Thank you and good afternoon. Welcome to our conference call. Charles Beck, our CFO, is with me. On the call today, we will review Q4 and fiscal 2018 financial results, discuss significant business developments and market conditions and provide an update on execution of strategy. We will archive this webcast and have also posted our prepared remarks for today’s conference call in the investor relations section of our website.

Safe Harbor Statement

Please note that during the course of this call we will be making certain forward-looking statements, including those regarding: revenue, bookings, results of operations and operating leverage inherent in our platform; our investments and initiatives; our market opportunities; the results of our efforts with respect to our platform and market momentum; the broad relevance of our platform; the progress made in developing our technology and our resulting anticipated accomplishments; the results of the implementation of our technology, strategy and initiatives; the benefits that our
technology could provide to regulatory regimes; the manufacturing quality control
synergy we offer; the focus of the market and tipping points in marzet development;
industry trends and the proliferation of linking requirements; our growth strategies,
operational efficiencies and the influence of contract negotiations on acceleration of our
growth; our anticipated cash usage; our expectations regarding a patent suit we have
filed; and our prioritization of sources of capital. We also will discuss from time to time
information provided to us by channel partners and actual and potential customers
about their business activities. We are providing this information, as we understand it
was represented to us. We do not verify nor vouch for such information. Such forward-
looking statements, and statements about partners and customers, are subject to many
assumptions, risks, uncertainties and changes in circumstances. Any assumptions we
share about future performance represent a point-in-time estimate. Actual results may
vary materially from those expressed or implied by such statements. We expressly
disclaim any obligation to revise or update any assumptions, projections, or other
forward-looking statements to reflect events or circumstances that may arise after the
date of this conference call. For more information about risk factors that may cause
actual results to differ from expectations, please see the company’s filings with the
Securities and Exchange Commission, including the Form 10-K that we expect to file
shortly. Any links included in this presentation are provided for general information and
context only. The content referenced is not incorporated by reference and you should
not consider it a part of this presentation. We do not verify nor vouch for such
information.

Introduction

For the first time, we are providing our prepared remarks for the call in advance. By
doing so, we hope to improve the quality of our disclosures and make life easier for our
analysts and investors. Another virtue of this approach is the opportunity to provide
links to relevant information, demonstrations, and other materials. We will be soliciting
feedback on these changes and continue to work to improve the process of communications with shareholders.

As is customary, Charles will comment on our financial results, then I will discuss significant business developments, market conditions, and execution of strategy.

**Financial Results**

Good afternoon everyone.

Q4 revenue was $5.2 million compared to $4.9 million in the fourth quarter last year. The increase in revenue was due to higher Discover and Barcode revenue, reflecting growth in bookings during the year, as well as additional program work with a government agency contractor, partially offset by lower Guardian revenue.

Q4 Discover and Barcode bookings were 50% higher than the fourth quarter last year, at $1.8 million versus $1.2 million. Q4 2018 bookings included annual renewals from existing customers as well as bookings from new customers. We are continuing to experience lumpiness in quarterly bookings in the early stages of market development due to timing and varying provisions of early contracts.

For the year, Discover and Barcode bookings grew 90% from $1.6 million to $3.1 million.

Gross margin for the quarter was 60%, up from 58% last year, reflecting higher Discover and Barcode revenue in the mix.
Operating expenses were essentially flat with the fourth quarter of last year. Opex has stayed relatively flat for the last five quarters, as we slowed the pace of hiring in 2018 until we see significant top line growth, and we continue to drive operational efficiency.

Net loss for Q4 was $8.0 million or 70 cents per diluted share, versus a net loss of $8.4 million or 76 cents per diluted share in the fourth quarter last year, primarily reflecting contributions from Discover and Barcode revenue growth.

We invested $5.8 million of working capital during Q4, which was a nice surprise as it was substantially lower than the range of $7 to $7.5 million we provided on our last call. Cash flow was positively impacted by the early receipt of a $1.0 million customer payment as well as lower expenses than we anticipated. We used $5.1 million to fund operations and $400 thousand for capital expenditures. We ended the quarter with $43.7 million in cash and marketable securities.

We anticipate cash usage will be between $6 to $6.5 million in the first quarter.

Everyone is intently focused on growing revenues from key accounts. Much of our efforts revolve around orchestration of suppliers and identifying and supporting customer business process changes to scale implementations. We are doing all we can to shorten the critical path to top line growth.

Turning to our financial results for the full year...

Revenue for the year was $21.2 million compared to $25.2 million in 2017. The decrease reflects the impact of the one-time $3.5 million upfront license fee and $900 thousand of related royalties we realized last year from a licensee. In exchange for the upfront license fee, we waived any future royalty obligations from this licensee in one of the licensed fields of use.

Excluding the impact of the one-time license fee and related royalties, revenue increased $300 thousand in 2018 reflecting growth in Digimarc Discover and Barcode revenue
partially offset by lower Guardian revenue. Barcode revenue increased $1 million due to contracts with new customers during the year and escalating annual fees from existing customers. Digimarc Guardian revenue declined $500 thousand largely due to one customer contract termination during the year. Service revenue was down slightly due to lower volume of program work with the Central Banks. The volume of program work can vary year to year depending on the program roadmap governed by the Central Banks.

Gross margin was 60% for the year, 6 points lower than last year, reflecting the impact of the one-time license payment and related royalties in 2017.

Operating expenses for the year were 7% higher than last year, reflecting the full-year impact of staffing increases in 2017 and early 2018. Our professional staff increased by 6 full-time employees during 2018 versus 27 last year, with most positions focused on sales and delivery of Digimarc Discover and Barcode in both years.

Net loss was $2.86 per diluted share for the year versus $2.44 per diluted share last year, reflecting the impact of the one-time license fee and related royalties and higher operating expenses. We invested $24.1 million of working capital during the year, including $21.2 million to fund operations and $2 million for capital expenditures.

For further discussion of our financial results, and risks and prospects for our business, please see our Form 10-K that we expect to file shortly.

Bruce will now provide his comments on significant business developments, market conditions, and execution of strategy.

Execution of Strategy

A little more than a month has passed since my last capital markets update so my remarks on operational progress will be brief.
I have given considerable thought to what to do about working capital and have developed some specific plans for bolstering the balance before year end. As part of that process, we will be holding a Capital Markets Day on March 11th to make sure that our analysts and shareholders have a thorough understanding of our business and investment strategy. As I consider public versus private valuation of our platform, I believe that there are several areas where the public equity market needs more visibility and understanding. As we contemplate the desirability and potential need for more capital, I am determined to find ways to do so that are accretive to our shareholders. As I outlined at the Needham conference, I have a clear sense of prioritization of sources of capital. We have designed a number of programs and plans to foster revenues from key accounts in concert with discussions with logical strategic partners who can bring both operational leverage and capital to continuing development of our Intuitive Computing Platform.

Although I appreciate the relevance of near-term bookings and revenues as the foundation of analysts’ models and focus of typical investors in the public equity market, these financial measures indicate more about the pace of adoption than the value of the platform. No doubt income is the best source of growth capital, and an important leading indicator of the likelihood of success, but it is not the be all, end all, measure of performance as we disrupt enormous market segments served by barcodes. Admittedly, it is a proper and very important focus for management. Don’t get me wrong. However, I am worried that the public equity market may miss the forest for the trees if I don’t do a better job of explaining our progress and path forward. Thirty-minute conference calls and 26-minute presentations at investor conferences are just not adequate to convey all important aspects of our relevance as a Multi-sided Platform (“MSP”) that can serve many enormous industries and provide multiple paths to critical mass. It seems like the
value of the Platform gets lost in discussions of details of early feature and market development, sometimes leading to truncation of perceptions of value.¹

During our presentation in March, I intend to provide a thorough exposition of development of the platform and associated markets. Charles and I will provide greater clarity about our assets, their monetization, and unexploited potential. I will explain clearly why we are investing the way we are, our goals, KPIs, expectations, and concerns.

As I noted in our last call, acceleration of growth will be heavily influenced by the pace and outcome of pending contract negotiations with certain customers and prospects. In the meantime, we are restraining the rate of investment. Tight management of investment creates tension regarding pace of adoption. We are mitigating the tension by improving efficiency of enhancement, drafting specifications, and re-orienting all the resources we can to account management and delivery.

The focus on Retailers and CPGs is a carefully considered decision that I made, mindful of access to, and the cost of capital, as a small cap public company. We are constrained by access to capital to invest modestly and carefully to bring sufficient early indicators of success to fund growth and expansion to new markets. Even though I believe we will be marvelously successful, that is not the definition of the value of the company or our Intuitive Computing Platform. There are many reasons for optimism, as indicated in my most recent investor presentation in January.

The obvious broad relevance of our platform requires that we orchestrate many aspects of account management, including customer and supplier resources. Their business process changes govern the pace of our progress with accounts. Given the relative

¹ For an introduction to MSPs, see, e.g., https://en.wikipedia.org/wiki/Two-sided_market; http://www.hbs.edu/faculty/Publication%20Files/15-037_cb5afe51-6150-4be9-ace2-39c6a8ace6d4.pdf; and http://andreihagiu.com/articles/
scale of Digimarc to our key customers and their suppliers, this is quite a challenge to get everyone rowing in the same direction. This is an area where a strategic investor could make a big difference.

We continue to support customers’ ambitions to improve consumer engagement to address changing shopping behaviors and government regulations. In December 2018, the USDA issued regulations for on-pack disclosure of genetically modified organisms in products. The effective date is February 19, 2019. The implementation date is January 1, 2020. Thus, CPGs must begin making implementation decisions soon. Digimarc Barcode (“digital watermarking”) is explicitly recognized as an approved means of linking from packages to required disclosures.

You may recall that Digimarc Barcode is also an approved means of linking from packages to SmartLabel content in the multi-industry program run by the Grocery Manufacturers Association and the Food Marketing Institute. Our most recent innovation in support of linking consumers from packages to useful information and services concerns the GS1 Global standard, known as GS1 Digital Link, published in May 2018. The first product in the world on shelf, employing the new standard, reached stores recently, using Digimarc Barcode as the data carrier and activation means.

The efficiency and versatility of Digimarc Barcode to serve these government regulations and consumer initiatives are becoming more apparent. The proliferation of linking requirements favors our Barcode over alternative data carriers like QR because of our versatility in satisfying all these requirements as well as supporting many other applications like robotic shelf management, store associate price audits and pick and pack, manufacturing QC, etc. It is becoming more obvious that awkward configurations

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3 For more information on GS1 Digital Link, see [https://www.gs1.org/standards/gs1-digital-link](https://www.gs1.org/standards/gs1-digital-link).
of multiple special purpose 1D and 2D barcodes would be necessary to accomplish what we do with a single platform and data carrier.

More evidence of broad relevance of our Platform is being demonstrated in consumer products manufacturing. The manufacturing quality control application that we have developed in cooperation with a leading CPG and their machine vision supplier has been presented to other CPGs and seems to be gaining traction. Several CPGs are piloting the solution as we package it up for general commercial release.

We have more synergy to offer those who employ Digimarc Barcode for manufacturing quality control. A logical bookend to manufacturing is emerging in plastics recycling. There is a serious large-scale study underway in Europe regarding the use of digital watermarking (Digimarc Barcode) in plastic packaging to improve sorting of waste to foster more effective recycling.\(^4\) It is important to appreciate that Enhancement of plastic substrates and wraps in concert with labels would add another dimension to the manufacturing application while opening the door to what has been, functionally, a totally different market. This is an example of operating leverage inherent in the Platform design.

Being capital constrained, we are not participating fully, but we are getting better informed. From what I’ve heard, taggants have limitations that we do not share, perhaps most importantly, there appears to be pretty limited number of identifiers, whereas we are practically unlimited for recycling purposes. With our ability to enhance labels as well as substrate, we can provide much more important information about plastic containers, their sources, and uses. The additional identifying data in labels also improves the likelihood of high-speed detection of degraded materials common in sorting

facilities. It would be very useful to likely regulatory regimes to be able to trace as much products as possible to the companies that produce them.

Global production of plastic reached 448mm tons in 2015. Only 18 percent is recycled. The largest market for plastics is packaging.\(^5\) We have not attempted to assess the size of the TAM for improving recycling. It is likely very large, given the paucity of alternative means of improving sorting in relation to the scale of the environmental problems that improved sorting can mitigate. The business model for this possible new feature of the platform has not yet been established. We have begun discussing economics with participants in the initiative. I will provide more information on this subject in March.

The work group intends to publish its recommendation for a global industry standard in May 2019. This could be a very important event in maturation of our Platform, signaling yet another massive market opportunity, one with a stamp of approval from a well-regarded industry work group.

The use of Digimarc Barcode in plastic consumer product packaging is synergistic with our manufacturing solution and general strategy, adding value for CPGs who embrace our platform, and completing the full circle of product package lifecycle support that our Platform provides. Our recent announcement with HP concerning use of serialized Digimarc Barcodes to deter counterfeiting and improving product recall processes further illustrates full product lifecycle support made possible by our Platform.\(^6\)

Pilots of Digimarc Barcode for Thermal Labels are continuing with Wegmans and New Seasons. A third pilot has begun. Another retailer is transitioning from pilot to production. There are several more retailers in the queue.

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As our software and support mature, we are becoming more sophisticated and efficient, and supplier competencies are improving. The leading edge of this important aspect of strategy is in Europe, where a major retailer has begun implementation of our platform for its private brand with packaging and prepress suppliers on the front lines. Nearly 200 packages have been enhanced in the first 50 days, with a plan to complete nearly 3000 packages in the first year. The primary motivation is improving checkout. This program is a leading indicator of how financial and operating leverage, and geographical expansion, can be realized. We are hopeful that success in such initiatives will inspire others to follow suit so that business can be acquired, pilots conducted, and transitions to production occur more quickly and effectively. It is noteworthy here that the retailer chose not to pilot, rather to move directly to production. Hopefully, this also becomes more common. My confidence in the notion of tipping points in market development is reinforced by a significant increase in inquiries from European suppliers and retailers based on industry knowledge of what is transpiring. We do not yet have permission to identify the retailer. As you know, our vision assumes that, in a mature state, our partners can act autonomously in building value on the platform, and they, or their clients, send license payments to Digimarc.

We are in the process of rolling out a remarkable doubling of the resolution of Digimarc Barcode for packaging. The basic tile of our carrier is now a little bigger than a typical thumbnail. The doubling of resolution means that there will now be four times as many codes in any given enhancement area. The higher resolution also reduces visual artifacts, facilitating faster, more economical enhancement. This follows upon our release in Q4 of an Adobe Illustrator extension that also improves Enhancement efficiency.

Among our most notable R&D accomplishments is Signal Rich Art, the merger of mathematics and artistic design to make Digimarc Barcode inherent in design. We are
exploring opportunities with consumer goods manufacturers to commercialize these techniques.

Some shareholders noticed we filed a patent infringement suit, the first one in many years. We believe that the defendant needs a license from us. It is not a large company so we don’t expect that the outcome will have a material effect on financial performance. It evidences our will to enforce our patents when license negotiations are not successful, following a long tradition of obtaining reasonable value for use of our inventions.

As I tried to indicate in the Needham presentation, we have been making steady progress in execution of strategy. Despite these accomplishments, perception of value in the public equity has been languishing. We understand that the key measures of performance for the capital markets are bookings, revenues, cash flow, and number and scale of client engagements. Customers are focused on demonstration of ROI, functional and aesthetic quality of enhancement, efficiency, impact on business process, and TCO. As we address these key performance indicators of investors and customers, we endeavor to allocate capital wisely while improving our customer engagement, supplier management, software development, training and support. We are becoming more sophisticated in all aspects of successful execution of strategy as our understanding of the platform, markets, and ecosystem matures.

Our priorities for 2019 are to move the market leaders to levels of implementation where they will influence the rest of the market to adopt, which should accelerate growth in bookings and revenues. We have put in place the basic building blocks with industry leaders, and their suppliers, in key geographic markets, with most of our resources focused on US retailers and CPGs. The inflection points that I have theorized will occur when the aggregate value of the Platform reaches critical mass or when the side network effects on relationships of participants create momentum. I will explain more about this at the Capital Markets Day.
My focus for the foreseeable future is to mitigate concerns about when inflection points will occur and the adequacy of our working capital to sustain us until then. All of management is obsessing about creating these tipping points. Much of our work concerns orchestrating customer and supplier resources to accommodate a new data carrier in mission critical, highly managed, aspects of complex supply chains. I believe that I can improve our capital base in accretive ways through strategic partnerships. I appreciate the wonderful support of our shareholders and am committed to improving the understanding of the public equity of our business and to seek capital, if needed, elsewhere, until fair value is realized in the public market. Again, more to come on this in a few weeks.

I have witnessed instances of the powerful influence that industry leaders can have on suppliers and competitors. We must deliver value and scale to these leaders. And we must align ourselves with industry leaders on the supply side as well. I have witnessed first-hand the indirect group network effects of movement of industry leaders toward adoption of the Platform. The tipping point to great value creation for our business is a function of achieving critical mass in the Platform or sufficiently powerful side network effects to aggregate users that provide incentives for more users to join on each side. The progress we have made in developing technology, support for, and use of, ICP supports the notion that we are heading in the right and nearing the cusp of great accomplishment. Reliable, efficient identification of media is a critical element of progress in the digital age for so many industries, in so many ways, I am confident we will succeed.

In reporting on our business in these quarterly updates, I am reminded of the ancient Buddhist parable of the blind men and the elephant that points out the limits of perception of point inspection and the importance of understanding the complete context. Rate of growth of revenues in retail and CPG applications is not a full measure of the value of
our Platform, per se. We have built a marvelous platform with your capital and I need a bit more time than these calls and presentations at investor conferences allow to describe and explain it to you. This is why we are holding a Capital Markets Day on March 11. In person attendance will necessarily be limited; however, the presentation materials will be posted on our website and the live remarks will be webcast. All the analysts who cover the company have been invited, along with interested industry analysts, academics, and press.

2019 marks our 20th anniversary as a public company. It’s a good time for a comprehensive update. I am very much looking forward to the opportunity to better articulate the assets that we have developed, our strategies and tactics for developing markets, and the business and financial models for value realization from the investments.

That’s it for our prepared remarks. Now, we will open the call to questions.