



2017 ANNUAL REPORT





Mission



Wheat Marketing Center (WMC), located in the historic Albers Mill building in Portland, OR, is dedicated to improving the well being of present and future generations of U.S. wheat farmers and worldwide consumers by conducting wheat utilization research projects and delivering dynamic educational programs in partnership with other international technical and educational organizations.



USW Chinese Contracting for Wheat Value Workshop



Idaho Wheat Commission Growers' Workshop

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CHAIRMAN'S MESSAGE

Leadership

WMC Board of Directors is very pleased with the progress made during 2017. As described in this report, board committees and staff worked effectively together to deliver two major projects -- a new website and updated educational displays – and to continue progress on financial reorganization and management.

In reviewing the courses, workshops and research projects, 2017 also reported strong results in terms of number of courses and participants, new partners, and market-focused research projects. Another feature of the website is the enhanced ability to make research results broadly available to stakeholders and to share WMC's weekly highlights in real time.

WMC staff extended its reach beyond Portland to visit customer facilities. In close coordination with regional U.S. Wheat (USW) offices:

- Managing Director Janice Cooper visited customers in Chile and Peru.
- Technical Director Gary Hou provided technical assistance to cracker customers in Central and South America and visited mills and end product customers in China.

With increased constraints on USW travel budgets, WMC is exploring additional opportunities to share our technical expertise outside of our facility. WMC board members will continue this discussion during a visit to Korean customers in March.

To our seven charter states and other stakeholders, I say thank you for your ongoing support of the Wheat Marketing Center. In this time of ample wheat supplies and challenging trade discussions, the U.S. wheat industry needs to pull together like never before to maintain and expand our markets around the world. Wheat Marketing Center remains focused on and committed to the core mission of improving the understanding of how U.S. wheat can meet the changing demands of global consumers.



Bill Flory, Chairperson
Idaho Wheat Commission

David Clough, Vice Chairperson
North Dakota Wheat Commission

Darren Padgett, Secretary
Oregon Wheat Commission

John Akre, Treasurer
Port of Portland

Brit Ausman
Washington Grain Commission

Keith Bailey
HighLine Grain Growers, Inc.

Steve Beedy
Colorado Wheat

Gregory L. Guthrie
Burlington Northern Santa Fe

Von Johnson
Nebraska Wheat Board

Chris Labbe
Kerr Pacific Corp.

Bruce Myllymaki
Montana Wheat and Barley Committee

Ron Williams
Columbia Grain Inc.

Tom Zelenka

Ex-officio Members

Warren Banks
Portland Community College

Alexis Taylor
Oregon Department of Agriculture



MANAGING DIRECTOR'S LETTER



Greetings from Portland! Thank you to our seven charter state wheat commissions, U.S. Wheat Associates and our many partners and stakeholders for helping to make 2017 another successful year for the Wheat Marketing Center. This report reflects a year filled with technical training courses and grower workshops, multiple research projects, and crop quality testing. But it was also a year of significant change in our outreach and communication methods.

Check out our new website, which includes weekly updates on WMC activities. The new site will enhance our ability to share our course calendar, research results, and other accomplishments with customers and stakeholders. Our emphasis on demonstrating the importance of wheat quality in end products helps reinforce the broader quality message.



We also updated the educational displays in the hallway with help from our charter states – both financial and the sharing of media resources – and from other stakeholders as well.

On the financial and administrative side, we continued to improve operations, cut overhead costs, and diversify income sources. WMC relies on our seven charter states – Idaho, Oregon, Washington, Colorado, Nebraska, Montana, and North Dakota – for the majority of our operating income. Successful business development efforts, particularly in public research and proprietary lab services, are generating additional income for operations.

The WMC Board of Directors, chaired by Bill Flory, is comprised of seven charter state representatives and six members from entities related to the global wheat industry. The knowledge and expertise of the members, many with long service on our board, bring valuable insights to discussions of strategy and business development. The Board meets in March and October, with various committees engaged on financial, personnel, marketing, and governance issues throughout the year. WMC Lab Services, the for-profit subsidiary set up to handle proprietary training, wheat and flour testing, and product development, and WMC Title Holding Co, which holds WMC's half-interest in the Albers Mill Building, have separate Boards of Directors.



WMC staff remains committed to our mission of improving the competitive edge of U.S. wheat through education and research. 2017 brought several changes, as noted in the list below. With the addition of two new staff in early 2018, we are back to full strength. Visiting Scholar Min Xu and a summer crop quality intern rounded out the staff.

WMC is honored to play its role as the “education and research bridge connecting growers and customers.” We are strongly committed to the common goal of supporting U.S. wheat farmers and promoting U.S. wheat. By working together with our partner organizations across the country and around the world, we are better positioned to meet the many challenges facing the wheat industry. May we all have a safe and profitable 2018.

STAFF



Janice Cooper	Managing Director	cooper@wmcinc.org
Gary Hou, Ph.D.	Technical Director	ghou@wmcinc.org
Bon Lee	Laboratory Supervisor	blee@wmcinc.org
Lingzhu Deng	Food Scientist	ldeng@wmcinc.org
Tina Tran	Laboratory Technologist	ttran@wmcinc.org
Margaret Sprinkle	Office Manager	accounting@wmcinc.org
Kin Wong	Laboratory Assistant	info@wmcinc.org



442

tour
guests

20

Courses



192

course
participants



10,129

*lab
tests*

26



countries
engaged

74

grower

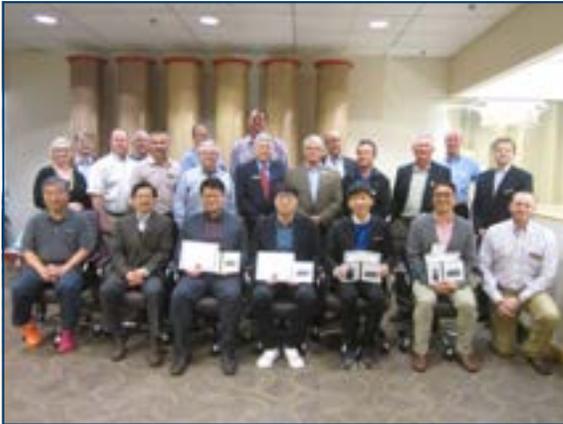
workshop

participants



COURSES & WORKSHOPS

WMC hosts multiple technical training courses and growers' workshops each year. For a current list, please see the back cover or visit our website, wmcinc.org.



USW Korean Noodle Team



WMC Cookie and Cracker Course



China Bakers Team



WMC Noodle Course



BAKERpedia Artisan Bread Course



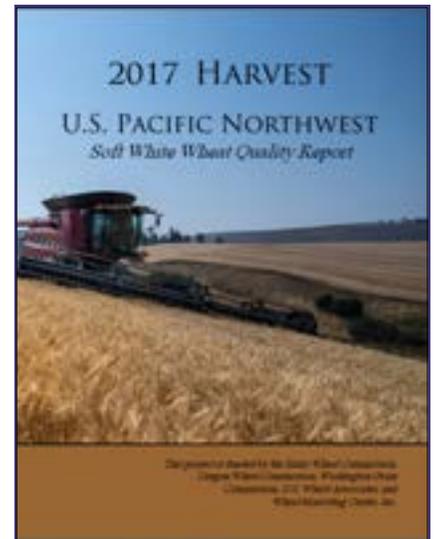
Education



BBGA Rye Bread Course



U.S. wheat competes in the world market based on its high quality and reliable supply. Each year, Wheat Marketing Center joins other quality laboratories from around the country in testing and documenting the quality characteristics of the current crop. In cooperation with elevators and grain facilities in Idaho, Oregon and Washington, harvest samples of PNW wheat are collected and sent to WMC where tests are performed and results reported weekly throughout the harvest season. In addition to this weekly testing, WMC produces an in-depth Crop Quality Report on soft white wheat (funded by the PNW wheat commissions) and provides data on soft white and hard white wheat for the comprehensive USW Crop Quality Report. WMC also participates in the regional evaluations of new varieties being considered for release.



RESEARCH HIGHLIGHTS

WMC's research projects focus on the end use quality of U.S. wheat, improvement of whole-wheat flour products, and enhancement of nutritional benefits in wheat foods. Often, research topics are chosen in response to harvest challenges and/or market opportunities. Subjects this year include:



Soft White Wheat Functional Characteristics for Crackers



Developing Instant Noodles with Aleurone-fortified Flour



Substituting Soft White Bran in Whole Wheat Noodles



Improving Quality Attributes of Whole Wheat Tortillas

STONE MILL

The **Engsko Stone Mill** is the most recent addition to WMC's milling equipment (and thanks to the Montana Wheat and Barley Committee for its financial support.) The Engsko mill produces stone ground flour with wide ranges of bran inclusion using different sifting sieves. This mill will enhance research capabilities related to improving whole grain end products and expand technical training options.



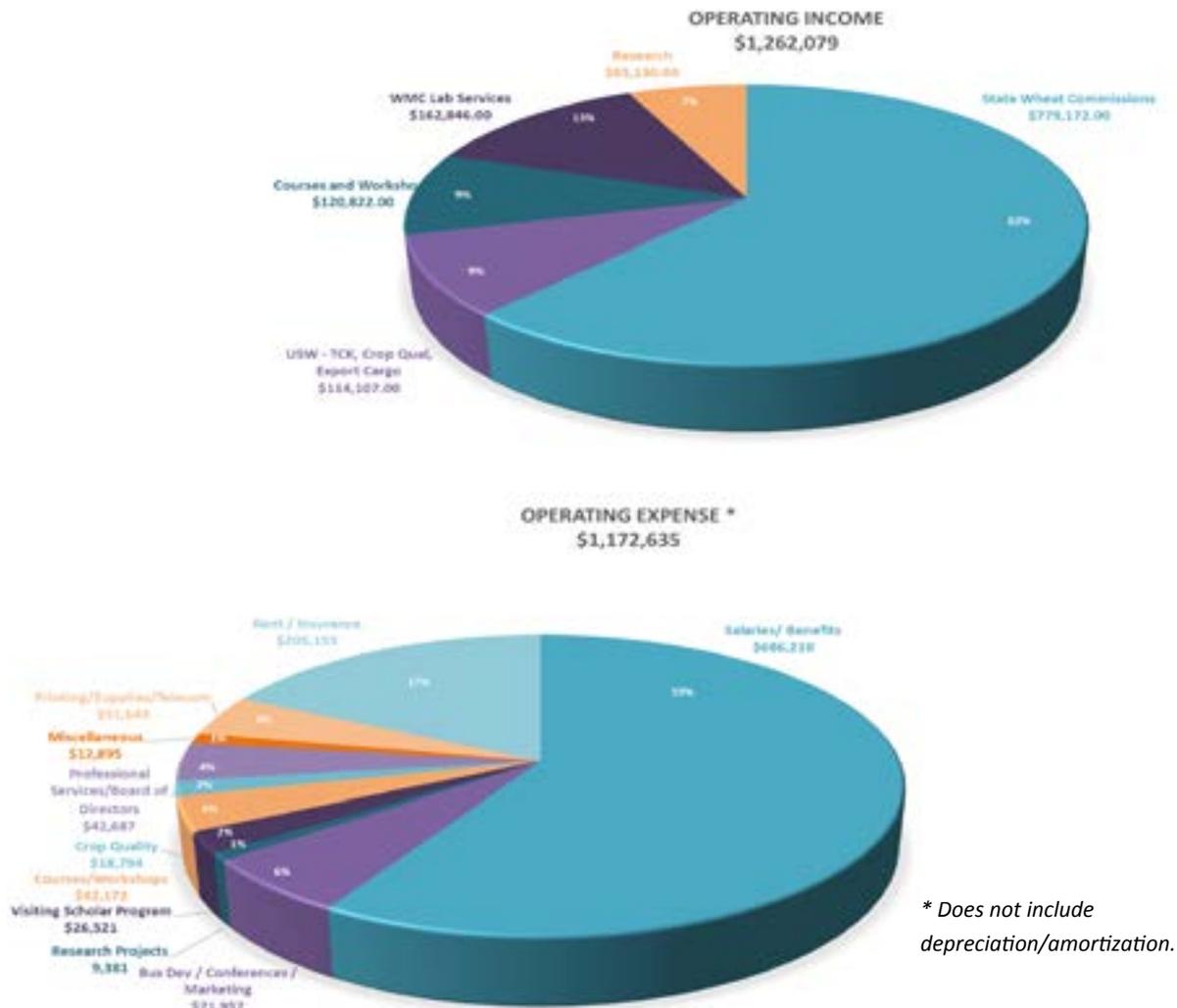
Bon Lee, Kin Wong and Tina Tran showing off the new Stone Mill



FINANCIAL REPORT – FISCAL YEAR 2016/17

Operating Budget: Wheat Marketing Center received 62 percent of its operating income from state wheat commissions (down from 77 percent in the prior fiscal year.) The seven WMC charter states – Oregon, Washington, Idaho, Montana, North Dakota, Nebraska, and Colorado – funded several programs including: general support, crop quality, grower workshops, research, Visiting Scholars, and display upgrade. South Dakota also provided some funding. WMC appreciates this strong support and looks forward to continued and expanded engagement with wheat growers across the country.

Approximately 59 percent of operating expense covers salaries and benefits for WMC’s highly trained staff. Other major expense items include rent, business development, Visiting Scholars, utilities and telecom, and insurance. The annual fiscal audit resulted in a clean report and found that 87 percent of expenditures were put toward program activities and the balance for administration.



Capital Budget: Capital income is derived primarily from WMC’s half-ownership in the Albers Mill Building. Starting with FY 16/17, operating and capital budgets were separated to demonstrate that state commission dollars are not being used for building-related expenses. WMC received \$420,000 in building income, half of which was invested back into the building partnership for capital improvements. Close to \$90,000 was spent on the display upgrade project, and equipment purchase, repair and maintenance.



With the generous support of several state wheat commissions, Wheat Marketing Center acquired three major pilot scale production lines that enhance its research, product development and technical training capability. The Asian Noodle Line is a complete line including vacuum mixer, dough sheeters, a series of rollers, slitter, steamer, fryer, and dryer. It mimics the commercial noodle production and is very suitable for technical training, research and product development purposes. The Cracker/Biscuit Line, one of only two in the world, can be adapted to many types of products, including saltine cracker, snack crackers, Marie-style semi-sweet biscuits, and various types of rotary cookies. The Tortilla Line, enables WMC to build on its extensive research on improving whole wheat tortilla quality.

The Wheat Innovation Lab is the first stop for the many visitors to the Wheat Marketing Center. The ability to demonstrate cracker, Asian noodle and tortilla production clearly illustrates how different wheat classes are used (alone and in blends) and the impact of wheat quality on end product quality.



Asian Noodle Line



Cracker/Biscuit Line



Tortilla Line

WMC Lab Services, Inc.

To accommodate requests from customers for confidential assistance, WMC Lab Services, a for-profit entity, was established to conduct proprietary research, lab analysis and training.

WMC Lab Services provides a range of services including quality testing, cracker/biscuit, Asian noodle, tortilla, and other product development on our pilot scale production lines, and customized training for technical staff. Under a lease agreement, WMC Lab Services reimburses Wheat Marketing Center for facility and staff use. WMC Lab Services is governed by a separate board of directors.



WMC LAB SERVICES

Tom Zelenka, Chairperson

Dave Stone, Secretary

Food Innovation Center
(OSU)

Brian O'Toole

North Dakota Wheat Commission

Steve Wirsching

US Wheat Associates

Ex-officio Members

Bill Flory

Idaho Wheat Commission

Mark Hodges

Plains Grains, Inc.



VISITING SCHOLARS

In 2001, Wheat Marketing Center (WMC) initiated a scientific technical exchange program for Visiting Scholars to perform research on selected topics. Scholars have come from many key markets, including Japan, Taiwan, Mexico, China, and Korea. Since the program's inception, WMC has hosted 25 visiting scholars from nine countries.

The Visiting Scholar program is designed to attract highly-skilled researchers from key markets around the world to the Wheat Marketing Center where they can enhance their knowledge and understanding of U.S. wheat utilization and share their own expertise with WMC technical staff. The Visiting Scholars engage in specific research jointly defined by the scholar and WMC Technical Director Dr. Gary Hou to support the interests and objectives of WMC's partners. Such exchanges not only strengthen relationships and create networks with current and emerging technical leaders but also provide insight for building foundations for better recognition of the comparative advantages of using U.S. wheat in existing and new product markets.

Ms. Min Xu, Ph.D. Student at the College of Tea and Food Science and Technology, Anhui Agricultural University, is our current scholar. She is conducting the following projects:

- Investigating the use of green tea extract to improve Asian noodle antioxidant and end product quality
- Studying the interaction between wheat starch and tea polysaccharide in Asian noodles
- Studying the functionality of tea proteins and catechins in dough strength

In addition to her specific research projects, Min provides staff support for WMC technical short courses, facility tours, other research projects, and crop quality analysis.



NEW WEBSITE

The new website, launched in October, enhances WMC's ability to communicate with customers and stakeholders. The site is updated frequently with information on WMC weekly activities and monthly featured partners.

The new home page showcases WMC's Wheat Innovation Lab with its pilot scale production lines for crackers/biscuits, Asian noodles, tortillas, and bagels. This highly-specialized equipment, in combination with the rich technical expertise of our staff, enables WMC to demonstrate the quality and functionality in U.S. wheat in a wide range of end products.



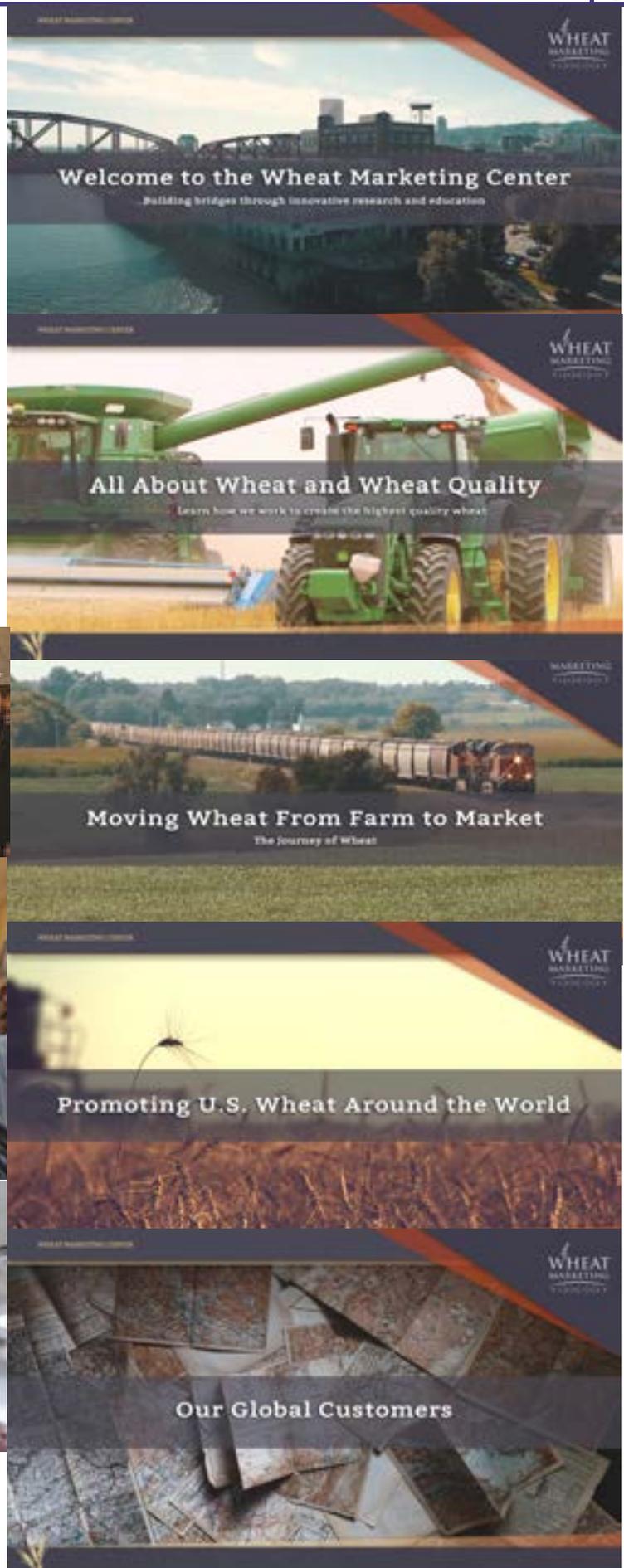
See the Research/Publications tab for access to the many articles and reports published by Dr. Gary Hou and collaborating scientists. The Wheat Quality tab explains how wheat is tested for quality and why it is important. We encourage you to visit our website, explore the drop-down menus, and sign up for news and updates. www.wmcinc.org

EDUCATIONAL DISPLAYS



Wheat Marketing Center was granted 501c (3) non-profit status as a research and education center in 1989. The displays, located in the hallway outside our center, continue to be a key component in carrying out this educational mission. The original displays were installed in 1989 and remained largely unchanged until this year. We have employed current technology to help us tell a more complete story of how wheat is grown and what happens to it after it is harvested. Five panels (with tablet-based controls) feature different parts of wheat's journey from farm to market.

The WMC Board celebrated the display unveiling with close to one hundred guests representing customer countries, the grain trade, ports and transportation companies, FGIS Officials, and other partners.





2018 HIGHLIGHTS

Wheat Marketing Center has an exciting year planned for 2018. In addition to our full complement of USW and WMC-sponsored technical training courses and commission-sponsored grower workshops, we are hosting another Bread Bakers Guild class, welcoming the board of Wheat Foods Council to Portland, and participating in both USW regional buyers' conferences.

We are also expanding course offerings featuring new technologies and techniques through our partnership with BAKERpedia. WMC board members will visit Korean customers in March to thank them for their frequent utilization of WMC research and training facilities. The Visiting Scholar program will welcome new participants from different regions.

For more details, call our office, follow us on social media, or join us at the Spring Board of Directors meeting on March 22, 2018.

Grower Workshops

- Jan 15** Idaho Farmers
*Sponsored by
Idaho Wheat Commission*
- Jan 18** Oregon Farmers
*Sponsored by
Oregon Wheat Commission*
- Mar 5-8** Montana Farmers
*Sponsored by
Montana Wheat & Barley Committee*
- Nov 28** Washington Farmers
*Sponsored by
Washington Grain Commission*
- Dec 5-7** Montana Farmers
*Sponsored by
Montana Wheat & Barley Committee*

WMC Courses

- May 22-24** Asian Noodle Technology Short Course
- May 31 Jun 1** Versatile Whole Grain Dough
Sponsored by BBGA/Hosted by WMC
- Jun 26-29** Cookie & Cracker Technology Short Course
- Aug 1** Science of Sourdough / *Bakerpedia*
- Aug 15** Science of Flour/*Bakerpedia*

USW Courses

- Apr 9-18** Nigerian Asian Noodle Technology Short Course
USW/Cape Town and Lagos Offices
- May 7-11** COFCO CFVV Workshop
USW/China Office
- Jun 4-8** Taiwan Flour Quality Study, Frozen Dough
USW/Taipei Office
- Jun 18-22** Korea Baking Products Study Team
USW/Seoul Office
- Sept 10-14** Korea Contracting for Wheat Value Workshop
USW/Seoul Office

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Wheat Marketing Center



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