	0.44%
Eugene Naidis (10)	Common Stock	81,824	0.63%
David Podwalski (11)	Common Stock	84,754	0.65%
All Executive Officers and Directors as a group (10 persons)	Common Stock	2,974,189	22.88%
<i>Principal Stockholders</i>			
Y.H Dimri Holdings (12)	Common Stock	1,160,650	8.93%
Vayikra Capital LLC (13)	Common Stock, Series B Preferred Stock and Series C Preferred Stock	868,026	6.68%

(1) Subject to a 9.99% beneficial ownership limitation applicable to all holders of the Preferred Stock, holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock will vote together with the holders of Common Stock on an as-converted basis. Accordingly, the percentages are based on an aggregate of 12,996,743 shares, consisting of 6,905,424 shares of Common Stock, 83,556 shares of Common Stock as fully converted from 376 shares of Series A Preferred Stock, 3,340,252 shares of common stock as fully converted from 15,031 shares of Series B Preferred Stock and 2,667,511 shares of Common Stock as fully converted from 12,004 shares of Series C Preferred Stock, each outstanding as of February 16, 2017.

(2) Of the options to purchase an aggregate of 3,077,540 shares of Common Stock granted to Mr. Graham under the Incentive Plan, which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, 2,231,217 options will be deemed vested as of April 18, 2018. Pursuant to an employment agreement dated March 20, 2017, amended on April 7, 2017, the Company issued to Mr. Graham upon his appointment as Chief Executive Officer of the Company (i) a ten-year non-qualified stock option for the purchase of 559,414 shares of Common Stock at an exercise price of \$5.41 per share, vesting in full on March 20, 2019; (ii) a ten-year non-qualified stock option for the purchase of 844,130 shares of Common Stock at an

exercise price of \$7.75 per share, vesting in full on March 20, 2019; (iii) an option to purchase 307,754 shares of Common Stock at an exercise price of \$4.50 per share, vested on April 7, 2017; (iv) an option to purchase 923,262 shares of Common Stock at an exercise price of \$4.50 per share, vest on September 20, 2017; and (v) an option to purchase 442,980 shares of Common Stock at an exercise price of \$4.50 per share, vest on March 20, 2019.

(3) Of the options to purchase an aggregate of 41,560 shares of Common Stock granted to Mr. Fischell under the Incentive Plan, 14,894 of which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, 33,182 options will be deemed vested as of April 18, 2018. In addition to vested options, this number also includes 43,103 shares of Common Stock owned by Mr. Fischell.

(4) Of the options to purchase an aggregate of 41,560 shares of Common Stock granted to Ms. Strand under the Incentive Plan, 14,894 of which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, of which 33,182 options will be deemed vested as of April 18, 2018. In addition to vested options, this number also includes 17,779 shares of Common Stock owned by Ms. Strand.

(5) Of the options to purchase an aggregate of 41,560 shares of Common Stock granted to Mr. Seff under the Incentive Plan, 14,894 of which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, of which 33,182 options will be deemed vested as of April 18, 2018. In addition to vested options, this number also includes 3,334 shares of Common Stock owned by Mr. Seff.

(6) Of the options to purchase an aggregate of 41,560 shares of Common Stock granted to Mr. Schwartz under the Incentive Plan, 14,894 of which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, of which 25,405 options will be deemed vested as of April 18, 2018.

(7) Of the options to purchase an aggregate of 14,894 shares of Common Stock granted to Mr. Hauck under the Incentive Plan, 14,894 of which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, of which 6,516 options will be deemed vested as of April 18, 2018.

(8) Of the options to purchase an aggregate of 441,309 shares of Common Stock granted to Mr. Malka under the Incentive Plan, 388,353 of which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, of which 200,059 options will be deemed vested as of April 18, 2018. In addition to vested options, this number also includes 123,695 shares of Common Stock owned by Mr. Malka.

(9) Of the options to purchase an aggregate of 292,924 shares of Common Stock granted to Mr. Sassoun under the Incentive Plan, which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, of which 56,957 options will be deemed vested as of April 18, 2018.

(10) Of the options to purchase an aggregate of 292,924 shares of Common Stock granted to Mr. Naidis under the Incentive Plan, which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, of which 56,957 options will be deemed vested as of April 18, 2018. In addition to vested options, this number also includes 24,867 shares of Common Stock owned by Mr. Naidis.

(11) Of the options to purchase an aggregate of 290,585 shares of Common Stock granted to Mr. Podwalski under the Incentive Plan, which are subject to the approval and ratification by shareholders of the increase of the total number of shares authorized for issuance under the Incentive Plan in the Special Meeting, of which 84,754 options will be deemed vested as of April 18, 2018.

(12) The address of Y.H. Dimri Holdings is 1 Jerusalem St. Netivot, 87710 Israel. Y.H. Dimri is entitled to these subject to the fulfillment of certain requirements. Yigal Dimri has voting and investment control over the shares held by Y.H. Dimri Holdings.

(13) Includes the following: (i) 440,248 shares of Common Stock; (ii) 138,889 shares of Common Stock issuable upon the conversion of shares of Series B Preferred Stock; and (iii) 288,889 shares of Common Stock issuable upon the conversion of shares of Series C Preferred Stock. The percentage of ownership is calculated based on the number of shares of Common Stock as converted. This number does not include Series B-1 and Series B-2 Warrants owned by Vayikra Capital, LLC, the conversion of which is limited by a beneficial ownership limitation that Vayikra Capital, LLC will not be permitted to exercise such warrants if such conversion would cause such holder to beneficially own more than 9.99% of the outstanding number of shares of our Common Stock outstanding after giving effect to such conversion. The address of Vayikra Capital, LLC is 1 Farmstead Road, Short Hills NJ, 07078. Philip M. Darivoff has voting and investment control over the shares held by Vayikra Capital, LLC.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) requires our officers and directors, and persons who own more than 10% of a registered class of our equity securities to file reports of ownership and changes of ownership with the SEC. Our officers, directors and 10% shareholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms so filed.

Based solely on a review of copies of such forms received and written representation letters from our executive officers and directors, we believe that, during the last fiscal year, all executive officers and directors complied with the Section 16(a) reporting requirements except the following:

Name of Reporting Person	Form Type	Date of Filing
Michael Hauck	Form 4	6/9/2017
Michael Hauck	Form 3	6/8/2017
Angela Strand	Form 4	6/7/2017
Robert Fischell	Form 4	6/7/2017
Leslie Seff	Form 4	6/6/2017
Revan Schwartz	Form 4	6/6/2017
Philip Darivoff	Form 4	3/14/2017
Sami Sassoun	Form 3	2/9/2017
Philip Darivoff	Form 4	1/13/2017

WHERE YOU CAN FIND MORE INFORMATION

The SEC maintains a website that contains reports, proxies and information statements and other information regarding the Company and other issuers that file electronically with the SEC at www.sec.gov. The Company’s proxy statements, Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as any amendments to those reports, are available free of charge through the SEC’s website. Shareholders may also read and copy materials that the Company files with the SEC at the SEC’s Public Reference Room at 100 F Street, NE, Washington, DC 20549. Shareholders may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

Copies of the Company’s reports filed with the SEC are also available at www.integrity-app.com.

INCORPORATION BY REFERENCE

The SEC allows the Company to “incorporate by reference” into this Proxy Statement documents it files with the SEC. This means that the Company can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this Proxy Statement, and later information that the Company filed with the SEC as specified below will update and supersede that information. Except to the extent that information is deemed furnished and not filed pursuant to securities laws and regulations, the Company incorporates by reference the following filing:

- Annual Report on Form 10-K for year ended December 31, 2016, filed with the SEC on March 31, 2017;
- Current Report on Form 8-K, filed with the SEC on April 13, 2017;
- Current Report on Form 8-K, filed with the SEC on May 3, 2017;
- Current Report on Form 8-K, filed with the SEC on May 10, 2017;
- Quarterly Report on Form 10-Q for quarter ended March 31, 2017, filed with the SEC on May 15, 2017;
- Current Report on Form 8-K, filed with the SEC on May 30, 2017;

- Current Report on Form 8-K, filed with the SEC on June 8, 2017;
- Current Report on Form 8-K, filed with the SEC on June 23, 2017;
- Amendment to Current Report on Form 8-K, filed with the SEC on June 28, 2017;
- Current Report on Form 8-K, filed with the SEC on August 2, 2017;
- Quarterly Report on Form 10-Q for quarter ended June 30, 2017, filed with the SEC on August 14, 2017;
- Current Report on Form 8-K, filed with the SEC on October 5, 2017;
- Current Report on Form 8-K, filed with the SEC on October 23, 2017;
- Current Report on Form 8-K, filed with the SEC on November 1, 2017;
- Current Report on Form 8-K, filed with the SEC on November 3, 2017;
- Quarterly Report on Form 10-Q for quarter ended September 30, 2017, filed with the SEC on November 14, 2017;
- Current Report on Form 8-K, filed with the SEC on December 28, 2017.

We also incorporate by reference into this Proxy Statement additional documents that we may file with the SEC between the date of this Proxy Statement and the date of the Special Meeting. These documents include periodic reports, such as Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, as well as Current Reports on Form 8-K and proxy soliciting materials. Our Annual Report on Form 10-K for the year ended December 31, 2017 (“2017 10-K”) is due on April 2, 2018. We plan to file the 2017 10-K in March 2018; however, there is no guarantee that we will be able to file it by the Special Meeting.

The information provided on our website is not part of this Proxy Statement, and therefore is not incorporated by reference herein.

Information furnished under Item 2.02 or Item 7.01 of any Current Report on Form 8-K, including related exhibits, is not and will not be incorporated by reference into this Proxy Statement.

You may obtain, without charge, a copy of any of the documents incorporated by reference in this proxy statement, other than exhibits to those documents that are not specifically incorporated by reference into those documents, by writing or telephoning us at the following address: Integrity Applications, Inc., 19 Ha’Yahalomim St., P.O. Box 12163, Ashdod, Israel L3 7760049; phone: (972) (8) 675-7878.

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED OR INCORPORATED BY REFERENCE IN THIS PROXY STATEMENT TO VOTE ON THE PROPOSAL 1. THE COMPANY HAS NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH INFORMATION THAT IS DIFFERENT FROM WHAT IS CONTAINED IN THIS PROXY STATEMENT.

THIS PROXY STATEMENT IS DATED MARCH 2, 2018. YOU SHOULD NOT ASSUME THAT THE INFORMATION CONTAINED IN THIS PROXY STATEMENT IS ACCURATE AS OF ANY DATE OTHER THAN SUCH DATE, AND THE SENDING OR MAKING AVAILABLE OF THIS PROXY STATEMENT TO STOCKHOLDERS SHALL NOT CREATE ANY IMPLICATION TO THE CONTRARY.

OTHER BUSINESS

Other Matters that May Come Before the Special Meeting

The Board of Directors does not intend to present, and knows of no others who intend to present, at the Special Meeting any matter or business other than that set forth in the accompanying notice of Special Meeting of Stockholders. If other matters are properly brought before the Special Meeting, it is the intention of the persons named in the proxy to vote any proxies on such matters in accordance with their judgment.

ALL STOCKHOLDERS ARE URGED TO VOTE OVER THE INTERNET, BY TELEPHONE, OR BY MAIL.