

2020 GLOBAL ARCHITECTURAL COATINGS NEW PRODUCT INNOVATION AWARD

FROST & SULLIVAN

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Background and Company Performance

Industry Challenges

Professionals and do-it-yourself (DIY) customers are the two main groups influencing the global architectural coatings market. However, the product preferences of these customer groups vary. While professionals prioritize quality and finish, the ease of application, environmental friendliness, and cost-effective products attract the DIY segment. There are also variances in systems developed for application on different substrate materials (e.g., masonry, wood, and metal). Therefore, manufacturers equipped with diverse product lines are likely to gain a competitive advantage over other participants.

Market influencers of architectural coatings, including regulatory authorities and customers, emphasize sustainability and improved air quality as essential criteria for product purchase, especially for interior applications. Companies proactive in the innovation and development of new products and technologies that can reduce dependence on conventional products are likely to gain customer preference.

The outbreak of the COVID-19 pandemic has impacted the global architectural coatings industry. With country-wide lockdowns implemented since early 2020 around the world, manufacturers of architectural coatings have been experiencing significant challenges due to the stalling of ongoing projects or cancellation of planned projects. However, companies stand to gain by focusing on research and development (R&D) and commercializing products for interior applications. Enhancement of internal air quality is expected to be a driver in repainting residential and commercial interiors soon. Manufacturers need to develop products that enable ease of installation and do not compromise the product's quality and finish as DIY customers are anticipated to make up a considerable share of users of these new products. Apart from DIY, the demand for such innovative products in the professional circuits mainly by application and contracting companies, installers, facility management, maintenance, hotels and renovation sectors is also going up. These solutions are required for Interior settings for a healthy living along with better sustainability aspects.

New Product Attributes and Customer Impact

Headquartered in Ober-Ramstadt, Hessen, Germany, DAW is a leading global manufacturer of decorative architectural coatings. Since 1895 DAW has developed, produced and sold innovative coating systems. As an independent family company in its fifth generation, it has continued to grow to become the third largest manufacturer of building paints in Europe and for decades the company has been the market leader in Germany.

DAW group is the driver of innovation in coating materials, thermal insulation and building protection and is a reliable partner for its customers and suppliers. DAW Group is the home to numerous stalwart brands one of which is Caparol. In addition to architectural coatings, Caparol supplies a range of external thermal insulation composite systems (ETICS), acoustic and building protection products. It has a dedicated in-house team of R&D professionals and technical specialists focusing on the innovation and development of

new, environmentally friendly products with superior performance. The German Sustainable Building Council (DGNB) and the Leadership in Energy and Environmental Design (LEED) have certified its sustainability standards.

Caparol Paints entered the Middle East market in 1999 with its technologically advanced, modern and sustainable products. With production in UAE, Caparol is spearheading the drive for architectural creativity in Middle East and Africa (MEA). Its logo, the striped elephant, has been synonymous with reliability, technical expertise and outstanding product performance. Its stone finishes have gained remarkable acceptance in the Gulf Corporation Council (GCC) markets and is the best product in the region since 20 years. Caparol Paints has already introduced innovative products such as CapaCare Airpurify (formaldehyde abatement technology, CleanStar (premium clean), nano technology driven products and phenolic foam insulation systems – all of which are first of the kind in the Middle East market.

In 2019, Caparol Paints marked its twentieth anniversary of successful operations in the region. Some of our prestigious projects include GEMS International School, Akoya by Damac, Rove Hotels, Nshama Town Square, La Ville Hotel and Resorts - Citywalk, BoxPark, The Ritz Carlton DIFC, Sofitel Hotel JBR, Shorooq Mirdif, Jumeirah Village Triangle Villas, Nizwa Souq, Eco-House Complex Muscat, Sultan Qaboos Youth Sports Complex, and Royal Oman Police Complex - Quram, Mosaic Towers - AL Khuwair. Caparol always looks forward to supporting the region with innovative, eco-friendly and sustainable solutions for a healthier living.

Addressing Unmet Market Needs through Innovation and Product Development

Caparol is committed to developing environmentally friendly solutions that contribute to comfortable and healthy living spaces. It focuses on offering superior coating products to customers and invests in developing advanced technologies and products based on the market's existing and emerging needs. As a company vision from its CEO Dr. Ralf Murjahn, "Everyone should be living and working in healthy, well-designed, efficient and sustainably constructed building". Since the beginning of the Covid-19 pandemic, its expert solutions team worked incessantly and responded in the quickest time in response to the virus, with the introduction of CapaCare Protect, a premium anti-microbial paint suited for homes, hospitals, clinics and day-care centers. It introduced the premium emulsion interior coating under the brand name CapaCare Protect in April 2020. The product is formulated with SILVERbac® technology, which uses silver ions to bind and destroy biological contaminants, including bacteria and viruses. CapaCare Protect can kill 99.9% of Human Coronavirus and H1N1 influenza tested as per American and Japanese standards in two independent ISO 17025 laboratories approved and accredited by the International Antimicrobial Council in the United States^{1,2}. It also features properties such as zero smell, zero volatile organic compound (VOC) content, Superior washability (up to

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¹ Caparol Arabia's innovative anti-microbial paint tested and proven to help the fight against COVID-19, August 4, 2020, Construction Business News, accessed from https://www.cbnme.com/suppliers/caparol-arabias-innovative-anti-microbial-paint-tested-and-proven-to-help-the-fight-against-covid-19/
² Caparol launches new interior paint with anti-microbial properties, April 5, 2020, ME Construction News, accessed from

² Caparol launches new interior paint with anti-microbial properties, April 5, 2020, ME Construction News, accessed from https://meconstructionnews.com/40346/caparol-launches-new-interior-paint-with-anti-microbial-properties

25000 cycles - tested as per DIN standards), fungal resistance (tested according to ASTM D3273-94), and zero heavy metals content (tested according to ASTM E1613/IHP028).

The company manufactures the product at its production plant in the United Arab Emirates (UAE) and is available to customers in the Middle East. Caparol plans to offer CapaCare Protect beyond the region in the future. Amid the widespread transmission of SARS-CoV-2, the company prioritized making this product available for the healthcare sector. Since then, CapaCare Protect has been used in various hospitals, schools, commercial facilities, and residential buildings in the region. Frost & Sullivan anticipates the product's ability to kill coronaviruses to propel its rapid adoption in the Middle East and beyond soon.

Based on Frost & Sullivan's analysis, Caparol's superior technology and products, which have been upgraded many times over the years, remain highly regarded among customers worldwide for their enhanced value and durability.

Offering Efficient Customer-Centric Processes

The company believes in enhancing customer experience by remaining close to customers throughout the entire product life cycle, from development to delivery. It synergizes various business teams such as sales, marketing, R&D, product development, and customer and technical services to provide excellent product value. Localization of operations is a vital enabler of this strategy because it allows Caparol to monitor local market conditions and provide localized solutions.

The company remains committed to digitizing its operations to allow faster and superior services for customers. It provides customers tools such as SPECTRUM which can be used as a visualization aid while making product choices, either during a consultation meeting with Caparol's experts or creating an independent product, colour or design selection. A workflow system for its internal operations allows the company to streamline all its internal processes using Intranet. Accessible to employees from anywhere using Intranet or mobile devices, the system enables faster processing of approvals. This paperless system ensures a quick turnover of forms and other applications within the company, ultimately allowing speedier customer service which is the core offering of Caparol.

Caparol offers efficient products and excellent logistics management through experienced product development professionals, ensuring product delivery to distributors and direct customers. Fostering a team of experienced professionals from leading industry manufacturers with proven track records acts as an additional validation of its ability to produce high-quality and reliable products. Customers view it as a provider of superior technical and post-purchase services compared to competitors. Frost & Sullivan applauds Caparol for its inclusive, customer-focused approach and preemptive procedures to ensure customer satisfaction and environmental best practices in the industry.

Conclusion

Caparol's extensive portfolio of architectural coatings results from innovative formulations developed in compliance with regulatory parameters and changing industry requirements that manufacturers must follow in various regional markets. The company's product lines feature next-generation coatings that provide extended durability, superior health benefits, and greater environmental sustainability than competing products in the market. With the high value associated with its range of architectural coatings, Caparol has established a strong market presence with a growing customer base. Frost & Sullivan believes that with the introduction of the new and impressive CapaCare Protect, Caparol is set to continue strengthening its market position over the coming years.

For its strong overall performance and launch of CapaCare Protect, Caparol Paints has earned Frost & Sullivan's 2020 New Product Innovation Award.

Significance of New Product Innovation

Ultimately, growth in any organization depends on continually introducing new products to the market and successfully commercializing those products. For these dual goals to occur, a company must be best in class in three key areas: understanding demand, nurturing the brand, and differentiating from the competition.



Understanding New Product Innovation

Innovation is about finding a productive outlet for creativity, for consistently translating ideas into high-quality products that have a profound impact on the customer.

Key Benchmarking Criteria

For the New Product Innovation Award, Frost & Sullivan analysts independently evaluated 2 key factors, New Product Attributes and Customer Impact, according to the criteria identified below.

New Product Attributes

Criterion 1: Match to Needs

Criterion 2: Reliability
Criterion 3: Quality
Criterion 4: Positioning
Criterion 5: Design

Customer Impact

Criterion 1: Price/Performance Value

Criterion 2: Customer Purchase Experience Criterion 3: Customer Ownership Experience Criterion 4: Customer Service Experience

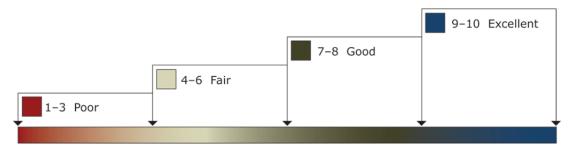
Criterion 5: Brand Equity

Best Practices Award Analysis for Caparol Paints

Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows research and consulting teams to objectively analyze performance according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation. Ratings guidelines are illustrated below.

RATINGS GUIDELINES



The Decision Support Scorecard considers New Product Attributes and Customer Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criterion are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, Frost & Sullivan has chosen to refer to the other key participants as Competitor 1 and Competitor 2.

Measurement of 1–10 (1 = poor; 10 = excellent)			
New Product Innovation	New Product Attributes	Customer Impact	Average Rating
Caparol Paints	9.9	9.9	9.9
Competitor 1	9.0	9.2	9.1
Competitor 2	8.5	8.3	8.4

New Product Attributes

Criterion 1: Match to Needs

Requirement: Customer needs directly influence and inspire the product's design and positioning.

Criterion 2: Reliability

Requirement: The product consistently meets or exceeds customer expectations for consistent performance during its entire life cycle.

Criterion 3: Quality

Requirement: Product offers best-in-class quality, with a full complement of features and functionalities.

Criterion 4: Positioning

Requirement: The product serves a unique, unmet need that competitors cannot easily replicate.

Criterion 5: Design

Requirement: The product features an innovative design, enhancing both visual appeal and ease of use.

Customer Impact

Criterion 1: Price/Performance Value

Requirement: Products or services offer the best value for the price, compared to similar offerings in the market.

Criterion 2: Customer Purchase Experience

Requirement: Customers feel they are buying the optimal solution that addresses both their unique needs and their unique constraints.

Criterion 3: Customer Ownership Experience

Requirement: Customers are proud to own the company's product or service and have a positive experience throughout the life of the product or service.



Criterion 4: Customer Service Experience

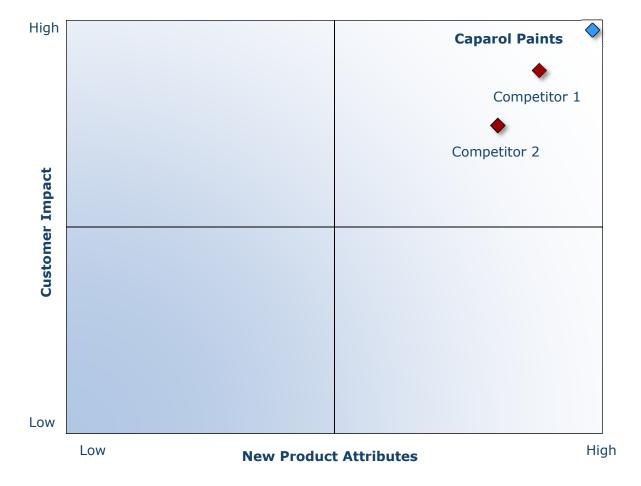
Requirement: Customer service is accessible, fast, stress-free, and of high quality.

Criterion 5: Brand Equity

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

Decision Support Matrix

Once all companies have been evaluated according to the Decision Support Scorecard, analysts then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.



Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

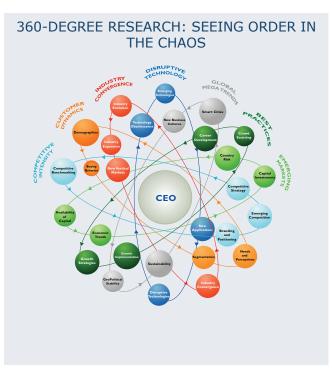
Frost & Sullivan analysts follow a 10-step process to evaluate award candidates and assess their fit with select best practices criteria. The reputation and integrity of the awards are based on close adherence to this process.

STEP		OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	Monitor, target, and screen	Identify award recipient candidates from around the world	 Conduct in-depth industry research Identify emerging industries Scan multiple regions 	Pipeline of candidates that potentially meet all best practices criteria
2	Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	 Interview thought leaders and industry practitioners Assess candidates' fit with best practices criteria Rank all candidates 	Matrix positioning of all candidates' performance relative to one another
3	Invite thought leadership in best practices	Perform in-depth examination of all candidates	 Confirm best practices criteria Examine eligibility of all candidates Identify any information gaps 	Detailed profiles of all ranked candidates
4	Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	 Brainstorm ranking options Invite multiple perspectives on candidates' performance Update candidate profiles 	Final prioritization of all eligible candidates and companion best practices positioning paper
5	Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	Share findingsStrengthen cases for candidate eligibilityPrioritize candidates	Refined list of prioritized award candidates
6	Conduct global industry review Build consensus on award candidates' eligibility		 Hold global team meeting to review all candidates Pressure-test fit with criteria Confirm inclusion of all eligible candidates 	Final list of eligible award candidates, representing success stories worldwide
7	Perform quality check	Develop official award consideration materials • Perform final performance benchmarking activities • Write nominations • Perform quality review		High-quality, accurate, and creative presentation of nominees' successes
8	Reconnect with panel of industry experts	Finalize the selection of the best practices award recipient	Review analysis with panelBuild consensusSelect recipient	Decision on which company performs best against all best practices criteria
9	Communicate recognition	Inform award recipient of recognition	 Inspire the organization for continued success Celebrate the recipient's performance 	Announcement of award and plan for how recipient can use the award to enhance the brand
10	Take strategic action	Upon licensing, company is able to share award news with stakeholders and customers	 Coordinate media outreach Design a marketing plan Assess award's role in strategic planning 	Widespread awareness of recipient's award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of the research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, resulting in errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research evaluation methodology provides an platform benchmarking industry for



participants and for identifying those performing at best-in-class levels.

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, helps clients accelerate growth and achieve best-in-class positions in growth, innovation, and leadership. The company's Growth Partnership Service provides the CEO and the CEO's growth team with disciplined research and best practices models to drive the generation, evaluation, and implementation of powerful growth strategies. Frost & Sullivan leverages nearly 60 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on 6 continents. To join Frost & Sullivan's Growth Partnership, visit http://www.frost.com