Independent provider of disruptive and advanced digital manufacturing services and devices since 1987

SCALABLE EXPERTISE

- Progressive design and metal additive manufacturing
- Proto3DShop, a concept store for 3D printers
- Turnkey provider of Microfactories and Shared Manufacturing Units
- Experience of the rapid prototyping market since 20 years

Our vision: "Changing the equation of tomorrow with mutating solutions"

Yannick Loisance, CEO
Multistation sells and provides value added services for disrupted and advanced new and used digital manufacturing and rapid prototyping devices, taking into account the structure and the material of the pieces to produce.

Multistation has selected since 1987 a wide program of reliable software and machines of different processes able to design and manufacture prototypes or series of complex pieces; these machines accelerate the product development life and minimize the engineering costs.

Machines are coming from a panel of 500 worldwide industrial partners: rapid prototyping, additive manufacturing machines, complex machines tools, second hand digital manufacturing machines.

The scalable business model can be defined as follows:

- loyal and professional dealer or representative, with or without exclusive contract.
- provider of added value services: marketing positioning, audit of clients demand, maintenance, training, turnkey deliveries of complete manufacturing solutions.

Large diversified customer base, more than 200 Mio € delivered to SME or large companies during the last 20 years, automotive, aerospace, railways, education, medical, luxury… a database of 20 000 companies.

A wide international commercial network of experienced sales and service people matching offer and demand:

- by answering the new needs for disruptive equipment and global worldwide demand.
- by getting orders through direct sales, internet platform or through the Proto3DShop a concept store for 3D printers and RP equipment for FabLabs.

Multistation is an international independent trade mark, built since 1987.
History

1st Industrial Revolution 1784 steam machine, hydraulic and fossil energy.

2nd Industrial Revolution end of 19th Century, electrical energy, mass production.


2010 - 4th Industrial Revolution Industrial Internet, virtual design.

1987 Foundation of Multistation: CadCam software and 5 axis machine tools distribution.

1992 Opening of the RAPID PROTOTYPING Division for industry and education.

1995 MULTIRAIL Railways machines, machines for COMPOSITE AUTOMATION.

2002 SECOND HAND MACHINES, international development.

2010 Opening of the Proto3DShop, a concept store in central Paris for selling 3D printers and turnkey Microfactories or Shared Manufacturing Units.

2014 Opening of the PROGRESSIVE DESIGN an MANUFACTURING CENTER
25 years know how and marketing experience in DIGITAL MANUFACTURING in high technology niches:

- **Disruptive technologies**, with which it is possible today to manufacture what we were unable to do before.
- **Advanced technologies** with high level automatization and performance.
- **Digital Manufacturing**, manufacturing based on a numerical modelization.

Four divisions:

1. **MICROFACTORIES**: rapid prototyping for education, B to B and B to C.
2. **PROGRESSIVE DESIGN** and **ADDITIVE MANUFACTURING** for Industry, R & T.
3. **MACHINES TOOLS** for transport, power generation, medical…
4. **SECOND HAND MACHINES DIVISION**: Multistation Second Life.

Selected clients references: AIRBUS, ZODIAC, SNECMA, TURBOMECA, ALSTOM, GE, SNCF, GENERAL ELECTRIC, RENAULT, PSA, CEA, CNRS, CARTIER, UNIVERSITIES…

We are selling and have sold machines, notably of following manufacturers:

LIECHTI - MIKROMAT - FOOKE - UNIOR - RAFAMET- POREBA - COLGAR - SAFOP LINSINGER - WOHLLENBERG - TERRUZZI - EHA - SOLIDSCAPE - 3D SYSTEMS - 3D SCANNERS ARCAM - SLM SOLUTIONS - OPTOMEC - DAVID Scanners …
divisions

1/RAPID PROTOTYPING for education, Microfactories and B to C
RAPID PROTOTYPING MACHINES FOR B TO C, EDUCATION, MICROFACTORIES AND DESIGN BUROS

3D printers, low cost, kits... Semi-professional 3D Printers

Rapid Prototyping machines: wax deposition, paper laminating, fused deposition modelling, stereolithography, diode light projecting...

Cutting machines: milling, laser, waterjet - Engraving machines

Vacuum, express casting - Thermoforming - 3D scanning

Cadcam, design and surface reconstruction software

These machines are demonstrated in our concept store PROTO3DSHOP, down town Paris.

We are turnkey MICROFACTORIES equipment provider: a MICROFACTORY or shared manufacturing unit is a small-scale workshop offering digital manufacturing capacity like small machine tools, 3D printers, laser or water jet cutting machine, routing milling machines, vinyl cutting plotters, table lathe, desk milling machine, thermoforming...
2 divisions

1/ RAPID PROTOTYPING for education, Microfactories and B to C

2/ PROGRESSIVE DESIGN AND ADDITIVE MANUFACTURING

Medical implant by SLM Solutions AG
Progressive design

- Topological optimization, automatic generation of lattice structures, in process simulation, FEA and fatigue analysis...

Additive Manufacturing

- Direct Manufacturing,
  - Wax for investment casting
  - Electron beam melting Process, titanium, inconel...
  - Selective laser melting of any metal
  - Direct metal deposition of any metal
  - Sand casting production of cores and molds in sand

- CONTROL: X rays digital tomography...
- POSTTREATMENT by high speed milling
3 divisions

1/ RAPID PROTOTYPING for education, Microfactories and B to C
2/ PROGRESSIVE DESIGN AND ADDITIVE MANUFACTURING
3/ MACHINES TOOLS for transport, power generation, medical…
Milling and cutting machines
- Machining centers for aerofoils: blades, blisks, impellers…
- Milling & boring machines for heavy machining.
- Mobile 5 axis milling machines for car design, marine and architectonics applications.
- Edge milling machines for windmill and steel industry.

Turning lathes
- Horizontal or vertical heavy duty lathes for military and power generation.

Deep boring machines and drilling machines
- Deep boring, special drilling for power generation.

Railways machines
- Wheel lathes, washing, maintenance, depot equipment, rails reprofiling…

Machines for aerospace and composite automation
- Machining of engines components.
- Riveting and assembling of large aerostructures.
- Laminating vacuum systems.
- Filament winding machines, impregnation, coating and impregnation lines, dryers.
- Autoclaves for rubber vulcanization, for composites curing.
- Textile cutting.
- Routing, carbon milling and drilling, detouring machines for any scale.
- Aluminum or carbon profile machining for stringer, aircraft floor…

Click for video of blade milling by LIECHTI
4 divisions

1/ RAPID PROTOTYPING for education, Microfactories and B to C
2/ PROGRESSIVE DESIGN AND ADDITIVE MANUFACTURING
3/ MACHINES TOOLS for transport, power generation, medical…
4/ SECOND HAND MACHINES DIVISION: Multistation Second Life

Second hand conventional railways wheel lathe RAFAMET, yom 1988
**MULTISTATION SECOND LIFE**

[www.multistation.com/-Occasion](http://www.multistation.com/-Occasion) is an international market place developed since 2002

**Brokerage activity, under confidentiality agreement, in following fields:**

- Rapid prototyping, 3D scanning devices, all brands
- Additive manufacturing machines
- Machine tools, 5 axis milling, engraving, large lathes, cutting all process, EDM…
- Composites: autoclaves, filament winding, impregnation…
- Testing LAB equipment: ovens, tomographs, acquisition, CMM, measuring …
- Railways maintenance: boring, repfiling, washing, testing
- Power generation: turbines…
- Special machines for automatisation: robots, production lines…
- Medical imaging: scanners, ultrasounds, MRI, mammographs

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**Multistation, partner in technology assets management:** investments, desinvestments, production relocation, liquidations, auctions…

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**Origin of machines:** worldwide machines builders, European banks, leasing companies and leading firms like automotive, aerospace, railways, administrations, sub-contractors… Sales of used machines, plant transfers or workshop closing… Auction sales or private treaty… Relocation
1/RAPID PROTOTYPING
- Multistation is a pioneer of the 3D printing market, forecasted for explosive growth to 8.4 Billion USD by 2020 with an expected growth rate of 23% p.a.
- 3D PRINTING, hobbyists, makers, schools, designers, companies testing the concept with entry level products.
- FAB LABS for makers, schools, microfactories, shared manufacturing units.

2/ADDITIVE MANUFACTURING, lattice engineering, healthcare and aerospace
- Factors contributing to the 3D printing industry's growth include advances in technology, the ability to shrink to-market time frames, expiring patents, and heavy government investment.
- Further, the industry will push into more materials such as polymers, metals and alloys, ceramics, sand, and even living tissue.
- Additive manufacturing market will see double digit growth in the next few years and volume is expected to double by 2015. Metal AM market has higher growth rates than plastic AM.
- Companies getting in on the ground floor of a global explosion will reap huge benefits. (Source: Wohlers Associates). GE is planning to produce in 2020 100 000 pieces of engines in additive manufacturing, particularly for Leap and GE 9X engines. (Source: ROLAND BERGER Strategy Consultants report: "ADDITIVE MANUFACTURING, a game changer for the manufacturing industry", München, Nov 2013).

3/MACHINES TOOLS: all the users of heavy duty and complex machines tools, like
- Engines and aero structures for aerospace industry.
- Transport: railways, automotive, linked to infra structures investment.
- Steel industries, offshore wind mills.
- Academic: huge equipment planned in this field.
- Particularly, customers in relocalization process.

4/SECOND HAND MACHINES
- Closure of plants, liquidations, delocalization.
- Assets management.
Located mainly in West Europe (80%) and rest of the world (20%).
Value of the machines between 1000 for 3D printers and 2 millions, average of 35 000 € for small rapid prototyping machines and 350€K for large machine tools.
Diversified customer base with no client representing more than 10% of the orders volume.

AEROSPACE: Aerofoil machining, riveting of fuselage or wings, Interior designr > AIRBUS, SOGERMA, COMPOSITES AQUITAINE, SAFRAN, SNECMA, TURBOMECA, MAROC AVIATION...

LUXURY: jewellery, watches, leather > CARTIER, LVMH, TAG HEUER, CHAUMET...

DESIGNERS: architects, 3D hobbyists, prosumers, makers...

ACADEMIC: PROTO3DSHOP line, 3D printers, rapid prototyping and manufacturing > ENS CACHAN, ECOLE CENTRALE, OTDU ANKARA, 1000 printers in schools...

AUTOMOTIVE: Car Design… > RENAULT, PSA...

POWER GENERATION: Nuclear, Oil & Gas, Turbines, offshore wind mills > FLENDER, ALSTOM, GE…Railways > SNCF, SNCFT, RATP...

MEDICAL: dental, prosthesis, implants...

MINT INDUSTRY: > Hôtel des Monnaies d’Alger...

COMPOSITES AUTOMATION: tanks, leisure, technical textiles, aerospace, automotive…

HEAVY INDUSTRY: steel industry, shipyards, forging, foundry, machines builders… > STX...

SUBCONTRACTORS: rapid prototyping, service bureau, machining…
## Exemple of recent transactions

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Manufacturer</th>
<th>Price</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep boring machine</td>
<td>UNIOR</td>
<td>250 K€</td>
<td>France - China</td>
</tr>
<tr>
<td>Soft material machining center</td>
<td>KOLB</td>
<td>200 K€</td>
<td>Turkey</td>
</tr>
<tr>
<td>Large lathe</td>
<td>POREBA, large lathe SAFOP</td>
<td>600 K€</td>
<td>France</td>
</tr>
<tr>
<td>Filament winding machine</td>
<td>BOLENZ &amp; SCHÄFFER</td>
<td>700 K€</td>
<td>France</td>
</tr>
<tr>
<td>Milling machine</td>
<td>ITAMA</td>
<td>80 K€</td>
<td>Madagascar</td>
</tr>
<tr>
<td>High speed milling machine</td>
<td>LIECHTI</td>
<td>900 K€</td>
<td>France</td>
</tr>
<tr>
<td>Milling machines for Design Centres</td>
<td>TARUS, CMS…</td>
<td></td>
<td>France</td>
</tr>
<tr>
<td>Large riveting machine</td>
<td>GEMCOR</td>
<td>2 500 K€</td>
<td>France</td>
</tr>
<tr>
<td>SOLIDSCAPE 3D printer 400 units</td>
<td></td>
<td>40 K€/each</td>
<td>France</td>
</tr>
<tr>
<td>Jig boring machine</td>
<td>MIKROMAT</td>
<td>1 500 K€</td>
<td>France</td>
</tr>
<tr>
<td>Vacuum casting machine</td>
<td>Schuchi UGM 500</td>
<td>60 K€</td>
<td>France</td>
</tr>
<tr>
<td>Rhino, Techgem, Flamingo software</td>
<td></td>
<td></td>
<td>France</td>
</tr>
<tr>
<td>Complete Foundry for Rapid Casting</td>
<td></td>
<td>200 K€</td>
<td>Algeria</td>
</tr>
<tr>
<td>Large autoclave</td>
<td>TERRUZZI</td>
<td>500 K€</td>
<td>Tunisia</td>
</tr>
</tbody>
</table>
Multistation has developed a strong 25 years marketing expertise dedicated to digital manufacturing and rapid prototyping:

**MANUFACTURERS**
- Efficient **sourcing capacity** through a wide international panel of machines manufacturers, including top class European manufacturers and emerging manufacturers, which have identified Multistation as loyal partner.

**CUSTOMERS**
- Extensive portfolio of **high quality clients** in diversified sectors.

**SALES FORCE**
- The force of Multistation is his **commercial network**:
  - each employee of Multistation is a salesman,
  - independent salesmen, rep, distributors. In different countries.

**INTERNET, COMMUNITY, SOCIAL NETWORK**
- Multistation is present on the networks Twitter, FaceBook and leans each day to improve his presence. [www.multistation.com](http://www.multistation.com) since 1996 and a new E shop.

**INTERNATIONAL FAIRS**
- Present as **exhibitor** or visitors in the main industrial fairs: EUROMOLD Frankfurt, BASELWORLD Switzerland, INDUSTRIE Paris, JEC Paris, USETEC Köln, AIRTEC Frankfurt and a lot of B to B meetings.
MANAGEMENT

Founder and President, **Yannick LOISANCE**, Engineer graduated of Ecole polytechnique, year 1971, naval engineer at Bureau Véritas, Sales engineer at Control Data, Managing Director in 1980 at Martin et Cie, one of the biggest importers in machine tools of the Eighties. Director of the subsidiary company of the German machine tools GILDEMEISTER, founder of multistation in 1987 with the representation of the 5A milling machines of JOBS and the computer aided manufacturing software GRAPHCAM.

Creator of industrial congress, As pioneer of the rapid prototyping since 1992, cofounder of the AFPR, French Association of Rapid Prototyping.

Yannick Loisance is a specialist of industrial marketing in disruptive technologies (robotics in the 80ies, 5A milling in the 90ies, 3D printers, progressive design and additive manufacturing…).

Managing Director, Chief Operations Officer, **Henri SOURY-LAVERGNE**, Engineer graduated ENSIL Limoges 28 years old. He was 2 years sales engineer in North Africa after a first experience as engineer in a TIER 1 of the aerospace industry.

Rapid prototyping Division, the Microfactories and 3D printing department is managed by **Tristan BOURRY**, 28, Mechanical Engineer graduated Montpellier Uni and ESTIA, 28, the professional RP machines are managed by **Clément ROUTET**, Designer Strate College, 28.

Second Hand Machines Division managed by **Jean-Bertrand LEFEBVRE**, 52 years old. Graduated of Paris Dauphine University, he participated to the foundation of a company specialised in medical imaging before joining the electronic platform ProXchange.

Additive manufacturing and Machine tools Division, are under the responsibility of **Henri SOURY-LAVERGNE**. The PROGRESSIVE DESIGN department is managed by **Camille OLLIVIER**, 25, mechanical Engineer graduated UTT.

Technical and service department, managed by **Ludovic SCHMUCK**, 40 years and 15 years Experience in Rapid Prototyping with a team of technicians and administrative people: maintenance of RP machines and large machines tools, sales support, benchmarks, training, inspection of second hand machines, logistic and sales administration…

**Marie GIACHERIO** is Chief Finance Officer, 33 years, she is in charge of administration and accounting.

The CRM is under responsibility of **Jessica COUPE**, 28.
General Information

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