SANGOMA TECHNOLOGIES CORPORATION

MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE THREE MONTH AND SIX MONTH PERIODS ENDED DECEMBER 31, 2020

February 4, 2021

INTRODUCTION

The Management Discussion and Analysis (“MD&A”) provides a detailed analysis of the financial condition and results of operations of Sangoma Technologies Corporation (hereinafter referred to as “Sangoma” or the “Company”). The MD&A compares the financial results for the fiscal second quarter of 2021 with those of the same quarter in the previous year. This MD&A should be read in conjunction with Sangoma’s audited annual consolidated financial statements and related notes for the year ended June 30, 2020 (“Financial Statements”) and Sangoma’s unaudited condensed consolidated interim financial statements and related notes for the three and six months ended December 31, 2020 which are available at www.sedar.com. All amounts are in Canadian Dollars unless otherwise noted.

BASIS OF PRESENTATION

The Company reports in accordance with International Financial Reporting Standards (“IFRS”).

NON-IFRS MEASURES

This MD&A contains references to certain non-IFRS financial measures such as Operating Income, EBITDA and Adjusted Cash Flow. Non-IFRS financial measures are used by management to evaluate the performance of the Company and do not have any meaning prescribed by IFRS and therefore may not be comparable to similar measures presented by other reporting issuers. Non-IFRS financial measures used herein have been applied on a consistent basis. “Operating Income (Loss)” means gross profit less expenses before financing costs and one-time charges. “EBITDA” means earnings before interest, income taxes, depreciation (including for right-of-use assets), amortization and one-time charges. EBITDA is a measure used by many investors to compare issuers. “Adjusted Cash Flow” means cash flow from operations as defined by IFRS less the capitalized development that Sangoma amortized during the period, plus interest expense and any one-time impacts at the time of an acquisition. We believe that Operating Income, EBITDA and Adjusted Cash Flow are useful supplemental information as they provide an indication of the results generated by the Company’s main business activities before taking into consideration how they are financed, taxed, depreciated or amortized. Investors are cautioned that non-IFRS financial measures, such as those presented herein, should not be construed as an alternative to net income or cash flow determined in
accordance with IFRS.
FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements, including statements regarding the future success of our business, development strategies and future opportunities.

Forward-looking statements include, but are not limited to, statements concerning estimates of expected expenditures (including in respect of IT and security enhancements being implemented in response to the cyber attack), statements relating to expected future production and cash flows, statements relating to the ongoing investigation into and actions being undertaken in response to the cyber attack and the anticipated impact on our business, and other statements which are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions indicate forward-looking statements.

Although Sangoma believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. Forward-looking statements are based on the opinions and estimates of management at the date that the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in forward-looking statements. Such risks and uncertainties include, but are not limited to, the outcome of our ongoing investigation into the cyber attack, costs related to our investigation and any resulting liabilities, our ability to recover any proceeds under our insurance policies, and costs related to and the effectiveness of our mitigation and remediation efforts. Sangoma undertakes no obligation to update forward-looking statements if circumstances or management's estimates or opinions should change except as required by law.

Readers are cautioned not to place undue reliance on forward-looking statements, as there can be no assurance that the plans, intentions or expectations upon which they are based will occur. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other events contemplated by the forward-looking statements will not occur. Although Sangoma believes that the expectations represented by such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct as these expectations are inherently subject to business, economic and competitive uncertainties and contingencies. Some of the risks and other factors which could cause results to differ materially from those expressed in the forward-looking statements contained in the management's discussion and analysis and annual information form (both available on www.sedar.com) include, but are not limited to risks and uncertainties associated with the COVID-19 pandemic, changes in exchange rate between the Canadian Dollar and other currencies, changes in technology, changes in the business climate, changes in the regulatory environment, the decline in the importance of the PSTN and new competitive pressures. The forward-looking statements contained in this management’s discussion and analysis are expressly qualified by this cautionary statement.
**DESCRIPTION OF THE BUSINESS**

*General (also refer to the Glossary of Terms at the end of this document)*

Sangoma’s products and services are used by leading companies throughout the world and in leading UC, PBX, IVR, contact center, carrier networks, and data communication applications worldwide. Sangoma’s portfolio of products also enable service providers, carriers, enterprises, SMBs, and OEMs alike to leverage their existing infrastructure for maximum financial return, while still delivering the most advanced applications and services from the latest technologies available.

**Sangoma’s Communications as a Service (CaaS) Portfolio**

Sangoma Technologies is a trusted leader in delivering value-based Communications as a Service solutions for businesses of all sizes. The value-based communications segment includes small businesses to large enterprises who are looking for all the advantages of cloud-based communications at a fair price. Sangoma’s current Communications as a Service offerings are typically offered with monthly, yearly, or multi-year contracts and include:

- Unified Communications as a Service (“UCaaS”)
- SIP Trunking as a Service (“TaaS”)
- Communications Platform as a Service (“CPaaS”)
- Fax as a Service (“FaaS”)
- Meetings as a Service (“MaaS”)
- Device as a Service (“DaaS”)

**Unified Communications as a Service (UCaaS)**

Sangoma's UC solutions are business communication systems (PBX’s with advanced UC features, such as presence/chat, conferencing, mobility, fax, and more) that can be deployed on-premise or hosted in the Cloud, allowing businesses to select the best option for their needs. Unified Communication systems, because of their mobility features such as having the business phone number ring on an app on your smartphone and/or desktop and instant messaging capability, enable remote work and work from home much more efficiently. Sangoma’s UC solutions are deployed globally, with over 2 million licensed seats of its commercial Unified Communication solutions. Sangoma’s Unified Communication solutions fully integrate with our phones, soft clients, and network interoperability products to provide a fully interoperable solution from a single vendor.

**Cloud-Based Business Phone Solution**

Sangoma offers its customers full-scale cloud-based Unified Communications solutions, running in Sangoma datacenters, in North America and the United Kingdom. With Sangoma, businesses can get contact center, mobility, softphone, call control, and productivity features included for every user at the same price. Sangoma’s hosted phone service delivers the customer experience businesses demand at an affordable price point. Customers can also choose pre-provisioned
phones that customers simply plug into their network.

**On-Premise Business Phone Solution**

Sangoma also offers the more traditional on-premise phone system, for businesses still wanting to deploy their business phone system on premise. Whether deployed on a dedicated appliance equipped with state-of-the-art technology or in the customer’s virtual environment, Sangoma provides the power and connectivity necessary for any organization.

- **IP Phones, Headsets and UC Clients**

  Sangoma provides desktop and softphone collaboration clients that integrate seamlessly with our UC solution offerings and deliver UC features (presence, contacts, chat, calling, audio and video conferencing, etc.) from a single application, on any device, at any location.

  - **IP Phones:** Sangoma offers a full line of phones that work with both our cloud and on-premise systems, that are perfect for every user type, from casual to call center to managers and executives. Sangoma’s product line includes entry-level, mid-range, and executive-level phones. All models include HD Voice and plug-and-play deployment. Sangoma’s range of IP phones are customized to seamlessly integrate with all of our UC Systems and provide zero touch installation, simplified system management, and instant access to a wide range of features.

  - **Headsets:** Sangoma also offers headsets that either work in conjunction with the desktop phones (by plugging into the phone) or work in conjunction to our desktop soft client (by plugging directly into the computer). These headsets enable roaming of up to 325 feet from the phone or desk computer.

  - **UC Clients and Softphones:** Unified Communication Clients (or softphones) are used to make or receive phone calls with your business phone number and can be used as your main phone or as an extension of your desk phone. They are available as an app on your smartphone or computer. These UC clients have enabled employees to work remote seamlessly by enabling phone calls to customers and other employees as if they were in a physical office. Sangoma offers UC clients with all of our Unified Communication / Business phone system product lines.

**SIP Trunking as a Service (TaaS)**

SIP trunks deliver Internet-based telephony services to businesses using their existing internet connection, eliminating the need for separate traditional PSTN or digital telecom connections. SIP trunking is fast becoming the technology of choice to interconnect an IP PBX system to a telephone company. The main drivers are cost efficiencies (over fixed lines such as ISDN or analog lines from incumbent telcos) and end-to-end UC features/ transparency. Cost efficiencies are realized because SIP trunking uses already-available broadband connections at customer premises. Sangoma offers both retail and wholesale SIP Trunking which allows our customers to choose the service that best meets their needs. Either service offers DIDs and number porting.
• Retail SIP Trunking

Retail SIP trunking offers predictable monthly expenses with pricing based per trunk. SIPStation, Sangoma’s retail SIP trunking service, is seamlessly integrated into our various UC platforms, making it easy to get up and running. It also includes an integrated fax service option, enabling a business to send and receive faxes from a web interface or from a local fax machine. Typically, small to mid-sized businesses and enterprises would utilize this type of service.

• Wholesale SIP Trunking

Sangoma’s wholesale SIP trunking offer is now available following the recent acquisition of VoIP Innovations. Pricing for wholesale SIP trunking is usage-based but with a larger monthly minimum commitment. This includes origination, termination, SMS/MMS, e911, and fraud mitigation. Typically, very large businesses or service providers who resell SIP trunks would utilize this type of service.

Communications Platform as a Service (CPaaS)

Communications Platform as a Service (CPaaS) allows developers to easily build services and applications using real-time communication features, such as voice, video, chat, and SMS, via the cloud. Sangoma’s APIdaze platform enables customers to build new communications services based on voice, rest APIs, WebRTC, and SMS. When running an application on a CPaaS platform, performance is critical since API accessing is done remotely. To ensure peak performance, Sangoma offers its own SIP trunking service, thus offering the best bandwidth possible in addition to easy access to phone numbers.

FAX as a Service (FaaS)

Faxing remains an important communications tool, yet VoIP networks are sometimes unable to send faxes reliably because fax standards are based on very specific timing that can be interrupted in VoIP systems, especially where there is substantial latency. Sangoma’s FoIP service, FaxStation, is a hosted service to remedy this problem. It features a telecom appliance with up to four analog connections for fax machines and operates in concert with Sangoma’s fax server data center to encrypt and package the fax communication to make it fail-safe. This is particularly useful for small businesses that rely on fax communications but also for industries with challenging network conditions, such as mining, oil rigs, and ship-to-shore over satellite.

Meetings as a Service (MaaS)

Sangoma Meet is a video conferencing and collaboration service supporting up to 50 video participants, using any device they want. Sangoma Meet also enables file sharing on screen so collaboration with co-workers is enhanced. Sangoma Meet also integrates seamlessly with your calendar and enables PSTN phone calls.

Device as a Service (DaaS)
With larger deals, customers have the option to rent Sangoma equipment if they are utilizing other Sangoma “as a Service” offerings, such as SIP trunking or UCaaS. Devices, such as phones or any network connectivity equipment needed to deploy a full solution are eligible.

**Network Interconnection Products**

In addition to the Communications as a Service (CaaS) offerings describe above, Sangoma also offers network interconnection products. These products connect different types of networks together, such as VoIP networks to PSTN networks, or VoIP networks to mobile networks or different types of VoIP networks.

**Session Border Controllers (SBCs)**

Anytime two VoIP networks interconnect, issues of security and interoperability arise. SBCs can manage these issues, including provider-to-provider connections, provider-to-enterprise connections, and enterprise-to-enterprise connections. Sangoma’s SBCs are available as hardware appliances, as software-only solutions running on a virtual machine in hosted environments, or as a hybrid of both. The hybrid solution is unique to Sangoma and provides all the flexibility expected from virtual machine capability coupled with the scalability that is found in hardware-based solutions. Sangoma’s SBCs have broad interoperability certifications.

**Customer Premise VoIP Gateways**

VoIP gateways are needed any time voice traffic moves from a VoIP network to a traditional PSTN telephone network. As the traffic traverses these networks there are issues that need to be resolved regarding both the media (the sound of the caller’s voice) and the signaling (the method used to control the media traveling over that connection).

Sangoma Vega Gateways Series are used by businesses that want to connect their traditional phone systems (PBX or key system) to a VoIP provider. These types of connections are referred to as SIP trunks, and Sangoma’s gateways enable users to take advantage of the cost savings and flexibility of SIP trunks, without having to upgrade their entire phone system.

These same gateways can also be used to connect a newer IP PBX to the PSTN. In addition to providing a backup to the service provided by their VoIP provider, companies can use VoIP gateways for multi-site transitions from older phone systems to new IP PBX phone systems.

VoIP gateways are also needed to connect traditional telephones to an IP PBX. For large companies, the cost of new IP phones can be higher than replacing the core system, so they keep the older phones and connect them to the new IP PBX. This allows them to phase in the new phones over time without disrupting normal business operations. There may also be specialized telephones (elevator phones, door entry phones, ruggedized phones for use in hard industrial or outdoor conditions) for which there are no IP replacements. These phones can also be connected to the IP PBX with a Vega gateway.

All Sangoma’s gateways have broad interoperability certifications.
Carrier and Core VoIP Gateways

In a service provider or carrier network, much larger gateways perform these same tasks. In addition, there are signaling protocols that are only used when carrier networks communicate with other carrier networks that are not included in the enterprise product line. The NetBorder SS7 VoIP gateway and Dialogic IMG gateway family are carrier-specific products that enable a VoIP carrier to connect their network to the SS7 network for up to 2,016 channels. The IMG 2020 also has the ability to pool 6 units for over 12,000 ports and comes with a management system to configure, monitor, and update systems from a central location. The Sangoma SS7 gateway has broad interoperability certifications.

PSTN Interface and Media Processing Boards

Sangoma’s complete line of boards connect and interface to the PSTN. Even though IP networks are growing, the PSTN still exists and still works, and new communication solutions will need to connect to the PSTN, so it is a viable market-based solution. Sangoma’s A and B series of boards, combined with the Dialogic JCT, DNI, CG, and Diva series of boards and the Digium PSTN interface cards from Sangoma enable our customers to connect directly to a PSTN network and interface a VoIP system with nearly every kind of telephony network, including ISDN PRI and BRI and analog FXO/FXS.

These boards are primarily used by communications solution developers in PC-based PSTN/VoIP telecommunications systems that connect to the PSTN and perform a very similar task to VoIP gateways, but are installed inside the server rather than being stand-alone devices. By providing customers with the option of using a PSTN interface board or a VoIP gateway, Sangoma maximizes flexibility based on installation requirements, particularly when space and power are at a premium. They may also be used in harsh conditions that require ruggedized servers.

Because the Dialogic Media and Network Interface product line comes with high end DSP media processing on board and with extensive programmable interfaces (APIs) for developers and integrators, they are also used to design advanced telecom applications such as IoT and modem banks, speech recognition systems, IVRs, contact centers, and mobile value-added network solutions.

Recording calls has long been a requirement for call center training purposes, for validating over-the-phone transactions, such as stock orders placed with a broker, and a variety of other scenarios. The Sangoma T116 is a specialized, high-density board that can be used as part of large call recording platforms.

Open Source Software Products

Asterisk and FreePBX

Sangoma is the primary developer and sponsor of the Asterisk project, the world’s most widely used open source communications software, and the FreePBX project, the world’s most widely
used open source PBX software. Together, Sangoma has 5 Million users of our open source software, with an average of 50,000 new installs per month.

Sangoma utilizes this free open source software as a beachhead so Sangoma can offer revenue-generating products and services beyond the open source Asterisk or FreePBX software users have downloaded. The types of products and services Sangoma offers includes software add-ons beyond what is offered in Asterisk or FreePBX, IP phones, SIP trunking, cloud-based fax, training, technical support, maintenance, PSTN cards, VoIP gateways, session border controllers, and commercial/hardened versions of the PBX/UC software they have downloaded.
OVERALL PERFORMANCE

Financial

1 Operating income (loss) and EBITDA are metrics used by the Company to monitor its performance and the definitions may be found in the section non-IFRS measures above.

For the second quarter of fiscal 2021, sales were $35.32 million, 9% higher than in the same quarter last year, and EBITDA was an all-time record $6.84 million, up 32% over the same quarter last year.

Gross profit was $23.46 million in the second quarter of fiscal 2021, 10% higher than in fiscal 2020 and with similar gross margin at 66% of revenue.

Operating expenses were $19.68 million in the second quarter of fiscal 2021, up 3% from the second quarter of fiscal 2020, increasing at a rate slower than Sangoma’s revenue growth, as planned.

EBITDA was a record $6.84 million in the second quarter, up by almost one-third from the $5.19 million in the same quarter last year.

Net income for the second quarter ended December 31, 2020 was $2.46 million.

Sangoma continues to maintain a strong balance sheet and finished the quarter with a cash balance of $92.28 million. Working capital closed at $83.43 million as of December 31, 2020 and Adjusted Cash Flow from operations at $6.32 million for the quarter.
Operational

Sangoma Technologies is a trusted leader in delivering cloud-based “Communications as a Service” (or CaaS) solutions for businesses of all sizes. This segment includes companies from small/medium businesses (SMB’s) right up to large enterprises who are looking for all the advantages of cloud-based communications at a fair price. In addition to those cloud-based Services, Sangoma also has a broad suite of Products to compliment its services.

Enterprises, SMBs and carriers in more than 100 countries rely on Sangoma’s technology as part of their mission-critical infrastructures. Through a worldwide network of distribution partners, Sangoma delivers high-quality services and products, some of which carry the industry’s first lifetime warranty.

Innovation

Sangoma continues to invest in Research and Development (“R&D”) to develop new products and to improve existing offerings with spending on R&D increasing each year. Sangoma believes that product innovation is essential to a technology company’s future. New additions to the Company’s product portfolio over the last few years include:
- T3 Mux Appliance
- Version 4 of NetBorder SS7 Media Gateway
- Vega 50, 400 and 5000 series Gateways
- NetBorder Express Microsoft Lync Certification
- NetBorder SS7 VoIP Gateway Appliance
- W400 GSM Board
- Vega 100 and 200 Gateways
- NetBorder Transcoding Gateway
- NetBorder Lync Express Appliance
- Vega 400 Session Border Controller
- A116 16-Span Digital Telephony Interface Board
- B500 BRI Board
- STM1 Mux Appliance
- Call Progress Analysis for Asterisk Systems
- NetBorder SS7 Gateway Release 5.0
- Full line of Session Border Controllers
- T116 16-Span Tapping Board
- NetBorder VOIP Gateway
- Lync Express 2.0
- SBC 2.0
- Video Multipoint Control Unit (MCU)
- FreePBX
- SIP trunks for FreePBX users through SIPStation
- FoIP service
- Sangoma’s commercial IP-PBX range called PBXact
- IP-phones with instant connect to FreePBX and PBXact
- PBXact UCC Cloud PBX Service

- Softphone client software
- Digium lines of cards and gateways
- Switchvox
- D-series phones
- Digium Cloud Services
- VoIP Innovations wholesale SIP Trunking
- APIDaze Communications Platform as a Service
- Sangoma Headsets
- Sangoma Meet, cloud-based video meeting service
Sales and marketing

R&D is important, but without sales and marketing, customers may be unaware of the advancements that Sangoma has made in innovation. So Sangoma continues to increase its investment in both sales and in marketing, to promote awareness of the Company, to communicate the critical shift from single products to full solutions to cloud, and to drive customer acquisition.

Sales

Sangoma uses a dual sales path ‘go to market’ approach: direct sales to large customers and indirect distribution to other small and medium businesses (SMBs).

- **Large Customers** typically include ‘service providers’, OEM’s and larger enterprise type businesses. In this customer segment, we tend to sell with a direct sales force.

  Service Providers is a broad category of customers that included telcos, ISPs, ITSPs, wireless/mobile operators, MSPs, UCaaS operators, etc. These types of organizations are potential customers for Sangoma.

  OEM partners are companies that “design in” Sangoma products as a component of their solutions. OEM customers tend to be committed participants in their given markets, and have longer-term focus. It is important to reach these potential customers in the early days of any project to secure ‘design wins’ and to have sales and marketing programs that will ensure close collaboration during product and sales development cycles.

  Enterprise customers are the classic ‘larger’ companies who buy products or services for their own use. This type of customer has similar ‘use cases’ to a SMB type customer, but is large enough that they prefer to do business directly with Sangoma, and the Company wants a direct relationship with them as well, and they are buying enough for Sangoma to cost effectively service them directly.

- **SMB Customers**: In other cases, the customer is commonly referred to as a Small-Medium Business. Here, it is not usually cost-effective to travel to meet with such customers in a typical sales cycle. Sangoma then utilizes an indirect distribution model to reach the full breadth of customers, based upon a two-tier Channel model:

  The ‘upper tier’ of the indirect model is typically made up of Distributors or Master Agents. where such partners have established relationships. The ‘second tier’ of the indirect model is normally made up of Resellers and Agents. Distributors typically sell to resellers, and Master Agents typically sell to Agents. The Resellers and Agents then sell, install, and support end users. The upper tier of the channel tend to be larger organizations and cover broader geographic regions, whereas the second tier tend to be smaller organizations (though not always) and are usually more ‘local’ in nature.

Sangoma has parts of its sales team that focus on Direct customers and parts that focus on the Channel. In the channel, partners require frequent attention to keep Sangoma ‘on their mind’ in a crowded product marketplace. So a portion of the Company’s sales team services the distributors
and master agents as the upper tier of the channel while a different part of the team focuses on the resellers/agents. Finally, Sangoma has professional sales teams across all key geographic regions as well.

**Marketing**

Sangoma also continues to increase its efforts in marketing. The Company has assembled corporate marketing programs with two key objectives in mind:

- to promote the Sangoma brand and positioning more aggressively, to convey the message about the Company’s full solutions and its transition to a Cloud-First company.
- Lead generation as one of the front-end steps in customer acquisition

Sangoma is now using various marketing techniques typical of technology firms to accomplish those two objectives. This includes participation in tradeshows, speaking at selected industry events, attending specialized seminars run by Sangoma’s distribution channel and other partners, investing in electronic marketing strategies (e.g. web presence, social media and blogging, online advertising, search engine campaigns, etc.), conducting lead generation campaigns via email/social media/etc, webinars, creating thought leadership pieces, PR, etc.

In addition to the overall corporate messaging, in support of the above two objectives, Sangoma has developed a comprehensive set of channel promotion programs, aimed at the Company’s indirect partners described above, both distributors/master agents as well as resellers/agents. The Company seeks to attract new channel partners and to grow the business with existing partners. Sangoma has implemented several incentive programs to reward its channel partners for performance and behaviours that Sangoma believes will grow revenues.
RESULTS OF OPERATIONS

SUMMARY OF RESULTS FOR THE SECOND QUARTER OF FISCAL 2021

Sales

Sales for the quarter ended December 31, 2020 were $35.32 million, up 9% from the $32.29 million in the second quarter of fiscal 2020 ended December 31, 2019. The increase in sales was driven by the continued growth and compounding of the Company’s services business where the recurring revenue is generated, having VoIP Innovations for the full quarter this year (about 3 weeks longer than in fiscal 2020), all partly offset by some softening in demand for one-time product sales primarily driven by COVID-19. Services revenue as a percentage of total sales was 56% in the second quarter of fiscal year 2021 and in absolute terms was almost 25% higher than in the same quarter of the prior year.

Cost of sales and gross profit

The cost of sales for the quarter ended December 31, 2020 was $11.86 million compared to $10.96 million for the quarter ended December 31, 2019. Gross profit for the second fiscal quarter of 2021 was $23.46 million, 10% higher than the $21.32 million realized in the second quarter of fiscal 2020. Gross margin for the second quarter was the same as last year at 66% of revenue.

Operational expense

As permitted under IFRS, costs are allocated by function except for the impact of foreign exchange, which can result in material swings between time periods.

Sales and marketing
Sales and marketing expense was $5.35 million for the second quarter, slightly lower than the $5.41 million for the same quarter of fiscal 2020 year as COVID-19 restrictions curtailed customer visits and industry events.

Research and development
A portion of the Company’s development costs are capitalized each period and amortized on a straight-line basis over three years (see the notes to the audited consolidated financial statements and related notes for the fiscal year ended June 30, 2020 available at www.sedar.com). The engineering expenses incurred, and the development costs amortized during the second quarter were $5.42 million, 5% lower than the $5.72 million in the same quarter last year mostly as a result of the weakening US dollar exchange rate and the Covid hiring freeze that remained in place during the quarter.

General and administration
General and administration expenses were $8.91 million for the quarter ended December 31, 2020 compared to $7.77 million over the same period ended December 31, 2019. The increased spend is primarily due to a full quarter of VoIP Innovations operations and cyber incident related expense.
Foreign exchange
For the quarter ended December 31, 2020, there was a foreign exchange gain of $0.01 million compared to a $0.27 million loss in the second quarter of fiscal 2020.

Total operational expense
Operating expense for the second quarter of fiscal 2021 was $19.68 million versus $19.17 million over the same period last year.

Operating income (before interest, income tax and acquisition related expenses)
As a result of the above, operating income for the quarter ended December 31, 2020 was $3.78 million, 76% higher than the $2.15 million in the same period last year.

Interest
Net interest expense for the quarter ended December 31, 2020 was $0.49 million, lower than the $0.79 million in the same period last year as a result of switching some debt to a LIBOR based loan in December 2020 and the pay down of principal between the periods.

Net income (loss)
Net income for the quarter ended December 31, 2020 was $2.46 million ($0.022 income per share fully diluted) compared to a net loss of $1.33 million ($0.018 loss per share fully diluted) for the equivalent quarter ended December 31, 2019.

EBITDA (earnings before interest, taxes, depreciation and amortization)
For the second quarter of fiscal 2021, EBITDA at $6.84 million and 19% of revenue was 32% higher than the same quarter last year driven primarily by the gradually increasing fraction of recurring revenue as the services business growth continues to compound and the expense controls.

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The above table shows the reconciliation of net income to EBITDA which is a metric used by the Company to monitor its performance and the definition may be found in the section non-IFRS measures above.
QUARTERLY RESULTS TRENDS

When measured in source currency (predominantly US$), sales in the quarter ended December 31, 2020 were 10% higher than in the second quarter of fiscal 2020 and were 3% higher than in the immediately preceding quarter. Sangoma’s quarterly revenue has now exceeded the same period in the prior year for each of the last twenty-four quarters.

SALES AND NET INCOME BY QUARTER

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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$28,915</td>
<td>$30,073</td>
<td>$28,095</td>
<td>$32,286</td>
<td>$36,310</td>
<td>$34,817</td>
<td>$35,833</td>
<td>$35,324</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$17,098</td>
<td>$18,639</td>
<td>$12,483</td>
<td>$21,322</td>
<td>$23,647</td>
<td>$22,687</td>
<td>$23,195</td>
<td>$23,461</td>
</tr>
<tr>
<td>Operating expense</td>
<td>$16,155</td>
<td>$15,962</td>
<td>$15,877</td>
<td>$19,170</td>
<td>$20,995</td>
<td>$19,651</td>
<td>$19,643</td>
<td>$19,678</td>
</tr>
<tr>
<td>Operating income</td>
<td>$1,743</td>
<td>$2,677</td>
<td>$1,606</td>
<td>$2,152</td>
<td>$3,372</td>
<td>$3,006</td>
<td>$3,533</td>
<td>$3,783</td>
</tr>
<tr>
<td>Net income (loss)</td>
<td>$1,970</td>
<td>$1,790</td>
<td>$906</td>
<td>$(1,751)</td>
<td>$1,699</td>
<td>$2,651</td>
<td>$2,258</td>
<td>$2,463</td>
</tr>
<tr>
<td>Net earnings (loss) per share</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-diluted basis</td>
<td>$0.021</td>
<td>$0.034</td>
<td>$0.014</td>
<td>$(0.018)</td>
<td>$0.023</td>
<td>$0.035</td>
<td>$0.022</td>
<td>$0.022</td>
</tr>
<tr>
<td>Fully diluted basis</td>
<td>$0.019</td>
<td>$0.032</td>
<td>$0.013</td>
<td>$(0.018)</td>
<td>$0.022</td>
<td>$0.035</td>
<td>$0.022</td>
<td>$0.022</td>
</tr>
<tr>
<td>EBITDA</td>
<td>$3,264</td>
<td>$4,174</td>
<td>$3,666</td>
<td>$5,192</td>
<td>$6,013</td>
<td>$6,104</td>
<td>$6,728</td>
<td>$6,856</td>
</tr>
</tbody>
</table>

1 Operating income and EBITDA are metrics used by the Company to monitor its performance and the definition may be found in the section non-IFRS measures above.
SUMMARY OF RESULTS FOR YEAR TO DATE FISCAL 2021

Sales
Sales for the six months ended December 31, 2020 were $70.36 million, up 17% from the $60.29 million in the same period of fiscal 2020 ended December 31, 2019. The increase in sales was due to the continued growth and compounding of the Company’s services business where the recurring revenue is generated, the acquisition of VoIP Innovations, partly offset by some softening in demand for one-time product sales primarily driven by COVID-19. Overall services revenue as a percentage of total revenue was at 56% in the first six months of fiscal year 2021 compared to 45% in the same period of fiscal year 2020.

Cost of sales and gross profit
The cost of sales for the six month period ended December 31, 2020 was $23.72 million compared to $21.49 million for the same period of fiscal 2020. Gross profit for the first six month period of fiscal 2021 was $46.64 million, 20% higher than the $38.80 million realized in the first six months of fiscal 2020. Gross margin for the first six months was 66% of revenue, 2% higher than the same period in fiscal year 2020 resulting from the impact of the VoIP Innovations acquisition and the steady increase in the percentage of revenue from services.

Operational expense
As permitted under IFRS, costs are allocated by function except for the impact of foreign exchange, which can result in material swings between time periods.

Sales and marketing
Sales and marketing expense was $10.44 million for the first six month period, slightly higher than the $10.34 million for the same period of fiscal 2020. The increase was primarily the result of the expense associated with the addition of VoIP Innovations, spending to drive growth, both partially offset by the cost containment measures undertaken as a result of the COVID-19 pandemic including reductions in travel and marketing expenses.

Research and development
A portion of the Company’s development costs are capitalized each period and amortized on a straight-line basis over three years (see the notes to the audited consolidated financial statements and related notes for the fiscal year ended June 30, 2020 available at www.sedar.com).

The engineering expenses incurred, and the development costs amortized during the six months ended December 31, 2020 were $11.51 million, 3% higher than the $11.20 million in the same quarter last year reflecting slightly higher investment to drive growth as well as the addition of the VoIP Innovations business.

General and administration
General and administration expenses were $17.40 million for the six months ended December 31, 2020 compared to $13.23 million over the same period ended December 31, 2019. The increase is primarily due to the addition of VoIP Innovations during fiscal 2020.

Foreign exchange
There was a foreign exchange gain of $0.03 million for the six months ended December 31, 2020, compared to the $0.28 million loss the same period of fiscal 2020.

**Total operational expense**
Operating expense for the first six months of fiscal 2021 was $39.32 million versus $35.05 million over the same period last year and was primarily accounted for by the acquisition of VoIP Innovations and increased investment to drive growth, which were both partly offset by COVID-related cost controls.

**Operating income (before interest, income taxes and acquisition related expenses)**

As a result of the above, operating income for the six months ended December 31, 2020 was $7.32 million, 95% higher than the $3.76 million in the same period last year.

**Interest**

Net interest expense for the six months ended December 31, 2020 was $1.00 million, lower than the $1.17 million in the same period last year following the lowering of the interest on the debt taken on to finance the VoIP Innovations acquisition through switching to a LIBOR based loan.

**Net income (loss)**

Net income for the six months ended December 31, 2020 was $4.70 million ($0.044 income per share fully diluted) compared to a net loss of $0.42 million ($0.006 loss per share fully diluted) for the equivalent period ended December 31, 2019.

**EBITDA (earnings before interest, taxes, depreciation and amortization)**

For the first six month period of fiscal 2021, EBITDA at $13.56 million and 19% of revenue was 53% higher than the same period last year resulting from the inclusion of VoIP Innovations, the operational efficiencies introduced during fiscal 2020, higher revenue, and the gradually increasing fraction of recurring revenue as the services business growth continues to compound.

<table>
<thead>
<tr>
<th></th>
<th>Six months ended</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>December 31, 2020</td>
<td>December 31, 2019</td>
<td></td>
</tr>
<tr>
<td>Net income (loss)</td>
<td>4,701</td>
<td>(425)</td>
<td></td>
</tr>
<tr>
<td>Tax</td>
<td>1,610</td>
<td>416</td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td>(21)</td>
<td>(43)</td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>1,025</td>
<td>1,210</td>
<td></td>
</tr>
<tr>
<td>Share-based compensation</td>
<td>375</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>Depreciation of property and equipment</td>
<td>400</td>
<td>292</td>
<td></td>
</tr>
<tr>
<td>Depreciation of right-of-use assets</td>
<td>1,615</td>
<td>1,524</td>
<td></td>
</tr>
<tr>
<td>Amortization of intangibles</td>
<td>3,859</td>
<td>3,006</td>
<td></td>
</tr>
<tr>
<td>Acquisition expense</td>
<td>-</td>
<td>2,599</td>
<td></td>
</tr>
<tr>
<td>EBITDA</td>
<td>13,564</td>
<td>8,859</td>
<td></td>
</tr>
<tr>
<td>Percent of revenue</td>
<td>19.3%</td>
<td>14.7%</td>
<td></td>
</tr>
</tbody>
</table>
The above table shows the reconciliation of net income to EBITDA which is a metric used by the Company to monitor its performance and the definition may be found in the section non-IFRS measures above.
LIQUIDITY

As of December 31, 2020, Sangoma had current assets of $116.33 million, current liabilities of $32.90 million, and closed the second quarter of fiscal 2021 with $92.28 million of cash which was down slightly from the first quarter due to the decline in the US dollar exchange rate.

On the operating front Sangoma generated $6.32 million of Adjusted Cash Flow during the second quarter of the fiscal 2021 compared to $0.95 million in the second quarter of the fiscal 2020. The Adjusted Cash Flow during the first six months of fiscal 2021 was $10.23 million compared to $3.89 million in the same six month period of fiscal 2020.

<table>
<thead>
<tr>
<th>Three month periods ended</th>
<th>Six month periods ended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
</tr>
<tr>
<td>Operating activities cash flow per financial statements</td>
<td>6,349</td>
</tr>
<tr>
<td>Less capitalization of development costs</td>
<td>(517)</td>
</tr>
<tr>
<td>Interest earned</td>
<td>(19)</td>
</tr>
<tr>
<td>Interest expense</td>
<td>505</td>
</tr>
<tr>
<td>One time refundable duty payment received in April</td>
<td>778</td>
</tr>
<tr>
<td>Adjusted cash flow from operations</td>
<td>6,318</td>
</tr>
</tbody>
</table>

Despite the COVID-19 situation and higher revenues, accounts receivable of $8.92 million on December 31, 2020 were lower than as at June 30, 2020 ($11.23 million) partly as a result of the higher proportion of revenues coming from services.

Inventories were in line with expectation at $11.45 million on December 31, 2020, $1.19 million lower than the balance as at June 30, 2020.

There are no existing or anticipated defaults or arrears on lease payments or interest payments and Sangoma is in full compliance with all debt covenants. Management of the Company believes that the current working capital and expected funds generated from operations will be sufficient to meet the operating and planned capital expenditures of the Company for the foreseeable future.

CAPITAL RESOURCES

There are no material commitments for capital expenditures at this time but the cyber security review being undertaken may recommend some additional equipment to further secure Sangoma’s internal network.

OFF-BALANCE SHEET ARRANGEMENTS

There are no off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of Sangoma.

RELATED PARTY TRANSACTIONS
Except as disclosed in the notes to the consolidated financial statements, the Company is not party to any material transactions with related parties.

**PROPOSED TRANSACTIONS**

On January 29, 2021, the Company announced a definitive agreement to acquire StarBlue Inc. (dba Star2Star Communications, herein “Star2Star”) for approximately US$437 million, consisting of US$105 million in cash and 110 million common shares of Sangoma Technologies Corporation valued at approximately US$332 million based on the closing price of the Company’s common shares on the TSX Venture Exchange as of January 28, 2021. 22 million shares will be issued at closing, and the remainder are to be issued in instalments commencing on April 1, 2022 and continuing for the next 14 quarters. The transaction is subject to the majority vote of shareholders at a Special Meeting to be held in late March or early April of 2021 with closing expected shortly after the Special Meeting if the transaction is approved. Further details of the contemplated transaction are available on Sedar at www.sedar.com and on the Company’s website. The cash portion of the purchase price will be funded through a combination of cash on hand and an extension of the existing credit facility with its current lenders.

**FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS**

The fair values of the cash and cash equivalents, trade receivables, contract assets, accounts payable and accrued liabilities approximate their carrying values due to the relatively short-term nature of these financial instruments and fair values of operating facility and loans approximate their carrying values due to variable interest loans or loans at market rates.

**OUTSTANDING SHARE DATA**

As of February 4, 2021, there were 111,359,288 issued and outstanding common shares of Sangoma and as of the same date there were outstanding options to acquire 3,954,762 common shares.

**SIGNIFICANT EVENTS**

Ransomware attack:

On December 24, 2020, the Company announced that it had suffered a ransomware cyber attack, had launched a comprehensive investigation to fully ascertain the extent of any data breach, and engaged third-party cybersecurity experts to support these efforts. The investigation so far has confirmed that the attackers encrypted, copied, and published a significant number of confidential files relating to the Company’s financial information, its corporate development efforts, certain private employee data, as well as some customer information and ordering history. There continues to be no evidence that the compromised customer information includes bank account or payment card data. Sangoma took immediate action to mitigate and manage the impact of this attack, has filed a report with law enforcement officials and deployed additional security measures to assist in detecting and preventing any future attempts or incidents of unauthorized access to or malicious activity on
its corporate network. Further, the Company has updated its employees regularly regarding the incident and the possible impact on the security of their personal data, has provided them with actions they can take to protect their personal information from misuse, and is rolling out 24 months of credit and dark-web monitoring and identity theft insurance at the Company’s expense. Finally, Sangoma has been in proactive contact with our customers (as well as other third parties whose data was compromised), to provide clear information as well as appropriate support, and will continue to do so. The analysis of the data believed to have been published is nearing completion and it is expected that most all parties involved will have been notified by March 31, 2021 and that any associated jurisdictional filing will be completed by then as well.

Sangoma has not experienced any service interruptions or outages as a result of the cyber attack that targeted the Company, and all customers continue to use the full suite of Sangoma’s products and services, normally. In addition to the Company’s own investigation, a highly experienced team of third-party cybersecurity experts has to date, uncovered no indication of security threats related to the cyber attack that could create any additional risk for Sangoma’s customers from using our products, nor any evidence to suggest that any intellectual property has been compromised.

COVID-19

In December 2019, there was a global outbreak of COVID-19 (coronavirus), which has had a significant impact on businesses through the restrictions put in place by the national, provincial and municipal governments around the world regarding travel, business operations and isolation and quarantine orders. At the commencement of the COVID-19 outbreak Sangoma was designated as an essential business in many of the jurisdictions in which it operates and continued to receive factory shipments and make deliveries to customers around the world throughout fiscal year 2020 and first two quarters of fiscal year 2021. Despite the challenging period globally, Sangoma maintained momentum during these difficult times, driven by sequential growth in service revenues partly offset by some modest softening in product sales as anticipated.

As indicated previously, there continues to be uncertainty regarding the full impact, duration and pace of recovery from the COVID-19 pandemic on Sangoma’s operations and markets, due to the evolving nature of the virus and the global economic slowdown (including varied governmental responses which may affect Sangoma’s business and prospects). Despite these uncertainties, Sangoma believes it is very well equipped to weather the storm and has taken several proactive steps in an attempt to better manage the challenges of the COVID-19 pandemic. These include:

- Continuing to operate in as close to a ‘business as normal’ manner, as is possible under these conditions, because Sangoma is an “Essential Service” under most all government rulings. Sangoma continues to provide its products and services to so many customers who count upon them, during these challenging times;

- Significant work by Sangoma’s operations teams to ensure that the company is able to maintain supply of all products and services, uninterrupted, to Sangoma’s valued customers throughout the COVID-19 pandemic;
• Reopening offices around the world as local rules allow while remaining able to operate with employees at home quite effectively; and

• Ensuring the company is well positioned, financially, during this crisis. Sangoma has taken prudent, proactive cost control measures as appropriate. Sangoma maintained all principal and interest payments on existing loans and raised equity during July 2020 such that the company is well positioned to continue with its acquisition strategy despite the COVID-19 pandemic.

**POST REPORTING EVENTS**

Since December 31, 2020 the Company has employed cyber security experts to assist the Company protect its internal network and has notified its insurance companies of its intent to claim. At this point it is not yet clear what elements of the work being undertaken will be covered by insurance and the final cost may exceed the $0.4 million already provided for in the second quarter financial statements.

**GUIDANCE**

On October 20, 2020 Sangoma provided guidance for Fiscal 2021 of between $143 and $147 million for revenue and between $24 and $26 million for EBITDA. Given second quarter results, the company is maintaining its guidance.

**ADDITIONAL INFORMATION**

Additional information relating to the Company is filed electronically on SEDAR at [www.sedar.com](http://www.sedar.com).
GLOSSARY OF TERMS

Analog
Analog telephony is the telephone system that dates back to the original experiments by Alexander Graham Bell. The voice signal is picked up by a microphone and transmitted to the central office. Voice signals from the central office consist of voltages that drive a headset to produce sound. Analog means that the voice pressure signals are represented by voltages levels on the line.

API
Application Program Interface: An API is a purpose-built interface that allows fourth party software to interact with a particular application. A typical API is the user interface for Windows that allow programmers to write programs for Windows that use all its built-in utilities. APIs do not depend on revealing source code, in general. They are usually well documented and include sample programs that make development easy.

Codec
In the telephony context a codec is a mechanism of digitally encoding voice. On the PSTN a voice channel takes up 64kbps in a codec standard called G.711. Cell phones use a codec called GSM that compress the voice further so that a GSM call consumes about 24kbps. Other compressed codecs are used in VoIP to conserve bandwidth. These include standards such as G.729, G.723. Most audio codecs are lossy, in that some of the voice quality is degraded by the compression. On the other hand, as bandwidth becomes cheaper, VoIP allows one to use other codecs that in fact use more bandwidth than the PSTN, the so-called broadband codecs that have DVD-like voice quality.

Digital telephony
In the modern PSTN only the “last mile” line to the customer is still analog, all other internal parts of the network are digital. Digital in this case means that at the central office the analog signal from the subscriber’s telephone is sampled digitally, converting the line voltages to a series of numbers that can be easily transmitted error free over long distances. See T1, E1 below.

Gateway
In the telephony context this is typically a separate unit with its own case and power supply that provides VoIP-to-PSTN services for a VoIP network. Almost all gateway devices use SIP interfaces to the VoIP system over Ethernet and have analog or digital telephony interfaces that connect to the PSTN. VoIP gateways are available from many manufacturers including Audiocodes, Cisco, Grandstream, Patton Electronics and many others.

ISDN
Integrated Services Digital Network (“ISDN”) is a set of communications standards for simultaneous digital transmission of voice, video, data, and other network services over the traditional circuits of the public switched telephone network. Of the many variations of ISDN, Sangoma supports BRI (Basic Rate Interface) which is essentially an all-digital replacement for ordinary analog lines and PRI (Primary Rate Interface) which is used over T1 and E1 lines. BRI is very popular outside of North America. PRI is used worldwide.

IP
The Internet Protocol (“IP”) is the primary protocol in the internet layer of the Internet protocol suite and delivers data packets from the source host to the destination host solely based on the IP address.

ISP
Internet Service Provider

ITSP
Internet Telephony Service Provider who offer telecommunications service including voice over internet type connections.

IVR
Interactive Voice Response: IVR systems use the phone to navigate a menu, for example those used by banks to allow access to customer’s account information. IVR systems have typically been driven by dial tones as the buttons on your phone are pressed, but increasingly they are using voice recognition for navigation.
**Open Source**
Open Source software is distributed free subject to certain conditions. Open Source licenses usually stipulate that source code must always be distributed or made available, and any improvements in the code have to be donated back to the community. It is possible to have dual licensing: Open Source to the community and also a closed, commercial license of the same or similar software.

**NetBorder**
This is the trade name of a Sangoma SIP to PSTN gateway product. It includes several other functions in addition to the PSTN gateway function. The mass marketed version is known as NetBorder Express or NBE.

**PBX**
Private branch exchange. A PBX is a premise based device to deliver calls from the PSTN or VOIP network to phones in single or multiple locations.

**PSTN**
Public Switched Telephone Network: This is the standard telephone network that has been in operation for many decades. A telephone or FAX or PBX or other telephony device is generally connected to an analog line at a wall plug, which is connected by “last mile” cabling to the central office. The analog signal from the device is converted to a digital signal at the Telco central office and is multiplexed, 24 simultaneous voice channels per line (in North America) onto a T1 for onward transmission. At the other end of the line the digital channel is reconverted to analog for transmission over the “last mile” to the receiving phone or other device.

**SBC**
A Session Border Controller (“SBC”) is a device deployed in Voice over Internet Protocol (“VoIP”) networks to exert control over the signaling and usually also the media streams involved in setting up, conducting, and tearing down telephone calls or other interactive media communications. SBCs are deployed as demarcation points between enterprises and service providers and between service provider networks.

**Signalling**
Call setup and tear down is remarkably complicated, involving such things as responding to the different tones as well as generating them, caller identification and handling the different features like hook-flash and voicemail properly. There are different signalling mechanisms for different types of circuits. Analog circuits use tones such as out-of-order, busy, ringing as well as the dialling tones. T1 lines often use a data protocol called ISDN PRI, where packets of control data are exchanged on a separate data channel. ISDN PRI is a simplification of the general signalling protocol used internally by the telecommunications networks known as SS7. In all cases signalling has to be exactly compatible with what the Telco expects, so interoperability and standards are important.

**SIP**
Session Initiation Protocol: SIP is the emerging standard signalling protocol for VoIP, though it has much broader applications. SIP is responsible for setting up and teardown of two party and multiparty calls, as well as a host of management features. To a great and increasing extent, VoIP calls are SIP based. The term SIP Trunk is used to describe the provision of a SIP line to an end customer.

**T1, E1**
A T1 line is a circuit that carries 24 digital telephone calls simultaneously. At higher densities, 28 T1s are aggregated into a T3 line carrying 672 calls. Larger offices can also connect to the central office via T1 directly, so as to have only one circuit for up to 24 calls. T1 is standard in North America and Japan while E1 is the standard in the rest of the world. E1 carries 30 channels of digitized voice per line.

**TDM**
Time Division Multiplexing (“TDM”) is used in circuit switched networks to increase the number of calls carried simultaneously on any one circuit and formed the basis for the digital telephony networks.

**Unified Communications**
Unified communications is a concept in which voice, email, messaging, video and any other type of communication are all considered forms of data that can be combined, manipulated and used in intelligent applications in a seamless way.

**VoIP**
Voice over IP: The transfer of voice traffic over the Internet Protocol. IP is used universally for all networking including local area networks and private networks, not just the Internet. So VoIP is not necessarily voice over the Internet, but voice over general data networks.